

Edinburgh Tram Inquiry

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Edinburgh Tram Inquiry Report



Acknowledgements

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Guide to Reading the Report

Where the Report can be found

The Inquiry Report is published on the Edinburgh Tram Inquiry website at: <https://www.edinburghtraminquiry.org/> as fully searchable web (HTML) text and downloadable PDF file.

To access either version of the Report, click the “The Inquiry Report” tab on the “Home” page on the [Inquiry website](#).

Structure of the Report

The Report comprises 25 chapters, 8 appendices, 24 recommendations and an Executive Summary.

At a very early stage of the Inquiry, it was considered impracticable to set out the events in chronological order because of the need to examine particular matters as distinct issues in some detail. A particular issue may arise in different contexts and is addressed in each chapter in the context of the subject-matter of that chapter. The heading of each chapter identifies its subject-matter. It will be apparent that this approach may result in a certain amount of repetition, but that has been minimised by the use of cross-references, although in some instances it was considered necessary to have a certain amount of repetition.

Apart from the recommendations relating to Public Inquiries generally, which are contained in Chapter 2 concerning the establishment and progress of the Inquiry, it was not feasible to include recommendations within particular chapters. This is because the basis for many of these recommendations is contained in several chapters. Accordingly, recommendations 5–24 inclusive are contained in Chapter 25, after the findings in fact, and they should be read in the context of the Report as a whole. For ease of reference, a list of all of the recommendations has been prepared and appears immediately before the Executive Summary.

Documents and Referencing

Documents referred to in the Report have been published on the [Inquiry website](#) and are identified by a reference code consisting of a three-letter prefix followed by eight numbers. The three-letter prefix is derived by the source of the document, as shown in the table in the Glossary. Document references appear in bold in brackets (for example, **[CEC00775849]**) and contain a hyperlink to the document as published on the [Inquiry website](#). Alternatively, click on the document search box at the top right on each chapter page. This re-directs the reader to the “Find Documents” search function on the [Documents page](#) on the [Inquiry website](#). Where reference was made to several parts of a multi-part document – for example, **[CEC00775849, Parts 3-7]** – the document code (**CEC00775849**) is hyperlinked to the first part in the reference (in this case, Part 3). To view other parts of a document, please use the document search functionality on the Inquiry website as described above, and search for the document code (in this case, **CEC00775849**). This will return all document parts.

Where reference is made to a document, using the document referencing system mentioned above, the standard referencing “**[libid]**” has been used in all subsequent references to that document, until reference is made to another document. The word “**[libid]**” contains the hyperlink to the original document.

Where a quotation from a document contains a spelling, grammatical or other error, but has been reproduced as originally written, “[sic]” has been used to indicate that the error appears in the original document.

Page numbering was automatically inserted in documents by the Inquiry’s document management system, Relativity, on the bottom right of each page. On pages with landscape orientation, page numbering may appear in the left page margin. Page numbering uses the format **CEC00775849_0053**, i.e. **document code_page number**, and may not follow from page numbering used by the document creator/owner. For multi-part documents the original page numbering remains continuous throughout all document parts.

Where footnotes have been used, these are clearly notated with a number in superscript, which contains a hyperlink to the footnote’s text at the bottom of the page. Clicking on the in-text reference number will direct the reader to the relevant footnote text at the bottom of the page. To go back to the in-text reference, readers should either click on the return arrow icon at the end of the footnote, or use the “go back” button in their Internet browser.

Glossary

Below is a list of acronyms used in the Report. Each acronym is expanded on first use in a chapter unless it appears in quoted text, in which case in order to preserve the integrity of the source document the meaning has not been added to the acronym. An acronym may have two meanings that refer to its use in the original documents: for example, "QC" may mean "Quality Control" and also "Queen's Counsel".

Abbreviation	Meaning
the Act	Inquiries Act 2005
the 1991 Act	New Roads and Street Works Act 1991
AFC	approved for construction
ALEO	arm's-length external organisation
AMIS	Alfred McAlpine Infrastructure Services Limited
BB	Bilfinger Berger UK Limited/Bilfinger Berger Civil UK Limited/Bilfinger Construction UK Limited, all referred to as Bilfinger Berger or BB
BBS	Bilfinger Berger UK Limited and Siemens plc, known as Bilfinger Berger Siemens or Bilfinger Siemens Consortium
BCR	Benefit to Cost Ratio
BDDI	Base Date Design Information
BSC	Bilfinger Berger, Siemens and Construcciones y Auxiliar de Ferrocarriles SA Consortium
BT	British Telecom
CAF	Construcciones y Auxiliar de Ferrocarriles SA
Carlisle 1	first Project Carlisle proposal
Carlisle 2	second Project Carlisle proposal
Carillion	Carillion Utility Services Limited
CEC	City of Edinburgh Council
CEO	Chief Executive Officer
CERT	Central Edinburgh Rapid Transport
CIPFA	Chartered Institute of Public Finance and Accountancy
COSLA	Convention of Scottish Local Authorities
CPO	Corporate Programme Office
D&W	Dundas & Wilson
Deloitte	Deloitte & Touche Limited
DfT	Department for Transport

Abbreviation	Meaning
DLA	DLA Scotland LLP, DLA Piper Rudnick Gray Carey Scotland LLP and DLA Piper Scotland LLP being the name changes of the firm of solicitors representing tie
DPD	Design, Procurement and Delivery
DPOFA	Development Partnering and Operating Franchise Agreement
DRP	dispute resolution procedure
EARL	Edinburgh Airport Rail Link
ENTICO	A company used as a vehicle for the incorporation of tie
ETN	Edinburgh Tram Network
FBC	Final Business Case
FBCv1	First version of the Final Business Case
FBCv2	Second version of the Final Business Case
GPR	ground-penetrating radar
GRBV	Governance, Risk and Best Value Committee
IFC	Issued for Construction
Infraco	Company/consortium that carried out the construction and engineering work on the tram line. Initially the consortium comprised Bilfinger Berger, Siemens (BBS), but it included CAF following novation, although BBS carried out the work.
Infraco contract	Infrastructure contract
INTC	Infraco Notice of tie Change
IOBC	Interim Outline Business Case
IPG	Internal Planning Group
ISIS	Information Services and Information Systems Division
IT	information technology
ITN	invitation to negotiate
JRC	Joint Revenue Commission
LB	Lothian Buses
McNicholas	McNicholas Construction Services Limited
MFRA	Moray Feu Residents' Association
Minister for Transport	Minister for Enterprise, Transport and Lifelong Learning
MoU	Memorandum of Understanding
MoV	Minute of Variation

Abbreviation	Meaning
MoV4	Minute of Variation 4
MoV5	Minute of Variation 5
MUDFA	Multi-Utilities Diversion Framework Agreement
NAO	National Audit Office
NIA	Notice of Intention to Award the Infraco contract and/or Tramco contract
NTI	New Transport Initiative
OB	optimism bias
OGC	Office of Government Commerce
OJEU	Official Journal of the European Union
OLE	overhead line equipment
OSSA	On-Street Supplemental Agreement
PA1	Pricing Assumption 1
PB	Parsons Brinckerhoff
PFI	Private Finance Initiative
PMP	Project Management Panel
PPP	public-private partnership
the project	Edinburgh Tram project
PRINCE2	PRojects IN Controlled Environments
PSSA	Princes Street Supplemental Agreement
QA/QC	quality assurance/quality control
QRA	quantitative risk analysis
RTN	Remediable Termination Notice
SAK	Stirling-Alloa-Kincardine railway
SDS	System Design Services
SDS Contract	System Design Services Contract
SG	Scottish Government
SGLD	Scottish Government Legal Directorate
SGN	Scotland Gas Networks
SNP	Scottish National Party
SMT	Senior Management Team
SP4	Schedule Part 4 to the Infraco contract

Abbreviation	Meaning
SRO	Senior Responsible Owner
SRU	Scottish Rugby Union
STAG	Scottish Transport Appraisal Guidance
TAG	Transport Analysis Guidance
TEE	Transport Economic Efficiency
TEL	Transport Edinburgh Limited
tie	tie Limited (formerly Transport Initiatives Edinburgh Limited and now CEC Recovery Limited)
TMO	Tram Monitoring Officer
TPB	Tram Project Board
TPD	Tram Project Director
Tramco	Company tendering for, and ultimately awarded, the contract for the supply and maintenance of the tram vehicles
Tramco contract	Tram vehicle supply and maintenance contract
Transdev	Transdev Edinburgh Tram Limited
TROs	Traffic Regulation Orders
TSS	Technical Support Services
VE	value engineering

Document codes used in the Report and provider organisations

Document Cipher	Document Provider/Type
ADS	Audit Scotland
BFB	Bilfinger Construction UK Limited
CAR	Carillion Utility Services Limited
CEC	City of Edinburgh Council
CZS	Responses to the Call for Evidence
DLA	DLA Piper Scotland LLP
GOV	Scottish Government
PBH	Parsons Brinckerhoff
PHT	Public Hearing transcript
SCP	Scottish Parliament
SIE	Siemens plc
SWT	Sweett Group
TIE	tie
TRI	Written witness statements (including closing submissions)
TRS	Transport Scotland
USB	Interim Document Management (initial material provided to the Inquiry in summer 2014)
WED	witness evidence

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Recommendations

- 1.** Scottish Ministers should undertake a review of public inquiries to determine the most cost-effective method of avoiding delay in the establishment of an inquiry, including consideration of establishing a dedicated unit within the Scottish Courts and Tribunals Service and publishing regularly updated guidance for people involved in the establishment and progress of public inquiries.

- 2.** In any event Scottish Ministers should not appoint as the sponsor of any public inquiry any department, agency or other government organisation where it, or any of its employees, has had any involvement in the project or other event giving rise to the establishment of the public inquiry.

- 3.** The guidance mentioned in the first recommendation should include: advice concerning the circumstances in which civil servants in the inquiry team may properly transfer to posts, other than promoted posts, within other government departments or agencies; which positions within the administration of a public inquiry may be filled by the employment of agency staff; and whether longer-term contracts as temporary civil servants are more appropriate for particular positions that cannot be filled by permanent civil servants.

- 4.** In reporting the cost of a public inquiry Scottish Ministers should report its net cost to the public purse, after discounting expenditure already incurred on accommodation, staff and other resources, as well as the total cost appearing in the accounts of the sponsor department.

- 5.** Where the Business Case for any future light rail project is based upon an assumption that, prior to the award of the contract for the construction of the infrastructure, certain matters will have been completed (eg design, the obtaining of all necessary approvals and consents or the diversion of utilities), the contract negotiations should be delayed until completion of these matters has been achieved, failing which before any infrastructure contract is signed a new Business Case should be prepared on the basis of the altered assumptions that prevail and should be approved by the promoter and owner of the project.

- 6.** All versions of the Business Case, including any Business Case required as a result of altered assumptions, should include an assessment of risk that takes account of optimism bias in accordance with published government guidance.

- 7.** The assessment of risk at each stage mentioned in Recommendation 6 should be the subject of a peer review by external consultants with experience of similar large-scale infrastructure projects in the transportation sector, who should submit a report of each review to the promoter and owner of the project as well as to the procurement and project manager sufficiently far in advance of the signature of the infrastructure contract to enable the promoter and owner to consider whether to authorise its signature and, as appropriate, to consider any other available options requiring a strategic decision.

Recommendations

Continued

- 8.** The existing Guidance on optimism bias was based on empirical data available almost two decades ago and should be revised to take into account the additional data that is now available. In particular, the reference classes should be updated to include a specific reference to light rail projects and the recommended uplifts for the different reference classes should be adjusted to reflect the additional empirical data that is now available. Thereafter the Guidance should be reviewed and revised to take account of additional data on a regular basis at intervals of not more than five years.

- 9.** The identification and management of risk should be an integral part of the governance of all major public-sector contracts in future. In identifying and managing risk the following principles should be adopted.

 - Probabilistic forecasts rather than single-point forecasts should be used to take account of the risk appetite of funders and project sponsors.
 - Funders, sponsors and project managers should be cautious when adjusting uplifts and there should be critical review of claims that mitigation measures have reduced project risk.
 - Effective governance needs to provide constant challenge and control of the project, including recording of where the project is compared with its baseline, and reacting quickly to get the project back on track, whenever there are signs that it is veering off course. This necessitates providing senior decision makers with data-driven reports on project performance and forecasts combined with reports by the management team and independent audits.
 - In reporting to governance bodies there should be special emphasis on detecting early warning signs that the cost, schedule and benefit risks may be materialising so that damage to the project can be prevented. If early warning signs do emerge, the project should revisit assumptions and reassess risk and optimism bias forecasts.
 - The quality of evidence rather than process is the key to providing effective oversight and validation.

- 10.** In the interests of protecting the public purse and maximising the benefits from public expenditure on major projects, the Scottish Ministers should contemplate establishing a joint working group consisting of officials in Transport Scotland and representatives of the Convention of Scottish Local Authorities ("COSLA") to consider how best to take advantage of:

 - tolerating the risk of cost overrun that is always a possibility in risk assessments by including all public-sector light rail projects in the portfolio of large projects undertaken by the Scottish Ministers, including those to be constructed wholly within the geographical boundaries of a single local authority;
 - the greater experience within Transport Scotland of managing major projects in the public sector; and
 - the necessary skills and expertise within Transport Scotland to deliver the project on time and within budget.

Recommendations

Continued

- 11.** The Scottish Ministers and local authorities responsible for funding light rail projects should be mindful at all times of their obligation to protect public funds and to obtain value for public expenditure. In that regard:
- the Scottish Ministers should impose conditions on the payments of grants, similar to the “hold points” imposed on the offer of grant made on 19 March 2007, that enable them to review at each “hold point” whether the scheme is continuing to meet its objectives and to determine whether to continue to support the funding and implementation of the scheme;
 - continued financial support from the Scottish Ministers should require their critical review of all versions of the draft Business Case and their approval of the final Business Case as well as their review, and approval before signature, of the draft contracts for the delivery of the project;
 - the Scottish Ministers should be involved in the delivery of the project as they were before the withdrawal of the support of officials from Transport Scotland in 2007 and following the resumption of infrastructure works after the mediation settlement at Mar Hall; and
 - as a condition of the grant the local authority should be obliged to comply with the project monitoring and control procedures of Transport Scotland and should ensure that robust, transparent, externally verifiable project controls for the project are in place.
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- 12.** For reasons of transparency and accountability for public expenditure the Scottish Ministers should keep minutes of:
- the nature and content of any discussions and the reasons for any decisions taken at all meetings, discussions or telephone conversations, and in email or other correspondence between a Minister and civil servants relating to the nature and extent of any involvement by civil servants in the procurement and delivery of a project funded or to be funded in whole or in part from public funds (including a grant from the Scottish Ministers);
 - all discussions between a Minister and representatives of a local authority, the company responsible for the procurement and delivery of a publicly funded project or the company responsible for its construction to record what was discussed and what, if any, decisions were reached and the reasons for any such decision; and
 - all discussions between a Minister and civil servants including telephone discussions concerning any negotiations, including, but not restricted to, negotiations at mediation for settling disputes involving contracts funded or to be funded in whole or in part from public funds (including a grant from the Scottish Ministers) to record what was discussed and what, if any, decisions were reached and the reasons for any such decision.

Recommendations

Continued

- 13.** The procurement strategy for any future light rail project should make adequate provision for the uncertainties concerning the location of utilities and redundant equipment belonging to present and past utility companies, particularly in urban centres. In particular, although it is not possible to be prescriptive about the appropriate timescale:
- the procurement strategy should include a requirement that the route of the track should be exposed and cleared of utilities well in advance of the infrastructure contractors commencing their work;
 - the procurement strategy should specify the period that should elapse between the exposure and clearance of the route and the commencement of construction, to ensure that the contractors have unrestricted access to the construction site and may proceed with the infrastructure works unencumbered by the presence of utilities;
 - in fixing the period mentioned above, the procurement strategy should take into account the length of the route to be constructed, past experience of the time taken for the diversion of utilities in light rail projects in other parts of the UK, and any additional constraints peculiar to the project such as an embargo on work to divert utilities during particular periods such as the festive season or special events (e.g. the Edinburgh Festival).
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- 14.** Although some participants in the Inquiry criticised the use of the Multi-Utilities Diversion Framework Agreement ("MUDFA") to divert utilities in advance of the infrastructure works and advocated the "bow wave" approach to the diversion of utilities that followed the mediation settlement at Mar Hall, I do not think it appropriate to be prescriptive about how the risks associated with the diversion of utilities are managed. It is sufficient for promoters of light rail schemes to be aware of such risks and to demonstrate that they have adequate proposals for managing them.
-
- 15.** In recognition of the various difficulties likely to be experienced in the design and construction of a light rail project through a city centre, the promoter and owner of the project should appoint as its procurement and project manager a company with suitably qualified and experienced permanent employees that has delivered a similar project successfully on time and within budget or can demonstrate that it will be able to do so.
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- 16.** Immediately following the appointment of the designer and throughout the design of the project the designer should engage with the promoter and owner of the project, the procurement and project manager, the local planning authority, the utility companies and interested third parties owning land that may be affected by the project, to clarify their design criteria. In such discussions throughout the design of the project the promoter and owner of the project should co-ordinate responses to the various stages of design and, in doing so, should take into account the competing interests of different parties and of various departments within any local authority exercising different statutory functions as well as the significance of the project in the context of the community

Recommendations

Continued

as a whole and should provide all necessary assistance and clear and timeous instructions to the designer to avoid delays and additional expense. In that regard:

- prior to the appointment of the designer the local planning authority ought to produce sufficiently detailed design guidelines to enable the designer to take them into account from the outset when designing the tram network, and to improve the prospects of obtaining the necessary consents and approvals without requiring repeated re-submission of designs that will result in delay to the project with resultant expense;
- throughout the project a collaborative approach should be adopted by the promoter and owner to achieve an early resolution of any design issues that arise; and
- the promoter and owner should assume primary responsibility for co-ordinating the local authority's response and for negotiating the resolution of all issues, to enable clear instructions to be issued to the designer and to avoid re-design of sections of the route following reconsideration of matters that have been resolved at an earlier stage.

17. The governance structure for the delivery of a major project such as a light rail scheme should follow the published guidance and should ensure that there is clarity regarding the respective roles of the various bodies and individuals involved in its delivery. In particular, the chairman of the company responsible for the procurement and management of the project should not also be its chief executive.

18. As part of their investigations representatives of OGC undertaking an independent "readiness review" of a publicly funded project and representatives of any person, including representatives of any public body such as Audit Scotland, undertaking a review of the progress of and/or expenditure on a project funded in whole or in part by public funds should be required to interview key personnel involved in the project to ensure that each of them understands his or her role and is performing it effectively. In preparing any list of key personnel to be interviewed the individuals undertaking the investigations shall include the person designated as SRO.

19. At all stages of the project there should be a collaborative approach to delivering it. This should include the co-location of representatives from each organisation relevant to the particular stage reached and having an interest in its completion to enable any issues to be addressed and resolved at the earliest opportunity, thereby minimising the risk of the escalation of disputes with associated delays and increased expense.

20. The directors, employees and consultants of the company responsible for the procurement and delivery of the project as project managers, including an arm's-length external organisation ("ALEO") wholly owned by the local authority that is the promoter and owner of the project, should not submit to the local authority information that is deceptive or reports that are misleading either by the inclusion of false statements or by the omission of references to facts that might influence

Recommendations

Continued

the strategic decisions of councillors if they were disclosed. In that regard they should recognise and respect the need for local authority officials to scrutinise and challenge the accuracy of information and reports submitted to them and should not seek to frustrate, or interfere with, the instruction of independent consultants to advise officials on the accuracy of the risk assessment in such reports or on the terms of any draft contracts for which they seek authority to sign.

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- 21.** Local authority officials should be mindful at all times of the distinction in roles between them and councillors, who are solely responsible for strategic decisions, and of their duty to provide accurate reports to councillors to enable them to take informed decisions based upon the reality of the situation. Such reports should not be misleading either by the inclusion of false statements or by the omission of relevant facts. Where officials prepare and submit reports based upon reports to them from an ALEO acting as the procurement and delivery vehicle, they should not assume the accuracy of these reports based upon the adoption of a "one family" approach involving the local authority and the ALEO.
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- 22.** Where a company, including an ALEO, knowingly submits a report or other information to local authority officials that is misleading by reason of the inclusion of false statements or the omission of relevant facts or where such officials knowingly submit misleading information to councillors, whether or not councillors act upon that information, the Scottish Ministers should consider whether there should be an appropriate sanction in damages against the relevant individuals within the company responsible for the false statements or omission of relevant facts, as well as against the company itself, and against the relevant local authority officials involved in submitting misleading information to councillors.
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- 23.** In addition to any civil liability arising from any sanction introduced in accordance with Recommendation 22, the Scottish Ministers should consider whether there is a need for a statutory criminal offence involving strict liability once it is established that the information and/or report was misleading by reason of the inclusion of false statements or the omission of relevant facts.
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- 24.** The Scottish Ministers should also give consideration to the need for legislation to impose a similar duty of disclosure to that owed by policyholders to their insurers upon a company, its directors, employees or consultants and upon a local authority and its officials towards representatives of OGC or of Audit Scotland undertaking any review of a publicly funded project. Any such legislation should determine the appropriate civil and/or criminal sanctions to be imposed for breach of the duty of disclosure.

Executive Summary

Background

1. The construction of the Edinburgh Tram Network ("ETN") was identified as a proposal in the City of Edinburgh Council's ("CEC's") New Transport Initiative ("NTI"), a long-term project involving a number of transportation proposals to be funded by road user charging, also known as congestion charging. On 19 October 2000, CEC approved a draft Local Transport Strategy which identified a number of proposals including the development of a tram network. CEC concluded that there was a need to incorporate an arm's-length external organisation ("ALEO") to operate the proposed congestion charging scheme and to use the revenue from it to fund the transportation projects identified by CEC.
2. Apart from being able to recruit staff with the necessary skills to operate such a scheme without the constraints of public sector pay scales, an ALEO could use the revenue stream from congestion charging to borrow funds in the open market without being hindered by borrowing constraints imposed on local authorities by the Scottish Ministers or the United Kingdom Government. Accordingly, in 2002 CEC incorporated "Transport Initiatives Edinburgh Limited", which was wholly owned by CEC, and which later changed its name to "TIE Limited" and is now known as "CEC Recovery Limited". Throughout this report, "**tie**" is used to refer to that company whatever its name at the relevant time.
3. Following its incorporation **tie** produced a report entitled "A Vision for Edinburgh" [CEC01623145], which set out a programme for the development and implementation of £1.5 billion-worth of transport improvements, using public and private sources of funding including congestion charging. The programme required the early support of the Scottish Ministers

"principally through agreement to provide £375 million of funding towards the development and construction of three tram lines, which form a key part of the improved transport infrastructure" [\[ibid\]](#), page 0004].
4. The Scottish Ministers guaranteed the availability of that sum of money to ensure that funding for at least the first tram line was available as soon as CEC produced a robust Final Business Case ("FBC"); see Chapter 5 (Procurement Strategy). The funding was not conditional on the introduction of congestion charging. After the abandonment of congestion charging in 2005 CEC retained ETN as a major construction project although no reassessment of the project's viability appeared to be undertaken at that time.
5. The Tram project was the largest capital project undertaken by CEC in living memory. It remained politically controversial throughout the lifetime of the project. CEC had a budget of £545 million for the project, consisting of a grant of £500 million from Scottish Ministers (being the original sum of £375 million mentioned above with indexation applied to it) with the balance being funded by CEC. The budget included the purchase of tram vehicles to operate on the network as well as the construction of the network itself.
6. Although CEC was the promoter of the necessary private legislation consisting of two separate Bills authorising the construction of lines 1 and 2, it used **tie** to represent its interests in the proceedings before the Scottish Parliament. **tie** was also responsible for the preparation of the Business Case for the Tram project and

for the procurement and delivery of the project. **tie** determined the procurement strategy and concluded the various contracts necessary for the delivery of the project with CEC acting as guarantor of **tie**'s financial obligations, as a result of which all financial risk of exceeding the available budget of £545 million remained with CEC.

7. Price certainty was important for CEC. Councillors' support for the project and their authorisation to **tie** to enter into the necessary contracts for the project was given on the basis that phase 1a (from the Airport to Newhaven) at least was to be constructed and opened for service in the summer of 2011 within the budget of £545 million, with an expectation that part of phase 1b (from Roseburn to Granton) might also be constructed within that budget.¹
8. In May 2008, in the exercise of delegated powers granted by the councillors, CEC's then Chief Executive (Mr Aitchison) authorised **tie** to sign the necessary contracts for the construction of phase 1a of the network and the manufacture, delivery and maintenance of the tram vehicles. The contracts were signed on 13 and 14 May 2008.
9. Although the procurement strategy had envisaged that **tie** would conclude a separate contract for the purchase and maintenance of the tram vehicles which would be novated to the infrastructure consortium ("Infraco") upon signature of the infrastructure contract ("Infraco contract"), in the Rutland Square Agreement dated 7 February 2008 **tie** agreed to Construcciones y Auxiliar de Ferrocarriles SA ("CAF"), the supplier of the tram vehicles, joining the consortium with Siemens plc and Bilfinger Berger (UK) Limited ("BBS") either before or following the signature of the Infraco contract and the novation of the tram vehicle supply and maintenance contract ("Tramco contract"). Following the signature of the Infraco contract on 14 May 2008, which included the Tramco contract as a separate schedule, the consortium included CAF and became known as BSC. Despite the obligations of BSC to deliver the project, it should be acknowledged that the difficulties with the implementation of the strategy related to the infrastructure works to be undertaken by BBS.
10. After a delay of almost three years, line 1a of the ETN was opened for revenue service on 31 May 2014, although its extent was restricted to a line from the Airport to York Place (the "restricted line 1a") rather than to Newhaven as had been the intention in the FBC. The restricted line 1a was reportedly completed within an increased budget of £776 million. In light of the reported increased cost of £231 million and of the restricted scope of the network that was delivered, as well as the delay in opening the truncated line for service, Scottish Ministers commissioned this Inquiry.
11. Before considering the reasons for the failure to deliver the entirety of line 1a on time and within the budget of £545 million it may be helpful to consider the actual cost of the restricted line as well as the estimated cost of the extension to Newhaven to enable a comparison to be made between the anticipated final total cost of line 1a and the original budget of £545 million. It is also convenient at this stage to consider the consequences of the additional cost incurred in constructing the restricted line 1a and of the delay in its construction.

Actual cost of the restricted line to York Place

12. There is uncertainty about the final total cost of completing the restricted line 1a. Following the settlement reached at the mediation at Mar Hall in March 2011, work on the construction of the restricted line 1a recommenced and the projected budget for completing it was £776 million. In March 2017, CEC reported the cost of completing

¹ Throughout this Report the designation "councillor" means that the person referred to was a councillor for all or part of the period during which the project was being planned and constructed.

the restricted line 1a as £776.7 million, being £231.7 million in excess of the budget of £545 million (the "additional expenditure"). Most of the additional expenditure within the reported cost of £776.7 million related to the total cost of the works by BBS under the Infraco contract. It was £427,206,309.52 for the restricted line 1a, compared with the original construction works price of £238,607,664.00 for a line between the Airport and Newhaven (the "entire line 1a").

13. The reported cost of £776.7 million was not, however, an accurate statement of the total cost because it underestimated outstanding claims by third parties, principally because CEC was unaware of a substantial claim that had not been intimated at that time; it did not include certain costs such as the cost of other infrastructure works undertaken by CEC directly attributable to the Tram project but allocated to other CEC budgets; it failed to include a pension fund deficit arising from the cessation of **tie's** business; it omitted compensation payments to businesses and the Net Present Value of the cost of borrowing the additional £246.5 million needed to complete the project. Taking these items into account, the best estimate of the total cost of the restricted line 1a is £835.739 million.
14. Had the increased budgeted cost of the restricted line (£776 million) been known before CEC approved the FBC on 20 December 2007, the Benefit to Cost Ratio ("BCR") would have been 0.73, indicating that neither CEC nor the Scottish Ministers would receive value for the anticipated public expenditure. In that situation CEC could not have justified proceeding with the project and the Scottish Ministers could not have justified payment of the grant of £500 million towards its funding and would have needed to consider their available options, including the possibility of constructing a shorter line within the available budget assuming that its economic appraisal produced a BCR greater than 1.

Cost of line 1a from the Airport to Newhaven

15. The full cost of the entire line 1a, and the extent to which it has exceeded the budget of £545 million, will only be known once the extension from York Place to Newhaven has been completed and its cost added to the £835.739 million estimated cost of the restricted line 1a. Based upon the estimated cost of £207.3 million, including risk, support for business, and optimism bias, in the business case submitted to CEC in 2019 in support of the extension from York Place to Newhaven, the total expenditure on line 1a will exceed £1,043 million – almost double the original estimated cost. That difference will obviously increase if the estimated cost for the extension is exceeded. In reporting the cost of the extension from York Place to Newhaven, officials should include all tram-related expenditure and recharge any such expenditure that may have been allocated to other CEC budgets, as occurred with the restricted line, as well as including the net present value of any borrowing by CEC to fund the extension.

Consequences of increased costs and delay

16. The most obvious consequence of the increased costs was the effect upon CEC's finances. CEC had to borrow £246.5 million to complete the restricted line 1a. Increased borrowing results in the commitment of additional future revenue expenditure to enable sums borrowed to be repaid with interest. A consequence of that commitment is the lost opportunity for CEC represented by its inability to provide the level of service to the community throughout the 30 year repayment period of the loan that it would otherwise have been able to fund from its revenue account without such a commitment. The annual revenue charge of £14.3 million required to repay capital and interest of the sum borrowed to complete the tram line to York Place represented

1 per cent of CEC's gross expenditure and is an indication of the money that would otherwise have been available annually over a period of 30 years to fund services in the City of Edinburgh. Moreover, if there has been any additional borrowing to fund the extension the loss of money available to fund such services annually over the period of repayment will be increased. More significantly it will result in an increase in the loss of CEC's opportunity to fund future services because of the need to repay capital and interest arising from the additional borrowing.

17. I accept that the effect on funding for future services is a consequence of borrowing by local authorities to fund capital projects. However, it seems to me that different considerations apply where borrowing for a capital project is planned in advance of the local authority's commitment to proceed with that project and the cost of borrowing is included in the business case for the project. In that situation councillors will be aware of the implications for future services of borrowing funds to deliver the project. In this instance councillors were concerned to have price certainty and they authorised construction of the ETN based on assurances by their officials, who in turn relied on assurances by **tie**, that the line from the Airport to Newhaven could be constructed and the necessary vehicles purchased within the available budget of £545 million. Councillors did not anticipate, and were not advised to anticipate, any restriction on the future provision of Council services if they authorised officials to proceed with the project based on the FBC. No provision was made for the borrowing of £246.5 million or for any additional sum to complete the extension from York Place to Newhaven. Such borrowing was unplanned at the outset, and its costs are a direct consequence of the failure to deliver line 1a within the available budget.
18. A further financial consequence for CEC of the failure to complete the line to Newhaven on time was the loss of fare box revenue from passengers who would have used the tram service if the line had been completed as planned. That loss has been estimated at £4 million per annum. It also resulted in the loss of the anticipated benefit of a tram service as a catalyst for the development and regeneration of the Leith and Newhaven areas. In that regard it failed to deliver the benefits anticipated in the FBC.
19. Apart from the consequences for CEC another obvious consequence of the delay in the completion of line 1a as originally planned was the effect upon businesses and residents along the proposed route, as well as upon residents in streets used for diverted traffic and upon the public whose access to the city was impeded and whose travelling time to work increased.
20. Although I acknowledge that the calculation of losses suffered by businesses that are directly attributable to the construction work is complicated by the effects of the recession following the banking crisis in 2008, the evidence has persuaded me that the delay in the construction work and the associated disruption were significant contributors to the losses incurred by businesses at that time. Businesses along the route of line 1a, particularly in the west end of the city and in the section between York Place and Newhaven, suffered loss because of the disruption caused by the construction works, which impeded access to their premises by prospective customers and goods delivery personnel. Some businesses ceased trading altogether, and others reported significant losses. While some disruption during the construction phase was inevitable, the disruption to businesses in these localities lasted much longer than would have occurred if the project had been completed on time. The disruption to businesses in the section between York Place and Newhaven, particularly on Leith Walk and in Constitution Street, will have continued during the construction of the extension of the line to Newhaven. This additional disruption would have been avoided if line 1a of the project had been completed on time and without restriction of its scope.

21. Residents along the route of line 1a also experienced loss of amenity due to noise and disturbance as well as considerable inconvenience for much longer than anticipated because of difficulties of access to their homes caused by the construction works and during prolonged periods when barriers impeding access to their homes remained in place when no work was being undertaken. Residents in other residential streets were adversely affected by diverted traffic, including heavy goods vehicles, for several years longer than should have been the case because of the failure to complete the project on time. The public, especially those with more restricted mobility, had difficulty in accessing the city centre because of barriers erected to enable construction to be undertaken but which remained in place when work had ceased pending resolution of disputes. Traffic diversions adversely affected residents throughout the city and commuters to it.

Causes of failure to deliver project within budget and to the extent projected

22. The principal causes of the failure to deliver the project within budget and to the extent provided can be summarised as follows.
- **tie**'s departure from the procurement strategy that had been intended to manage risk out of the project.
 - The failure of **tie** to work collaboratively with CEC and others including, in particular, Parsons Brinckerhoff ("PB") and BSC.
 - Failure by **tie** to report accurately on progress and failure by CEC officials to monitor progress.
 - Delay with production of design due to poor performance by PB and failure by **tie** and BSC to manage the design contract effectively.
 - **tie**'s failure to follow the guidance about optimism bias when preparing various versions of the Business Case such that the cost of the project was underestimated.
 - **tie**'s failure to achieve the price certainty sought by CEC and to transfer risk to BSC in accordance with the procurement strategy.
 - The negotiation of the Infraco contract on terms that were inconsistent with the FBC and prevented progress being made in the construction of the project when there were Notified Departures from the pricing assumptions in the contract.
 - The governance structure did not follow any recognised model. There was a lack of clarity as to who had responsibility for the performance of certain tasks and there was some overlap regarding the respective roles of the various bodies created, and individuals appointed, to deliver the project. It is also unclear whether all of the individuals appointed to specific roles actually fulfilled these roles.
 - The failure of CEC's officials to protect CEC's interests as the client and promoter of the project bearing the risk of exceeding the allocated budget of £545 million.
 - The Scottish Ministers' decision following the debate in Parliament on 27 June 2007 to withdraw the involvement in the project of officials in Transport Scotland resulting in a loss of expertise in the management of major transport infrastructure projects and in particular a lost opportunity to review the FBC and the draft Infraco contract before its signature.

These will be considered in the sections that follow.

Procurement strategy

23. As I have noted in paragraph 4 above, the grant from the Scottish Ministers depended upon CEC producing a robust FBC. **tie** had the responsibility of preparing the FBC but it had to be approved by CEC. In that regard CEC wished the price certainty necessary to ensure delivery of the project within the available budget of £545 million.
24. Between 2002 and 2004, **tie** ran a procurement group that was tasked with considering how best to procure the tram system. The procurement group included professional advisers from various disciplines, including DLA Piper Scotland LLP ("DLA"), Grant Thornton, Mott MacDonald, Faber Maunsell, and Partnerships UK. A report by the National Audit Office (the "NAO") published in 2004, which was entitled 'Improving public transport in England through light rail' [[CEC01708649](#)], noted the poor financial performance of several existing light rail schemes, and the tendency of scheme promoters to seek to transfer as many of the project risks as possible to the private sector. Such factors were leading to inflated project costs, because the private sector either avoided light rail projects altogether (removing competition) or sought greater margins for taking the risks. The NAO suggested that better sharing of project risk and alternative contract structures could help to reduce the cost of such projects and encourage private sector investment.
25. Following the above advice from the NAO, **tie** developed a procurement strategy that involved having separate contracts with different contractors for distinct parts of the project. In accordance with that strategy the contracts for the construction of the network infrastructure and for the purchase and maintenance of the tram vehicles were to be negotiated separately. **tie** negotiated the contract for the construction of the network infrastructure with BBS and the contract for the purchase and maintenance of the tram vehicles with CAF respectively.
26. By contracting separately for the purchase and maintenance of the vehicles (under the Tramco contract) **tie** would not be restricted to a supplier that was part of the consortium selected to deliver the project. The greater choice of vehicle suppliers ensured that **tie** secured a competitive price and avoided the infrastructure contractor adding any risk premium or other surcharge in respect of the vehicle supply and maintenance contract. No issues of delay or increased cost of the Tram project arose in respect of the Tramco contract, apart from the additional storage costs incurred by CAF associated with the delay in **tie** taking delivery of the vehicles as a consequence of the delay in progressing the project.
27. Bearing in mind CEC's desire for price certainty and the report from the NAO, **tie**'s procurement strategy was intended to take active steps to manage risk out of the project. Apart from the separation of the procurement of the Tramco contract and the Infraco contract mentioned in paragraph 25 above, these included: prior to the conclusion of the Infraco contract, providing Infraco with completed designs with all necessary approvals and consents subject to the population of these designs with specific systems and components chosen by Infraco; novating the design contract to Infraco at the date of signature of the Infraco contract; and completing the diversion of utilities in advance of the infrastructure work to enable Infraco to construct the tram line unimpeded by the existence of utilities.

Failures in implementing the strategy

28. Although some witnesses from **tie** criticised the procurement strategy, I have concluded that it was a sensible response to the difficulties experienced elsewhere in the UK in the construction of light rail systems. The difficulties with the project were not attributable to the procurement strategy; they were a result of **tie**'s failure to implement it in relation to the completion of design in advance of the Infraco contract and the diversion of utilities in advance of the infrastructure works. It seemed to me that criticisms of the strategy by **tie** witnesses were motivated by a desire to divert attention from their own failures.

Design

29. The procurement strategy was intended to limit the allowance for risk related to design that would be included by Infraco in the Infraco contract price. The method for achieving this was that, prior to the award of the Infraco contract, **tie** would conclude a contract for System Design Services (the "SDS contract") with a provider of such services (the "SDS" provider), who would develop the design to a certain level and obtain all necessary consents and technical approvals from CEC and from third parties such as Network Rail, Forth Ports Authority, Edinburgh Airport and Royal Bank of Scotland who might be affected by the design of the route.
30. The effect of this strategy was that **tie** would bear the risk of design prior to the signature of the Infraco contract, thereby avoiding the inclusion in the contract price of a risk premium for design that contractors would normally add to their bid if they had the responsibility for designing the project and for obtaining the necessary approvals and consents. Upon signature of the Infraco contract the SDS contract would be novated to Infraco, who would thereafter accept design risk and would complete the design by incorporating the components and systems upon which its bid had been based and would carry out the construction, installation, commissioning, and maintenance planning in respect of the ETN. If that strategy had been implemented, **tie** would not have incurred any additional expense resulting from any design change after the Infraco contract was signed unless **tie** had requested such change and, in terms of the change provisions in the Infraco contract, had agreed the cost of such change in advance of instructing Infraco to proceed with it.
31. **tie** signed the SDS contract with PB on 19 September 2005, but **tie** lacked the necessary skills to manage that contract to ensure that design was completed as planned before the signature of the Infraco contract. Initially, **tie** appears to have thought that it could simply rely on the obligation on the SDS provider to produce design and obtain approvals in accordance with the design programme, with minimal involvement by **tie** in the design process. Moreover, **tie** and PB failed to engage CEC in the design process at the outset and to ascertain the wishes of CEC which was responsible for granting planning and technical approvals as planning and roads authority. **tie** also failed, in conjunction with CEC, to ascertain at the outset and thereafter manage the expectations of third parties whose consent was required for the design of sections of the route affecting their property.
32. The strategy relating to completion of design was intended to provide potential infrastructure contractors with an informed basis for pricing their bids, thereby reducing the need for risk premiums and increasing the probability of achieving the price certainty that CEC sought. However, completion of the design was delayed. At the date of signature of the Infraco contract, design was incomplete and subsequent development of the design, treated by the contract as change, was inevitable.

Concluding the Infraco contract while the design was incomplete was a material departure from the procurement strategy and failed to transfer risk to Infraco to the extent upon which the FBC was based, meaning that the desire for certainty as to price could not be achieved. **tie** ought to have delayed signature of the Infraco contract and the novation of design until the design was nearer completion but it refused to do so, reflecting a marked reluctance within **tie** to do anything that would delay the award of the Infraco contract. Although there was a recognition within **tie** that the price for the Infraco works was not fixed at contract close, contrary to the procurement strategy, elected members of CEC were not made aware of this development. Although some CEC officials were aware that the price for the Infraco works was not fixed at contract close most CEC officials were not, due to the fact that they relied on what was reported to them by **tie** and its advisers. There was a failure by CEC officials to take separate advice to protect CEC's interests.

33. The primary responsibility for the delay in completing design lay with **tie** for mismanaging the design contract. **tie** acted for CEC during the Scottish Parliament's consideration of the private legislation promoted by CEC to enable the construction of the ETN. In the summer and autumn of 2005 the Scottish Parliament was considering various proposed amendments to the alignment of the route and did not conclude its consideration of that issue until Christmas 2005. Nevertheless, **tie** concluded the SDS contract three months prior to the conclusion of the parliamentary procedure.
34. Moreover, significant changes were made to the original plans and sections submitted to the Scottish Parliament, particularly those for Haymarket Yards, Newhaven, and the Gyle. At Haymarket Yards, the route changed completely. The changes also included changes to the horizontal and vertical limits of deviation. PB had not been involved in the parliamentary process and **tie** failed to notify it of these changes with the result that the preliminary design was prepared from the wrong baseline. The changes to the baseline from which PB had to prepare designs and the failure of **tie** to keep PB informed of such changes meant that PB had to carry forward elements of preliminary design into the detailed design phase. This prevented the orderly progression of design and introduced the risk of **tie**, or CEC, requiring changes to the preliminary design during the detailed design phase. **tie**'s failure to inform PB of the changes when they arose reflects upon its poor management of the project.
35. Underlying **tie**'s mismanagement of the design contract was its unrealistic programme for design delivery. The draft FBC [CEC01821403] prepared by **tie** and presented for approval to councillors on 21 December 2006 included a programme summary, showing that detailed design for phase 1a was due to be completed and all approvals and consents to be obtained by 4 September 2007, with the Infraco contract being awarded in October 2007. The programme had little float and was based upon the assumption of "right first time and on-time delivery of activities" [libid](#), page 0164, paragraph 11.3]. **tie**'s aspirations for the completion of design within that timescale were unachievable. In its comments dated 30 March 2007 on the draft FBC [TRS00004145, page 0009] Transport Scotland queried whether the intention to complete design by October 2007 was realistic. Mr Harries and Mr Glazebrook, two of the most experienced consultants at **tie**, did not think that the design would ever be delivered to programme when they were involved in the project. Mr Harries was involved in the project between November 2004 and February 2008 and Mr Glazebrook commenced work with the project early in 2007 and remained until 2011.

36. The programme was never achieved, and **tie**'s solution to design delay, following Mr Gallagher's mantra of getting design "right first time and on time delivery", was unrealistic and displayed a lack of appreciation of the iterative nature of design and of the challenges in obtaining planning and technical approvals in a UNESCO World Heritage Site. The delay in completing design in accordance with the programme was compounded by **tie**'s failure to provide PB with instructions on critical issues, resulting in PB ceasing work on the SDS contract between February and June 2007. By the summer of 2007 it was apparent to **tie**'s senior management that it would be impossible to complete the design in accordance with the programme.
37. Further examples of **tie**'s mismanagement of the design contract include the following.
- **tie** failed to respond to the preliminary design within the period of 20 days specified in the SDS contract, resulting in PB proceeding to detailed design in the absence of **tie**'s responses to the preliminary design because of the limited time allowed for design. This had an adverse effect upon the orderly progression of design.
 - **tie** failed to engage with CEC and third parties at an early stage in the design process to determine their wishes and requirements and to manage their expectations. The result was frequent and belated requests for changes to design including the reconsideration of options that had already been rejected.
 - Different teams within **tie** requested that PB prioritise different items of design, at different times, in a manner that lacked co-ordination, resulting in an inefficient process to produce design.
 - **tie**'s procurement team amended the Employer's Requirements to take account of its discussions with Infraco bidders without reference to PB and PB continued to develop the design based on the original Employer's Requirements. In early 2007, it became evident that the proposals received from the Infraco bidders, the Employer's Requirements and the SDS design did not align.
38. In May 2008, **tie** agreed to settle various claims by PB for additional costs, arising largely because of the delays in progressing design, including change notices issued from October 2006 onwards. The additional payments totalled £7,452,343 and represented an increase more than 30 per cent above the SDS contract price. The amount of the additional payments indicates the extent of the changes and delays that occurred in the design process before the award of the Infraco contract. The fact that **tie** agreed to make these additional payments to PB suggests that it recognised that many of the changes and delays to design before the award of the Infraco contract had occurred for reasons for which **tie** was responsible.
39. Although **tie**'s mismanagement of the design contract was the primary cause of the delays in design, CEC's failure to clarify its requirements and the requirements of interested third parties before the commencement of design also contributed to delays in the design of the project. As owner and promoter of the project and as the statutory body responsible for granting planning consents and technical approvals for the project, CEC failed to provide adequate guidance about the design principles to be applied. Although, around December 2005, CEC did produce a Tram Design Manual [[CEC00069887](#)], which gave some guidance on design principles, that guidance was of a very general nature, and it was not until April 2008, a month before the Infraco contract was signed, that CEC produced a draft Tram Public Realm Design Workbook, [[PBH00018590](#); [CEC02086917](#); [CEC02086918](#); [CEC02086920](#)–

[CEC02086934](#)]² which was intended to supplement the guidance in the Tram Design Manual [[CEC00069887](#)] and the Edinburgh Standards for Streets [[CEC00669586](#)] and to assist PB in developing the details of the designs for the City Centre to obtain consents and approvals. Such guidance was produced too late. CEC ought to have produced sufficient detailed design guidelines before the SDS contract between **tie** and PB was signed to enable PB to take them into account when designing the tram network. Had that occurred it is likely that PB would have received the necessary consents and approvals from CEC sooner than occurred and there would have been more likelihood of implementing the procurement strategy in relation to design.

40. For the sake of completeness, I acknowledge that PB recognised its failures in the production of the design of the project, principally by omitting to engage with CEC prior to the commencement of the SDS contract to discuss CEC's design requirements and, prior to the arrival in 2007 of Mr Reynolds, by failing to manage change control effectively. However, these failures do not alter my conclusion that **tie** and CEC were principally responsible for design delay. Any criticisms of PB require to be viewed in the context of the environment in which it was working, being one of continual changes, a failure to close out issues and poor overall project management by **tie**.

Novation of the design contract to Infraco

41. Novation is a process whereby, with the agreement of all parties, all rights and obligations under a contract are transferred from one party to another. Commonly, the agreement for novation will state that the relationship between the provider of goods and services and the "new" client will be regulated by – and be taken always to have been regulated by – the existing contract and that, as between the existing parties to the contract, that contract shall be regarded as at an end. This means that the parties to the original contract no longer have rights against, or obligations owed to, each other and the new party stands in the shoes of the party that has been released from its obligations. It is up to the parties to determine how their relationship(s) should be structured, and it may differ from what I have just described, but in the Tram project it followed that outline. This meant that not only would the contractual relations concerning design in the period following novation be between PB and BSC; it would be as if this had always been the case. The only rights and obligations that **tie** would have in relation to design would be against BSC.
42. In terms of the SDS contract **tie** was entitled, but not obliged, to require that contract to be novated to Infraco when the Infraco contract was signed. Although the concept of novation of the design contract was predicated upon the assumption that design would have been completed to the extent specified in the SDS contract and that PB would have obtained all necessary approvals and consents before the signature of the Infraco contract, **tie** insisted upon novation of the SDS contract to Infraco despite the incomplete design and the absence of a substantial number of approvals and consents. That was a serious error by **tie**. The incomplete design and the fact that not all the necessary consents and approvals had been obtained had to be reflected in the terms of the Infraco contract. The result was that the risk of design development was not passed to Infraco as intended and **tie** retained a significant risk of design change after the award of the Infraco contract, with consequential increases in the cost of the project.

2 CEC were unable to provide the Inquiry with the "Tram Public Realm Design Workbook" as a single document [[CEC02087292](#)].

43. By insisting upon the novation agreement when design was incomplete, **tie** transferred control of completion of the design process to BSC but retained the significant risk of increased cost associated with it. In his oral evidence to the Inquiry Mr Maclean, Head of Legal and Administrative Services at CEC from December 2009, observed that the novation of the design contract in such circumstances meant that the designer and the contractor were "on the same team" [**PHToooooo08**, page 42].
44. The novation agreement also amended the SDS contract by removing the absolute obligation imposed upon PB to obtain all necessary consents and approvals. Instead, PB would not have to bear the costs of amendments required by any approval body where the requirements were:
- inconsistent with or in addition to the Infraco proposals or the Employer's Requirements;
 - not reasonable given the nature of the approval body; or
 - not foreseeable within the context of the Infraco proposals or the Employer's Requirements.

In any of these circumstances **tie** bore the financial risk related to obtaining consents and approvals.

45. After novation, slippage in the design programme and delays in the obtaining of consents and approvals continued. The continual slippage in design is apparent from the fact that Version 51 of the SDS programme was provided to BSC on 23 November 2009 [recorded in PB progress report for January 2010, **BFB00004338**, page 0005, paragraph 2.3], whereas in May 2008, when the Novation Agreement was signed, version 31 was current [Close Report, **CECo1338853**, page 0007, paragraph 2.2]. The dispute between **tie** and BSC as to where responsibility lay for completion of design was a principal cause of the slippage of design because PB was unwilling to alter the design without being assured of payment from BSC. Moreover, internal reports by BB referred to the late production of design by Siemens that PB required to complete its design. Both of these were indicative of the failure of BSC to manage the design at least until it signed an agreement with PB on 25 February 2010 [**TRl00000011**] resulting in PB committing more resources to design and BSC guaranteeing payment in full for some of PB's services and 75 per cent of the costs of others. In relation to the latter group, BSC would seek the whole amount from **tie** and PB would assist them in this. If BSC were successful in recovering all the cost from **tie**, it would make a balancing payment to PB so that PB would also be paid in full for these services.
46. Design remained incomplete in March 2011 during the mediation at Mar Hall. Although BSC bears some responsibility for failing to manage the design contract post novation and for the delay in reaching the agreement with PB on 25 February 2010 to enable progress to be made with design, the principal cause of design delay after novation was attributable to the dispute that arose between **tie** and BSC as to which party was to bear the risks under the Infraco contract arising from the development and completion of design and the concerns about whether PB would be paid for work that was the subject of that dispute. The responsibility for that situation rests with **tie** and, in particular, the persons responsible for negotiation of the terms of Schedule Part 4 to the Infraco contract ("SP4") that are considered below in the context of the negotiation of the Infraco contract on terms that were inconsistent with the FBC.
47. The extent of the problem with design after novation is reflected in the payment of £14,117,112 made by BSC to PB in relation to services provided between SDS novation

in May 2008 and the completion of the project. Although that payment included sums relating to additional services not included in the SDS contract, the payments made in respect of design core scope and design change, for design completion and for prolongation, exceeded £9.3 million, representing a further increase of approximately 40 per cent of the SDS contract price of £23,329,853.

48. I consider that CEC bears some responsibility in this period just as it did before contract close. CEC continued to fail to work in a collaborative manner to resolve design issues swiftly and with clarity or to provide a focus on enabling the project to proceed smoothly. The lateness and sheer volume of its comments were bound to cause delay and expense. I accept that as a public body with statutory responsibilities it would be inappropriate or even unlawful for it to fetter its discretion. The change that came about after the Mar Hall mediation, however, is striking. There is no suggestion that CEC ignored or in any way compromised its obligations in that period, and yet matters were dealt with in a wholly different way. The number of CEC staff allocated to the design process increased significantly and they were co-located with representatives from BSC and PB. The impression that I have is that, prior to the agreement at mediation, each department or section of CEC had been focusing only on what the ideal position would be for its own particular responsibilities. In effect, CEC commented with a number of voices rather than a single considered voice. The decisions made by local authorities in relation to consents etc. are usually matters that require some judgement, which involves balancing different – and sometimes competing – issues before reaching a single concluded view; they are not black and white. As such, it would have been legitimate to consider (when commenting on design) the overriding CEC view that there should be a tram system and that it would bring benefit to the city. Had there been someone with responsibility to oversee and co-ordinate the response from CEC to the many requests for approvals and consents, I think it likely that the responses would have been more proportionate, focused and reasonable. Without this, in carrying out its work, PB in effect had to meet the requirements of multiple departments with divergent interests.

Utilities

49. The need to divert underground utilities from the path of the proposed tram lines was recognised as a particular problem for the construction of any tram line through a city centre. There were usually uncertainties about the extent and precise location of utilities as records kept by utility companies were often incomplete or inaccurate. There was also unrecorded redundant apparatus relating to disconnected utilities that contributed to the congestion under ground, limiting the space available for relocation of utilities. In view of these uncertainties the diversion of utilities has tended to be an expensive part of tram or light rail schemes. Following the experience of contractors in earlier schemes to construct tram networks through city centres in the UK, tenderers were not willing to take the risk of bearing the costs of diverting utilities without adding substantial premiums to their bids.
50. The procurement strategy required the diversion of utilities in advance of the infrastructure works, to remove the uncertainty and the disruption to the programme for these works that undiverted utilities would otherwise cause for the infrastructure contractor. This strategy was intended to provide potential infrastructure contractors with an informed basis for pricing their bids, to reduce the need for risk premiums and to increase the probability of achieving the price certainty that CEC sought.
51. Instead of having utility companies diverting their own apparatus, **tie** planned to conclude an agreement with a single contractor who would have responsibility for

the diversion of all utilities, except high-pressure mains and high-voltage power cables or other apparatus requiring the specialist involvement of the utility company owning the apparatus. Following a tendering exercise, on 4 October 2006, **tie** entered into the Multi-Utilities Diversion Framework Agreement ("MUDFA") with Alfred McAlpine Infrastructure Services Limited. That company later changed its name to Carillion Utility Services Limited. At that time, this was the largest multi-utility project ever undertaken in Europe.

52. Even viewed in isolation, this element of the works itself ran over budget and took longer than expected. The effects went further than the works to the utilities, however, as the delay caused knock-on effects with the infrastructure works, which led to further delay and expense there. There were several reasons for the delay associated with the MUDFA works, including the uncertainty about the work that would be required, the delays in obtaining information from the utility companies about the location of their apparatus, the complexity of securing the consent of all utility companies to the draft Issued for Construction designs requiring the designs to be redrafted and resubmitted for approval before being issued to the MUDFA contractor, the unrealistic programme, the failure of the MUDFA contractor to relocate all utilities that had to be moved in advance of the Infraco works to construct the tram line and the inability of **tie** to manage such a complex contract.
53. The programme in MUDFA was unrealistic. It envisaged that the pre-construction services would be undertaken between October and December 2006 and the MUDFA works would thereafter take approximately 14 months between March 2007 and June 2008. This allowed for a gap of approximately 7 months between the programmed completion of the MUDFA works and the planned commencement of the works under the Infraco contract. The programme failed to make adequate provision for the uncertainties about the number and location of utilities in city centres at that time or for the extent of the delays experienced in other cities in the UK due to such uncertainties.
54. In March 2007, prior to the Scottish Parliament election in May, there was uncertainty whether the project would proceed, because the Scottish National Party ("SNP") was committed to abandoning it. Accordingly, a revised MUDFA programme was agreed, which provided for the MUDFA works starting in July 2007 and finishing by the end of 2008, i.e. a period of approximately 18 months, with almost no buffer between then and the start of the Infraco works. Even this new period for the works for the diversion of utilities was inconsistent with the experience of other light rail projects in the UK. The length of the on-street section in the Edinburgh Tram project (i.e., from Haymarket to Newhaven) was approximately eight kilometres. A total duration of 18 months for the MUDFA works was unrealistic when compared with the experience in Manchester, where there was a two-kilometre on-street section, and in Birmingham, where there was an 800-metre on-street section. In each case the works took about two years to complete. In view of erosion of the buffer period between completion of the MUDFA works and the commencement of the Infraco works, it should have been obvious to **tie**'s senior officials from the outset that problems were inevitable and that the MUDFA works would impinge on the Infraco works.
55. The utilities programme kept slipping and the cost of the MUDFA works increased due to the discovery of additional utility apparatus and unexpected underground obstructions. Each revised programme was too optimistic and was based on levels of production that had never been achieved previously. When additional apparatus was encountered the absence of any allowance for slippage in the programme meant that there was likely to be delay. The MUDFA works were not completed before the

signature of the Infraco contract. By the date of the mediation at Mar Hall in 2011, the MUDFA works were still incomplete. This included areas in which Carillion Utility Services Limited had ostensibly completed its works. For example, in the 700 metres of Shandwick Place, there were 302 utilities within the designated working area that had not been moved despite the alleged completion of the MUDFA works there.

56. The failure of the MUDFA contractor to clear utilities from the designated working area of Infraco in Shandwick Place was not an exceptional occurrence. When Infraco started work on Leith Walk in 2008 it encountered difficulties that prevented it from working in an efficient manner. These included lack of unrestricted access to designated work areas due to continuing MUDFA works in those locations, and the existence of utilities in other designated work areas that had not been moved despite the MUDFA contractor ostensibly having completed the MUDFA works in that location.
57. Following difficulties in the implementation of MUDFA it was terminated early, by agreement, in December 2009. Two further contractors were appointed to carry out the remaining required works to utilities. After mediation a different approach was adopted to the diversion of utilities. It was described as a "bow-wave" approach in which utilities were diverted in sections of the route immediately ahead of the Infraco works. Some core participants suggested that the bow wave approach should be used in all future tram projects but I do not think that it is necessary or appropriate to be prescriptive about the method of diverting utilities in advance of infrastructure works. It is sufficient that those involved in planning and constructing tram lines through city centres should be aware of the particular problems associated with the existence of utilities and the need to allow adequate time for their diversion in order to avoid delays to the construction of the tram lines.
58. Slippage in the SDS contract and MUDFA was largely the result of deficiencies in **tie's** ability to manage contractors and their programmes. **tie's** failures in that regard were in stark contrast to the management of the project after mediation. After the mediation, McNicholas Construction Services Limited ("McNicholas") was appointed to carry out the remaining utility works and Turner & Townsend replaced **tie** as project managers. New governance arrangements were introduced. A weekly utility meeting was established to discuss and agree utilities issues. In addition, a utilities project manager was appointed, who acted like a clerk of works. He had a roving role to move up and down the site; problems discovered on the ground were immediately brought to his attention and there was a short line of communication from the utilities project manager to Mr C Smith, the Senior Responsible Owner, to enable issues to be resolved or recorded quickly. Moreover, a representative from each of the utility companies was co-located with the on-street works team, including experienced project managers, commercial managers, and representatives from McNicholas, to identify what the best solution would be to the utility diversions where conflicts arose. In short there was a collaborative approach to the removal of utilities which did not exist before mediation.
59. Despite the discovery of a considerable number of additional utilities conflicts in the on-street section between Haymarket and York Place after mediation, the necessary work was carried out more smoothly, with less confrontation with the contractor and within the required timescale. Although this was vastly different from what had happened during the MUDFA works, not everything changed. The estimate of the cost to complete utilities works was £2.91 million, of which £1.1 million was for legacy works on Leith Walk [WED00000092, page 0001]. Mr C Smith considered that the estimate was based upon unreliable information and £5 million was allocated to utilities risks [TR100000153, page 0020]. The final account for the utility works completed after Mar Hall exceeded £20 million [ibid, page 0065].

60. The conclusions that can be drawn from the existence of utilities in city centres and the need for their relocation to accommodate light rail infrastructure are that:
- there are uncertainties about their precise location and the location of redundant apparatus and other underground obstructions.
 - although site investigation will assist in identifying such problems, it is apparent from the experience after mediation that uncertainties will remain.
 - the budget for diverting utilities should contain sufficient contingency to allow for such uncertainties.
 - a collaborative approach to the diversion of utilities should be adopted.

tie's failure to collaborate with others

61. **tie's** failure to collaborate with designers, contractors, and stakeholders to resolve any issues that arose and minimise delays and consequent expense was not confined to the SDS contract or MUDFA. Although **tie's** failure in that regard continued throughout the procurement of the Infraco contract and following its signature, the difficulties in the relationship between **tie** and BSC after the signature of the Infraco contract might be explained by **tie's** distrust of BSC, notably BB which was part of that consortium, because of the events leading to the signature of the Infraco contract resulting in demands for increases in the contract price. After contract signature BSC's demands for additional payments that were shown to have been excessive did nothing to improve the relationship between **tie** and BSC. However, once the Infraco contract was signed on 14 May 2008 the die was cast. Thereafter parties were bound by the terms of the contract. Before considering **tie's** failures in the negotiation of that contract and the problems with the contract terms it is appropriate to recognise that CEC was among the stakeholders with whom **tie** failed to collaborate despite giving the appearance of doing so.
62. The culture within **tie's** senior management prior to the signature of the Infraco contract was one of resentment of any challenge to, or perceived interference in, their role of procuring and managing the project. This is best illustrated by **tie's** attitude to the involvement of a group of senior CEC officials from the Solicitor's Department and the Departments of Finance and City Development responsible as members of the project team for scrutinising various aspects of the project, looking after CEC's interests and reporting to their respective managers (the Solicitor to CEC and the Directors of Finance and City Development as the two responsible directors). This group was known colloquially as "the B team" and referred to as such by some witnesses in their evidence to the Inquiry. Following meetings between representatives of the "B team" and of **tie** at which members of the "B team" asked appropriate but searching questions, **tie** would complain to the appropriate director within CEC about what **tie** interpreted as interference in its procurement of the project. In September 2007, when the Director of Finance and the Director of City Development decided, on the advice of the "B team", to appoint external consultants (Turner & Townsend) to review and quantify the risks to CEC arising from the proposed Infraco contract and Tramco contract, **tie** instructed an OGC risk review instead. The nature of the OGC risk review differed from CEC's requirements and Mr Heath, a consultant involved in the OGC risk review, acknowledged that a review by Turner & Townsend would have gone into much more detail than the OGC team was able to do. **tie's** resistance to scrutiny by Turner & Townsend was indicative of its resistance to any criticism that might, in its view, result in the project being cancelled.

63. **tie's** attitude to CEC's officials continued after the signature of the Infraco contract and was underlined by the actions of Mr Hamill, of **tie**, who confirmed in his evidence to the Inquiry that the relationship between some of the members of the senior management of **tie** and CEC officials was not very harmonious. On Mr McGarrity's instruction he adjusted the quantitative risk analysis ("QRA") after financial close to reduce the allowance for general programme delay by £1.3 million, despite the fact that the reasons for doing so were not explained to him. Although the changes proposed by Mr McGarrity reflected the recommendation by **tie** contained in the Financial Close Process and Record of Recent Events document [CECo1338847], it is clear from the terms of his communication with the members of the **tie** management team mentioned below that Mr Hamill was unaware of the justification for the change or of its relationship to the Financial Close Process. He altered the relevant figure manually and sent the amended QRA to CEC officials. In doing so, he advised Mr Bell, Mr McGarrity, Ms Clark and Mr Murray, of **tie**, that he had "pockled the spreadsheet" [PHT0000023, page 61] and that it solved the problem and helped them to "get the final result past CEC as I doubt they will notice what I have done" [ibid]. Mr Hamill asked the recipients of his email to confirm by a specified date before he sent his email to CEC officials that they were content with his proposed approach and that he would take no response as being acceptance. None of the recipients of the email responded to Mr Hamill to advise that they disagreed with his proposed approach, from which I have inferred that they approved of Mr Hamill's actions and his attitude towards CEC officials. Although the effect of the change may not have been material in the context of the project as a whole Mr Hamill was aware that his actions were irregular. As was recognised by Mr McGarrity, Mr Hamill ought to have explained to CEC officials that he had not re-run the computer programme and had entered the figures manually as well as his reasons for doing so. Although Mr McGarrity stated that he would have wanted CEC officials to know what had been done if there was a manual adjustment to the QRA, he did not respond to Mr Hamill's email to make that suggestion. Mr Hamill's failure to explain to CEC officials what he had done, together with the failure of the recipients of his email to challenge Mr Hamill's explanation that what he had done was apparently intended to avoid scrutiny of his actions by CEC officials, illustrate an acceptance by senior management in **tie** that it was permissible to withhold information from CEC officials in order to get the project underway.
64. **tie's** failure to collaborate with others extended to its engagement with Audit Scotland. Its resistance to what it perceived as criticism mentioned in paragraph 62 may also have been influenced by uncertainties about the future of the project because of the political climate prior to and after the Scottish Parliament election when it was known that the SNP administration was opposed to the project. In June 2007 when there was political scrutiny of the project **tie** withheld relevant information from Audit Scotland in its inquiries prior to the preparation of its report to the Scottish Parliament. In particular, it withheld two Powerpoint slides from Mr Greenhill, the official from Audit Scotland responsible for the report about the Tram project. These slides disclosed significant slippage in the design programme and were material to Mr Greenhill's investigations. A further example of manipulation of the provision of information to Audit Scotland arose in relation to a claim that was being made in 2007 by PB for an extension of time of 40 weeks and an additional payment of £2,248,517 in respect of prolongation and additional services between 3 July 2006 and 9 April 2007. Although **tie** advised PB that the claim was well presented and worthy of consideration, **tie** requested PB to delay processing the final claim through document control until after the Audit Scotland report had been submitted to the Cabinet. There were also legitimate concerns about the accuracy of the information provided by **tie** to Audit Scotland about the cost estimate and the statement that the Infraco bids were "firm".

Risk

65. The personnel at **tie** involved in the procurement and delivery of the Tram project were aware of the danger of events that might result in delay and in increased costs. Such danger is commonly understood by those engaged in construction and engineering contracts and is known as risk. In all such contracts it is necessary to make allowance for risk within the cost of the project. In the Edinburgh Tram project, the allowance for risk within the total estimated cost of £498 million reported in the FBC was just under £49 million although that figure was not disclosed publicly. That allowance for risk was assessed on a P90 basis, which meant that there was a 90 per cent probability that the allowance would not be exceeded. Using P90 meant that **tie** had greater confidence in delivering the project within budget than if they had used the more normal basis for such projects of 80 per cent probability that the allowance would not be exceeded (P80). By using P90 the amount allowed for risk within the estimated price was less than if **tie** had used P80.
66. Whatever allowance is made for it, risk must be managed throughout the project. The management of risk can involve various measures including its elimination, its transfer to the contractor, its minimisation or control and its quantification. **tie** set out to use measures falling into each of these categories, but it is apparent that its risk management was not successful.
67. The elimination of risk associated with design and utilities was dependent upon the implementation of the strategy that the design for the infrastructure works would be fully complete by the time that a price for those works was agreed, and that the works to divert utilities would be carried out under a different contract and would be complete in a section of the route before the Infraco works commenced in that section. The failure to implement that strategy meant that the risk had not been eliminated as planned. As the risks had not been eliminated, **tie** intended to transfer them to Infraco, particularly the risk arising from the incomplete design, and it was this that led to the discussions in December 2007 in Wiesbaden. However, both the written agreement that followed those discussions, the "Agreement for contract price for phase 1A" [[CECo2085660](#), Parts 1–2] and the pricing schedule in the Infraco contract, SP4 [[USB00000032](#)], left substantially the entire risk with **tie**, as it was the intended purpose, as well as the effect, of each of the pricing assumptions in SP4 to allocate to **tie** the risk if the circumstances were not as assumed.
68. The most relevant of the assumptions in SP4 were that:
- the delivery of design would be aligned with the Infraco construction delivery programme.
 - the design delivery programme under the SDS Agreement was the same as the programme contained in Schedule 15 to the Infraco contract.
 - no additional earthworks would be required, and the consortium would not encounter any below-ground obstructions, voids, contamination, or soft material.
 - the works required in relation to the road structures in Princes Street, Shandwick Place, Haymarket junction and St Andrew Square would not extend to full-depth reconstruction.
 - the diversion of utilities would be complete in accordance with the programme, save for ones that had been specified in the Infraco contract as being the responsibility of the consortium.

69. In SP4 **tie** and Infraco acknowledged that many of the assumptions were known not to reflect the reality of the situation and that there would be Notified Departures resulting in increased costs immediately after the signature of the Infraco contract. **tie** failed to make any assessment of the likely number of Notified Departures or to quantify the risk to which it was exposed if the circumstances differed from the various assumptions in SP4. **tie** took no steps to ensure that there was an awareness within CEC of the effect that the terms of SP4 would have on the contract price. Although some officials in CEC were aware of the terms of SP4, others were not, having taken a conscious decision to rely on **tie** officials to keep them informed.
70. Apart from failing to eliminate risks or transfer them to Infraco, **tie**'s efforts to control and quantify risk also included errors that had the effect of underestimating the risk allowance and therefore the cost of the project. **tie** followed a QRA process that was recognised as a standard procedure. It involved **tie** entering the estimated cost and likelihood of more than 400 risks contained in the project risk register into specialist computer software. The output of the computer programme provided an assessment of probabilities of various out-turn costs from which a risk allowance could be derived for the project assuming a particular percentage probability. Although that was a standard procedure, the computer output was only as reliable as the input. **tie**'s estimated costs of possible risks was based upon optimistic assessments of the required allowance for such risks made by a group of people within **tie** but their determination of the values to be put on the individual risks and their consequences were not adjusted to take account of optimism bias, which will be considered in paragraphs 72–75 below.
71. It is apparent that, in some instances, **tie**'s risk allowance was wholly inadequate. The best example of this concerns the MUDFA works. In the budget at FBC in December 2007, the price for these was noted as being approximately £51.5 million and the risk allowance for them was just under £11.5 million. At financial close these figures were reduced to approximately £48.5 million and £8.5 million respectively. Ultimately the cost overrun for utility diversions was approximately £50 million.
72. Professor Flyvbjerg described optimism bias as follows:
- “a cognitive predisposition found with most people to judge future events in a more positive light than is warranted by actual experience. Clearly an optimistic budget is a low budget, and cost overrun follows” [TR100000265, page 0006].
- The available guidance at the time of the project recognised the need for an upward adjustment of the allowance made for risk in the estimated cost of major construction and engineering projects to take account of optimism bias. **tie** failed to comply with the guidance and accordingly underestimated the allowance for risk in the budget.
73. In the Preliminary Financial Case in 2003, **tie** adopted the approach that the percentage figure brought out as the risk contingency could be deducted from the percentage that was to be allowed for optimism bias in terms of the guidance. This was not appropriate as the allowance for optimism bias was intended as an uplift to the risk contingency.
74. In the draft Interim Outline Business Case **tie** classified the project as “standard civil engineering” [CEC01875336, Part 5, page 0090, paragraph 6.4.3] and selected the uplift for optimism bias on that basis. **tie** considered that the starting values for uplifts in the Treasury Guidance were high and could be reduced with the application of procurement and project and risk management best practice. The consequence of this

approach was that no realistic allowance was made for the effects of optimism bias. Moreover, the project should have been classified as "non-standard civil engineering". Had that occurred and the appropriate uplift been used for that classification it could not have been accommodated within the available "headroom"; that is, the amount by which available funding exceeded the anticipated cost. Even if the 80 per cent confidence level had been used the uplift would have resulted in the estimated cost of the project exceeding the available budget. Thus even if **tie** assumed a risk of cost overrun of 20 per cent, representing four times the risk of cost overrun that was reflected in the statements by **tie** to CEC that there was 95 per cent certainty that it could deliver the project within the budget envelope, the estimated cost would exceed the available funds.

75. By the time of the draft FBC, **tie** had decided that there should be no provision for optimism bias and in accordance with that decision no allowance was made for it in the FBC.
76. Apart from the above errors in risk management, **tie** made significant unjustified reductions in the risk allowance between the approval of the FBC in December 2007 and the signature of the contract in May 2008. For example, on 11 February 2008 **tie** reduced the risk allowance for design and consents by £1.124 million and for MUDFA by £3 million. Although the claimed justification for these reductions was the conclusion of the Wiesbaden and Rutland Square Agreements it is not apparent that either agreement could provide a justification for reductions to the risk in respect of either design or MUDFA. In addition, the risk allowance of £17,526,000 for the procurement of the Infracore contract and the Tramco contract was reduced to nil. Although it is true that once the Infracore contract and the Tramco contract were in place it could be said that the risks of procurement could not arise, at that time the conclusion of the contracts was still some time away and, until their terms were finalised, the risks of procurement were still live such that there was no justification for reducing the risk to nil. It appears that the real driver for the risk reductions was an attempt to present the price as being within budget despite the increase in price brought about by each of the Wiesbaden and Rutland Square Agreements.
77. In addition to the changes mentioned in paragraph 76, for the period ending 1 March 2008 the QRA provided by **tie** to CEC was expressed to a P80 probability, which means that there was only an 80 per cent probability that the costs would not be exceeded. Although it is not unusual to use P80 in calculating risks, **tie** had used P90 in their risk assessments until that date to reflect CEC's desire for price certainty. Where the probability threshold is reduced, the allowance that must be made for risk is reduced, which in turn reduces the overall estimated cost of the project. The practical effect was to reduce the risk allowance, and consequently the estimated cost, by £3 million. Despite this, **tie** said nothing to CEC to draw attention to the change that had been made, to explain the effect that it would have on the total risk allowance or to justify it. It was another device by **tie** to present the price as being within budget.

Governance

Governance structure

78. The governance structure for the project was unnecessarily complex. The structure adopted did not follow any recognised governance model used at the material time. There was a lack of clarity as to who had responsibility for the performance of certain tasks and there was some overlap regarding the respective roles of the various bodies created, and individuals appointed, to deliver the project. It is also unclear whether all the individuals appointed to specific roles actually fulfilled these roles. The problems with governance are apparent when one considers the various decisions taken concerning the governance structure from July 2005 onwards.

Project Board

79. The first apparent problem relates to the failure to follow the guidance upon the creation of the project board. The guidance indicated that the project board should consist of representatives of the three interests in the project represented by the Senior User, the Senior Supplier and the Executive. The Senior User is a person or persons who represent the entity that will make use of the output of the project when it is complete. The function of the Senior User is to ensure that, when complete, the project output will meet the needs of those who will use it. The Senior Supplier will be a person or persons who represent the teams that do most of the work. The function of the Senior Supplier role is to be in a position to commit or acquire resources necessary to complete the project. The Senior Supplier role need not come from the customer organisation and may consist of representatives of external contractors as well as, or in place of, internal managers. Applied to the Tram project, it would be expected that representatives from BSC would be included in the supplier role, as might representatives from PB. The Executive represents the business interest and is a person rather than a group of people. That person is ultimately in charge of the project. The guidance is clear that the project board is not intended as a democracy in which decisions are taken by a majority. The decisions are ultimately those of the Executive, and it is that individual who instructs the project managers. In terms of the PRINCE2 method. The Executive is responsible for appointing the other project board roles and chairs the project board.
80. The core governance proposals were similar for each of the Edinburgh Airport Rail Link and the Tram project. When project boards for each of them were first proposed there was no clear statement of their role and their responsibility. The statement in the Report for the **tie** Board meeting on 25 July 2005 that the Tram Project Board ("TPB") would be the principal decision-making body is inconsistent with the guidance in the PRINCE2 model that a project board should not have directive power. The suggestion in that Report that **tie** would delegate its powers to the boards also indicates that their role would be that previously undertaken by **tie** and would therefore be directive or executive. In terms of the guidance on project boards, however, that is not the proper function of a project board. It appears that what was done was, in essence, to regard each project board as a mini-**tie**, which would focus on a single project. There is a further fundamental inconsistency between the statement that powers would be delegated to the project boards and the comment by Mr Bissett in his evidence to the Inquiry that they would have the function of oversight and challenge but **tie** would retain the ultimate responsibilities of the project boards. [PHT00000028, pages 39-41]

81. Later reports to the **tie** Board contained similar statements. The TPB was noted to be the primary decision-making forum and also the oversight body for the project, but nonetheless **tie** retained overall responsibility for the quality of **tie**'s service delivery and for fundamental matters affecting the project. Also, decisions of the TPB were to be reported to the **tie** Board for ratification, and the TPB was to be seen as a committee of the **tie** Board so as to enable the delegation of powers to it. It is hard to see how it was intended to reconcile the notions that:
- the project board was the decision maker, but was also providing oversight;
 - the project board was the decision maker, but **tie** retained responsibility; or
 - the project board was the decision maker, but its decisions would require ratification by **tie**.
82. A further difficulty was that the Chairman of the TPB was initially to be Mr Gemmell, a non-executive director of **tie**, but that was also at odds with both the OGC and the PRINCE2 guidance. According to both, the chair of the TPB should be someone with a core executive role and responsibility. In the OGC guidance the Senior Responsible Owner ("SRO") mentioned in paragraph 83 below was to chair the project board.
83. The second problem was identified in May 2006, following the OGC review. That review noted that the governance structure was complicated compared with best practice which it explained as follows:
- "A best practice project governance structure would consist of an empowered project team under the direct control of an empowered and accountable project director. The project director would report to a project board chaired by the Senior Responsible Owner ('SRO') for the project on behalf of the project promoter.
- "The project board and the project director would have clear terms of reference in respect of their respective responsibilities delegated from the project stakeholders.
- "The OGC describes the role of the SRO as *'the individual responsible for ensuring that a project or programme of change meets its objectives and delivers the projected benefits. They should be the owner of the overall business change that is being supported by the project. The SRO/PO should ensure that the change maintains its business focus, has clear authority and that the context, including risks, is actively managed. This individual must be senior and must take personal responsibility for successfully [sic] delivery of the project. They should be recognised as the owner throughout the organisation.'* [CEC01395434, page 0006, paragraph 3.1.]
84. Prior to this review no SRO had been appointed. Although Mr Renilson was appointed immediately thereafter he interpreted the role as requiring him to use his best endeavours to "make the project happen" [PHT00000040, page 91]. He also considered that his role as SRO related only to the period when the tram would be operational and not during the construction period. I have seen no evidence that could justify his belief that his role was so limited; to the contrary there was clear evidence, of which Mr Renilson must have been aware, that the responsibilities of the SRO covered the construction period. The result was that no one was performing the SRO role before and during the construction phase until the appointment in June 2009 of Mr Jeffrey as SRO. Having regard to his position as chairman of **tie** Mr Jeffrey's appointment as SRO was inappropriate.

85. The fact that nobody was performing the role of SRO before June 2009 should have been apparent to all the members of the TPB and it is extraordinary that nothing was said or done at the time to rectify this omission. Allowing the project to proceed in the absence of someone to perform the key role of SRO – or the equivalent of the Executive in PRINCE2 terms – was a fundamental defect in the governance arrangements. It meant that there was no single person with responsibility for the project and the focus that could be expected from an active SRO was absent.
86. Even if Mr Renilson had undertaken the role assigned to him, the situation would still have been far from ideal. As the project governance developed, Transport Edinburgh Limited (“TEL”) became a delivery vehicle for the project and Mr Renilson was its CEO. As the person with ultimate responsibility for the project, in my view it is better for an SRO to be someone within the client that is commissioning the work or the end user of what is provided. The SRO should be on the outside looking in. As such, the SRO will have some objectivity in relation to the actions of the entity or entities responsible for delivery. Although TEL might have been considered as an end user, it was not appropriate to have a representative from it because it was also a delivery vehicle. As CEC was the owner of this project, it would have been most appropriate to have had an SRO from within CEC. This would also have addressed the issue of unsatisfactory reporting to CEC.
87. The third problem, related to the second, was the appointment of Mr Gallagher to the joint roles of Chairman and Chief Executive of **tie** in August 2006. This was a departure from the code on good corporate governance derived from the Cadbury and Greenbury Reports. Mr Aitchison’s purported justification for that departure was that it was a pragmatic approach in the prevailing circumstances, including the finalisation of the business case. In terms of OGC guidance it should have been the SRO who had responsibility for the business case. Had CEC recognised the role of the SRO and ensured that someone was protecting the interests of CEC by performing that role, the perceived justification for departing from the code would have been shown to be without foundation. Allowing Mr Gallagher to perform the dual role removed a check that would otherwise have been in place in the period throughout contract negotiation and execution.

Relationship between tie and TEL

88. When TEL was incorporated in 2004 with a view to integrating bus and tram services in Edinburgh, Lothian Buses (“LB”), the operator of bus services, had no role in the development or operation of the trams because the latter role had been awarded to Transdev Edinburgh Tram Limited (“Transdev”), whose parent company was an experienced operating company with invaluable expertise in the development and procurement of similar projects. In November 2005 the minutes of the TPB as a sub-committee of the **tie** Board recorded that TEL would “hold the mantle of control and ownership post financial close” [\[TRS00002067, page 0002, paragraph 3.1\]](#) meaning that it had control during construction. It is difficult to understand that decision because **tie** was the body that employed the people to carry out the work necessary to deliver the project. It was also the body that was seeking tenders for the infrastructure and tram works. It was the body that had entered into the SDS contract. It was the only body in receipt of funds from CEC. In any event, it is not obvious that TEL had sufficient resources or employees to play an important role in the delivery and/or oversight of the project, given that TEL had only two employees (Mr Renilson and Mr Richards) and derived all its funding from **tie**.

89. Despite TEL's lack of resources mentioned in paragraph 88, the minutes of the TPB of 23 January 2006 record the merger of the TPB and TEL with the result that instead of **tie** delegating responsibilities to the TPB, the TPB would be part of the body that owned **tie**. In February a governance structure was proposed that resulted in TEL "stepping into **tie**'s shoes" for the project. The decisions of the merged body of TEL and the TPB would be taken solely by directors of TEL. This meant that, in effect, TEL had been put in charge and **tie** was taken out of the picture. Nevertheless, the paper proposed that the regular attendees at the TEL Board should include the Tram Project Director ("TPD"), other **tie** operational management, other CEC representatives, Transdev representatives, a representative from the Scottish Executive and Mr Papps. This further obscured the point of the changes and blurred the distinction between the various entities. There was still no representation of the supplier interest.
90. In June 2006 a paper on governance [[CECo1803822](#)] was presented to the TEL Board that was intended to address the position through to financial close. It referred to the "fulcrum" of the project as TEL's Board acting as the TPB. The authority of the TPD came from TEL. Following the merger of TEL and the TPB it was felt necessary to have clearer delineation between TEL, acting as the TPB, and its acting in its other capacities. Accordingly it was proposed that the project board would revert to the title of TPB and would be a formal committee of TEL.
91. The paper also noted the establishment of two sub-committees of TEL, one of which was the Design, Procurement and Delivery ("DPD") Sub-Committee. It was to be headed by Mr Gallagher, the Executive Chairman of **tie**. This further complicated the decision-making path. The DPD Sub-Committee under Mr Gallagher could take a decision that would advise the TPB, a sub-committee of the TEL Board. In order for a decision to take effect it was necessary that TEL give a direction to **tie** under the chairmanship of Mr Gallagher. It may be said that formal steps were not required to achieve this, but it remained the position that this was a very complex structure and that reliance on informal directions or instructions usually creates scope for misunderstanding and confusion.
92. There were further iterations of the governance proposals in which the TPB became an independent entity, rather than a sub-committee of TEL. By October 2006 in the structure to financial close the key bodies were listed as the TEL Board, the TPB and the two sub-committees of TEL referred to in paragraph 91. **tie** was no longer identified as a key body despite the fact that it employed almost everyone necessary to deliver the project and was the only body in receipt of funds to do so; in short anything that TEL was required to do would be done by **tie**.
93. In September 2007, both the TPB and TEL were each charged with execution and oversight of the project and there was a substantial overlap in the membership of the TPB and the TEL Board. The overlap in both the roles and the membership of both bodies provided scope for confusion as to where the ultimate responsibility should lie. This created a danger that issues that arose would not be properly examined and this is what happened in practice.
94. The complexity and extent of duplication built into the governance structure is illustrated by the practice of the TPB having joint meetings with the **tie** Board. Although this only occurred in October during 2007, it resumed in January 2008 and for the first half of the year the TPB held joint meetings – sometimes with TEL and sometimes with **tie**. There was then a gap until there were further joint meetings with **tie** in November and December 2008 and from January 2009 to March 2009.

When presentations were given to a joint meeting of **tie** and the TPB, the minutes of the meeting refer only to the latter, adding to the difficulty of identifying where responsibilities lay and which bodies were taking decisions. The alternation of joint meetings between the various entities in early 2008 also created the situation in which the minutes of a joint meeting of TPB and TEL would be approved at a joint meeting of TPB and **tie**, and vice versa. These practices suggest that there was no proper understanding of what the governance structures should achieve.

95. On 23 January 2008, there was a joint meeting of the TPB, **tie** and TEL. The papers for the meeting contained yet another iteration of governance within weeks of the CEC's approval of the old one. The new governance structure was intended for the construction period that it was hoped would commence shortly after January 2008. If there was to be a separate structure for the construction period it clearly would have made sense to record it and seek approval at the end of 2007. Taking many months to agree a structure only to have it superseded almost immediately clearly demonstrates very poor management of this issue.
96. As was the case with earlier structures, the new proposed arrangements both describe the TPB as an oversight body and as having full delegated authority to execute the project. There was a confusion of roles within the proposed structure. **tie**'s role was described as being the management of the relevant contracts to deliver the tram network in a fit state for operational purposes, on time and budget. The papers for this meeting on 23 January 2008 included a copy of the proposed operating agreement between **tie** and CEC in terms of which **tie** was to provide the services to deliver the tram service to CEC. This conflicted with the intention, expressed elsewhere in the papers, that **tie** was to provide the delivery services to TEL. It also conflicted with what had been agreed by CEC just the month before. Once again, the clear inference is that there was a lack of understanding as to what the parties were trying to achieve and a corresponding lack of understanding of the roles and responsibilities of each body.
97. The proposals also noted that it was intended that there be "appropriate common membership" [[CECo1015023](#), page 0074] across the **tie**, TEL and LB (Lothian Buses) Boards and that the councillors would be the same on both the **tie** and TEL Boards. Mr Bissett accepted that, in practice, the members of the boards came together in a single meeting. This further calls into question the purpose of having distinct bodies and blurs the allocation of responsibilities.
98. This meeting also established the Approvals Committee, which was intended to give final approval to the contracts prior to signature. It is relevant that the Approvals Committee was to be a sub-committee of the TPB and of the Boards of both **tie** and TEL. This overlap is not surprising as, on the basis of the structures that had been put in place, it would be very difficult to determine which entity should take the decisions and give the advice. It is perhaps one of the most pointed indicators of how confused the governance structures had become that in order to ensure that such a critical decision was properly taken, it was necessary that it be structured so that all three bodies took it.

Bonuses

99. The issue of bonuses paid to the people engaged in **tie** and TEL was the subject of comment during the Inquiry and it seems that this matter can most appropriately be considered along with the structures created for the project.

100. Guidance on good governance required companies to have a formal and transparent procedure for developing policy on executive remuneration and for fixing packages of individual directors. It also stipulated that remuneration committees should consist exclusively of non-executive directors who are independent of management (Cadbury Report).
101. In 2003, **tie**'s bonus scheme allowed certain of its employees a relatively modest performance-related bonus of 10 per cent of base salary (15 per cent for director-level staff). The stated justification for such a bonus was that **tie** had hired certain employees from the private sector and the absence of a car and bonus would be perceived as a disadvantage to the **tie** package.
102. Mr Gallagher was a member of the Remuneration Committee and at its first meeting on 16 October 2006 he nominated Mr Cox as its Chairman and submitted a paper for the committee's consideration. The committee approved the paper that proposed that (with effect from 1 April 2007) **tie** executive directors and other recommended senior managers be entitled to an annual bonus opportunity of 50 per cent of salary. All other **tie** employees were to have an annual bonus opportunity of 25 per cent of salary [[CEC01830099](#), page 0002, item 4; [CEC01828971](#), page 0004, paragraphs 1 and 3]. The context for the increase in bonus opportunity was noted to be that 2006 had seen a significant transformation in **tie** (from a project development organisation to a project management organisation, responsible for project managing and delivering world-class transport infrastructure projects valued in hundreds of millions of pounds) and that **tie** was now competing with the very best organisations in the private sector to attract and retain the best talent.
103. Even although he was not present when the Remuneration Committee considered what actual bonus should be paid him, it was inappropriate and contrary to good governance for Mr Gallagher, as the Executive Chairman of **tie**, to be a member of this committee, far less to propose the level of the bonus opportunities for **tie**'s executive directors who included himself.
104. The committee merely endorsed Mr Gallagher's proposals at its first meeting and did not seek any expert advice or undertake independent checks about the suitability of the proposed criteria for bonus payments. Nor did it consider deferring at least part of the payments until the actual cost of the project was known. In these respects it lacked a formal and transparent procedure for developing policy on executive remuneration and did not give the appearance of being independent of management.
105. In the run-up to financial close in May 2008, the bonus entitlement of senior **tie** staff (and contractors) was dependent partly on individual performance and partly on the timing of financial close and the reported cost, or budget, of the Tram project at financial close. In the event, it appears that the part of the bonus entitlement relating to the timing of financial close was not paid (because financial close took place later than 28 March 2008), but that the part of the bonus entitlement relating to the estimated cost of the project was paid.
106. Following the departure of Mr Gallagher the Remuneration Committee concluded that there were inadequate performance management processes in place and it approved a new bonus scheme which related future bonus payments to senior directors to the completion of the project within agreed cost and timing criteria. In the event the committee accepted Mr Jeffrey's recommendation that there should be no bonus payments made for 2009/10.

Contract close

- 107.** As part of the procedure in which CEC authorised **tie** to close the Infraco contract the following steps were necessary and were each undertaken on 13 May 2008.
- (1) The **tie** management team, including Mr Gallagher, met and formally concluded that it was satisfied with the contract terms and that the **tie** Chairman should send a letter to the CEC Chief Executive recommending that contract completion should proceed.
 - (2) Following on from the above, Mr Gallagher wrote to Mr Aitchison, advising him that **tie** was of the view that the final terms negotiated were materially consistent with the terms of the FBC, that the final terms confirmed the value-for-money proposition demonstrated by the FBC and that it was appropriate to conclude the contracts. A letter from Mr Mackay as Chairman of TEL was sent in parallel.
 - (3) The Policy and Strategy Committee of the Council authorised the CEC Chief Executive:

"to instruct **tie** Ltd to enter into contracts with the Infraco and Tramco bidders in the context of recent changes detailed in the report by the Chief Executive" [\[CEC01891564, page 0007, item 11\]](#).
 - (4) The CEC Chief Executive wrote to Mr Gallagher confirming that **tie** should immediately enter into the Infraco contract and the Tramco contract.
 - (5) The Approvals Committee consisting of Mr Gallagher, Mr Mackay and Mr Renilson, Chief Executive of TEL, met and gave authority to Mr Gallagher, as **tie** Chairman, to proceed with completion of the contracts. In reaching that decision the committee had to consider whether the final terms of the contractual arrangements were within the terms of the FBC, subject to slippage of up to one month in programmed revenue service in 2011. If it did consider that this requirement was satisfied, it had to decide whether it was appropriate to enter into the contracts and their decision had to be unanimously in favour of doing so before **tie** could proceed to sign the contracts. It also had to be satisfied that approval had been received from the CEC Chief Executive to proceed to execution of the Infraco Contract Suite.
- 108.** The Approvals Committee failed to recognise that when they are taken together the documents submitted to them in support of contract close presented a materially misleading picture. There was inadequate scrutiny of the material and a failure to question relevant officials when the Approvals Committee met. The only people present at the meeting were the three members of the committee. There was no common understanding among the members of the committee of their role. There was conflicting evidence from them as to what they did. Mr Mackay gave evidence, which I have rejected, that the committee went through the contract but the evidence of Mr Renilson and Mr Gallagher was that the process was a formality with members simply checking that material existed. There was no effective oversight by the committee. No records were kept of the deliberations of the committee or of their reasons for being satisfied that **tie** should proceed to conclude the contracts.
- 109.** The governance arrangements for the authorisation of **tie** to conclude the contracts were woefully inadequate. Nothing in the various steps towards contract close required a person or persons with sufficient independence from those who had negotiated the contract to apply their minds to the issue of whether the contract conformed to the FBC, to identify what material was available and what conclusions ought properly to be drawn from it, to make a decision and, importantly, to keep a record of all that they had done.

- 110.** The revised governance arrangements for the project as a whole introduced in 2011 were, in my view, a very significant improvement on what had existed previously. Although the mediation at Mar Hall had resulted in a settlement that meant that the project should be easier to administer than it had been, nonetheless, a substantial amount of construction work remained to be done and the improved governance arrangements were an important factor in that work being completed within the revised timetable. A number of features of the revised governance arrangements contributed to that outcome, including:
- The governance arrangements were simpler and clearer than those prior to Mar Hall and were easy to understand.
 - As promoter of the project, CEC took responsibility for, and direct control of, governance.
 - CEC invested a large measure of responsibility for the project in the hands of a single person, Mr C Smith, as the SRO, who understood and performed that role.
 - There were regular meetings between employer and contractors to resolve any issues that arose before they escalated.

The Infraco contract

(a) Contract negotiations

- 111.** **tie**'s failure to implement the procurement strategy resulted in the need for the contract negotiations and the resulting Infraco contract to reflect the altered circumstances. The Infraco contract that was signed on 14 May 2008 was the result of protracted negotiations between **tie** and BBS commencing with the invitation to negotiate ("ITN") issued on 3 October 2006 by **tie** to pre-qualified bidders. On 23 and 25 October 2006, BBS expressed concerns about various issues, including the early stages of the design provided to them, gaps in the supplied drawings, and the potential influence on the final design caused by unresolved planning requirements and the wishes of third parties. Moreover, significant issues were raised regarding drawings provided for bridges and other structures including the absence of drawings for 24 structures, and it was said to be questionable whether the design, based on the drawings supplied, was sufficiently advanced to enable a robust and credible price to be prepared. There were also significant inconsistencies in the information provided by **tie**. Some of **tie**'s employees shared these concerns and suggested on several occasions that the project be paused to allow the design to catch up and to enable the process of awarding the Infraco contract to start on a proper footing. By the end of 2006, considerable difficulties and delays existed in relation to design but **tie**, led by Mr Gallagher, refused to delay the tendering process because of emerging concerns that the project might not go ahead, and that a lot of time could have been lost while waiting for more detailed design to become available before obtaining bids. In adhering to a programme that was incapable of being delivered **tie** was reckless and placed its own interests ahead of the public interest, despite the fact that it was a company wholly owned by CEC and dependent on public funds.
- 112.** **tie**'s concerns about the future of the project were heightened by the SNP's opposition to it in its manifesto for the Scottish Parliament election published in 2007 and the SNP minority Government's attempt to cancel the project in June 2007 that was frustrated by the Scottish Parliament. As will be discussed in paragraphs 188–189 below, the Scottish Ministers withdrew the support of officials in Transport Scotland whose technical experience would have been invaluable in advising **tie** in the contract negotiations.

- 113.** It is worthy of note that, during contract negotiations in the period between April and June 2007, **tie** did not have access to legal advice, having dispensed with the services of DLA in April and before the start in June of the internal solicitor recruited to replace DLA. Thereafter **tie** had advice only from the internal solicitor until the re-engagement of DLA. There is some uncertainty about the latter date but it was probably around August 2007. It is not possible to conclude that **tie**'s actions in this respect resulted in increased costs for the project but dispensing with the services of solicitors, experienced in procurement and in advising on the terms of commercial contracts, and replacing them with a newly recruited internal solicitor who had had no prior involvement with the project was a serious error by **tie**, particularly at a critical period when **tie** had to evaluate tenders including the consolidated proposals submitted by BBS and the other tenderer in May 2007. The probable reason for **tie**'s actions in this respect was to save expenditure but if that is correct, it was a false economy.
- 114.** **tie**'s approach to the contract negotiations was determined by CEC's desire for price certainty for the project which included, but was not restricted to, the cost of the infrastructure works. In an attempt to satisfy that requirement **tie** advised tenderers that it was not obliged to award the Infraco contract to the preferred bidder if the price exceeded £218.5 million but could do so at its sole discretion. Following receipt of the tenders from both bidders in May 2007 it was apparent to **tie** that forecast capital costs exceeded available funding and that further savings were required.
- 115.** **tie**'s proposed solution was to reduce capital costs to a sum within the available budget by value engineering ("VE") savings. VE is a process routinely carried out in construction contracts whereby the parties involved in the works consider whether there is a cheaper means by which the objectives of the contract can be met. It is normal for clients and contractors to seek VE opportunities to achieve savings on the cost of a project. Such opportunities vary according to the individual project but, for example, might relate to the method of construction or changes to the form of specific structures, resulting in lower costs. The two bidders for the Infraco contract had identified a number of opportunities for cost savings and improvements. The difference in the treatment of VE savings in this project from that adopted in other projects was that all the savings were to accrue to **tie**, with no share being payable to the contractor.
- 116.** A series of VE workshops were arranged with each of the Infraco bidders to discuss savings to close the funding gap. The level of VE savings sought by **tie** was unachievable, not least because **tie** failed to take into account the cost of redesign occasioned by changes in structures necessary to achieve such savings and of the consequent delay resulting from the redesign. I accepted Mr McFadzen's description of the VE savings being sought by **tie** as a "fantasy" and that they were being used as a form of "financial engineering" so that **tie** could "manipulate" the figures in order to report to CEC that the cost of the project was within the available budget [[PHT00000034](#), pages 43–44].
- 117.** In October 2007, **tie** appointed BBS as the preferred bidder for the Infraco contract. There had only been one other remaining bidder at that stage. However, the assessment of best and final offers from each of the bidders had been carried out while the design was only approximately 58–60 per cent complete with the result that the bids had been prepared on the basis of the preliminary rather than the final design, and 30 per cent of the price from each preferred bidder consisted of "provisional sums" being no better than a "round-figure guess". The effect of the state of design also meant that the bidders amended the proposed contract terms and conditions to protect their risk position pending receipt of more design information

and completion of due diligence. Although **tie** sought to have this provisional element of the price firmed up once BBS had been appointed as the preferred bidder, BBS was resistant to providing more fixed prices. To have such a large element of the price remain uncertain was clearly at odds with CEC's desire for price certainty.

- 118.** Although **tie** might have had an aspiration that matters would improve in the negotiations leading to the signature of the Infraco contract, the conduct of the negotiations and the terms of the Infraco contract failed to achieve **tie**'s ambitions. On 13 December 2007, a week before the CEC meeting to approve the FBC, Mr Gallagher and Mr Crosse attended a meeting with representatives of BBS at Wiesbaden. Mr Gilbert, **tie**'s commercial director in charge of procurement, prepared briefing notes for the meeting that recommended conceding an increase in the price in return for BBS accepting the liability for "design development risk". However, Mr Gallagher's agenda was to secure an agreement on a figure that could be used to illustrate that the project would be delivered within the estimated cost of £498 million even although he was aware that the agreed figure would be subject to unquantified and unquantifiable increases as design progressed. Mr Gallagher and the principals of the consortium, Dr Enenkel and Mr Hofsaess, had a private meeting following which **tie** agreed to an increase of £8 million in the Infraco contract price in exchange for certain provisional sums being made firm and fixed. The adjusted contract price after Wiesbaden was £218,262,426 which was within the target price mentioned in paragraph 114 and satisfied Mr Gallagher's objective. Design development risk was not transferred to BBS. The agreement reached at Wiesbaden resulted in a written agreement signed on 20 and 21 December 2007.
- 119.** On 20 December 2007, CEC approved the FBC which stated that the capital and maintenance costs of the scheme had been finalised and that, for line 1a, it was forecast to be £498m. The forecast was stated to be based upon firm rates and prices received from the bidders for system construction, vehicle supply and maintenance and included a risk contingency. The figure of £498 million was a "target number" that **tie** management felt should be given to CEC, as opposed to a cost derived from empirical data that is suggested in the FBC. Moreover the quantification of the risk contingency was an underestimate as it failed to make any allowance for optimism bias. In these respects the FBC was misleading.
- 120.** Thereafter contract negotiations continued. On 7 February 2008, **tie** and BBS concluded the Rutland Square Agreement in terms of which the price agreed at Wiesbaden was increased by £3.8 million resulting in a construction contract price of £222,062,426. In addition, the agreement acknowledged that there was a claim by BBS for £3.2 million in respect of changes from the Employer's Requirements version 3.1 which was later settled at £2.7 million and was not part of the construction contract price. The Rutland Square Agreement contained a provision that **tie** and BBS agreed that under no circumstances would the construction contract price be increased prior to formal signature of the Infraco Contract. Despite that provision **tie** and BBS signed the Citypoint Agreement on 7 March 2008 in which there was a further price increase of £8.6 million to reflect:
- (a) an amendment to the contract programme extending the opening date for revenue service from March 2011 to July 2011;
 - (b) the impacts of version 3.5 of the Employer's Requirements;
 - (c) BBS accepting the design quality risk and consequential impact on time;

(d) providing compliant depot equipment; and

(e) provision of tapered poles for the overhead electrification lines. This was an issue of aesthetics according to which CEC considered that the tapered poles looked better.

The Inquiry has seen no evidence of **tie** resisting this price increase based on the agreement that there would be no further construction price increases before signature of the Infraco contract.

- 121.** Contrary to legal advice tendered by DLA, on 18 March 2008 **tie** issued a Notice of Intention to Award ("NIA") the Infraco contract to BBS. The NIA is a precursor to the award of the contract and affords the parties a short period to reflect upon the terms of the negotiated deal before formally committing to it. When **tie** issued the NIA there was no agreed contract price; no milestone payment schedule; no bills of quantity; no agreed master construction programme; and no agreed post-novation design delivery programme. It was contrary to normal procurement management practice for the procuring party to issue an NIA when the parties were still in negotiation over central contractual documentation. **tie**'s actions in issuing the NIA prematurely strengthened BBS's negotiating position.
- 122.** The premature issue of the NIA and **tie**'s failure to enforce the provision in the Rutland Square Agreement that there would be no further construction price increases prior to signature of the Infraco contract appear to have encouraged BBS to make a last-minute demand for an additional £12 million on the eve of the planned signature of the Infraco contract. This demand was ultimately settled in the Kingdom Agreement, in terms of which **tie** agreed to pay BBS an additional £4.8 million in four instalments of £1.2 million each, described as an "incentivisation bonus" [CEC00036952, Part 2, page 0143]. The payments were to be made upon the completion of each of four sections. As was accepted by Mr Walker and was apparent to Mr Fitchie, they were not incentive payments and suggesting otherwise was simply a device to give the impression that something had been obtained in return for the increased price. In addition to the payment of £4.8 million **tie** agreed to pay BBS £3.2 million to compensate it for work done in the procurement period if **tie** did not proceed with phase 1b of the project. There was no justification in this case for such a payment, and it would appear that this was another device to limit the apparent cost of line 1a by moving the cost of liabilities from line 1a to line 1b. The Infraco contract that was to be signed on 2 May 2008 was amended to incorporate the terms of the Kingdom Agreement, and the amended contract was signed on 14 May 2008.

(b) Contract terms

- 123.** Although many parts of the contract had been drafted by late 2007, the pricing schedule ("SP4") was blank at the time of the signature of the Wiesbaden Agreement. When CEC made the decision to approve the FBC and to proceed with the project in December 2007 there were still no draft provisions on the pricing mechanism. Once approval had been given, however, it was necessary that the terms of this part of the contract be drafted and agreed. **tie** and BBS negotiated the terms of SP4 between January and April 2008 and CEC officials received a copy of SP4 on 15 April 2008.
- 124.** The construction works price, analysed in Appendix A to SP4, which is reproduced here, was stated to be on a lump-sum basis that was fixed until completion of the Infraco works and not subject to variation except in accordance with the provisions of the Infraco contract (sections 1.1 and 1.2). Although there is a recognition of the possibility of change to the price, there is an impression of price certainty created by the terms "lump sum" and "fixed until completion of the Infraco works".

APPENDIX A
CONSTRUCTION WORKS PRICE ANALYSIS
A1 CONSTRUCTION WORKS PRICE ANALYSIS

Lump Sum Firm and Fixed Price		£ 231,797,342
Deduct Identified Value Engineering	Taken To Firm Price	£ 9,965,006
	(See Appendix C)	
Firm Price		£ 221,832,336
Deduct Further Value Engineering	(see Appendix D)	£ 2,670,000
Sub Total		£ 219,162,336
Add Defined Provisional Sums	(see Appendix B)	£ 11,434,316
Add Undefined Provisional Sums	(see Appendix B)	£ 8,011,012
Construction Works Price		£ 238,607,664

Source: [USB00000032](#), page 0015

- 125.** The table in Appendix A to SP4 was a matter of presentation and was designed to show that BBS's price was affordable. It was misleading. As can be seen from the table, the analysis results in achieving a price of £219,162,336 when VE savings are deducted and provisional sums are excluded, apparently achieving **tie**'s objective of a target price in the region of £219 million excluding provisional sums. VE savings had to be delivered to achieve the construction works price of £238,607,664 and, as **tie** was aware, the nearer one approached the start of construction work the harder it would be to achieve such savings. The VE savings in the table were unlikely to be achieved. **tie** failed to consider the design implications and associated costs mentioned in paragraph 116 above and the deductions for VE represented financial engineering. If the VE savings of almost £12 million were not achieved they would be added back into the contract price in full and BBS would also be recompensed up to a maximum figure of £25,000 per VE saving for each potential saving considered. Insofar as the table sought to illustrate a firm price of £219,162,336, it was misleading and recognised as such by Mr Reynolds, of PB. In an internal report dated 28 March 2008 he commented upon the VE savings of approximately £12 million without making any allowance for the cost of design required to provide VE savings and observed that **tie** intended to instruct changes immediately after signature of the contract to remedy the situation. He also expressed his concern that the major stakeholders, including CEC, did not appear to be aware of the position and he advocated that PB must ensure that the Novation Agreement was worded such that it protected PB from any accusations of deception which could be levelled at **tie** in future.
- 126.** In paragraph 22 above I summarised the principal causes of the failure to deliver the project within budget and to the extent projected, and I have considered most of them relating to **tie**. The criticisms of **tie** thus far demonstrate not only its poor management of the project but also a culture within **tie** that withheld information from CEC and at times positively misled it. There can be little doubt that **tie**'s mismanagement played a significant role in the failure to deliver the project on time and within budget and to the extent projected. However, the principal cause of these failures was the Infraco contract itself, the terms of which resulted in disputes about its interpretation and the cessation of work at particular locations until the relevant

dispute had been resolved. The disputes that arose shortly after the signature of the contract centred principally on two related sets of provisions in the Infraco contract: (1) the provisions relating to entitlement to additional payments in SP4; and (2) the provisions in clause 80 as to what should happen in relation to execution of the works when it was considered that a change was being made to those works.

127. The provisions relating to an entitlement to additional payments in SP4 centred on assumptions that were stated in SP4 to be the basis on which the price had been fixed. If those assumptions did not hold true, Infraco could be entitled to additional payment. Clauses in contracts stating the basis on which the price has been determined and regulating entitlement to additional payments are common enough in construction contracts. In themselves, therefore, the existence of such clauses in the Infraco contract is not remarkable. It is apparent, however, that the terms as they appeared in the contract for the Tram project caused substantial problems that led to the breakdown of working relationships and, ultimately, the practical cessation of works.

128. Section 3.2.1 of SP4 is in the following terms:

"It is accepted by **tie** that certain Pricing Assumptions have been necessary and these are listed and defined in Section 3.4 below. The Parties acknowledge that certain of these Pricing Assumptions may result in the notification of a Notified Departure immediately following execution of this Agreement. This arises as a consequence of the need to fix the Contract Price against a developing factual background. In order to fix the Contract Price at the date of this Agreement certain Pricing Assumptions represent factual statements that the Parties acknowledge represent facts and circumstances that are not consistent with the actual facts and circumstances that apply. For the avoidance of doubt, the commercial intention of the Parties is that in such circumstances the Notified Departure mechanism will apply." [USB00000032, page 0005.]

Although clauses explaining the basis upon which the price has been determined and regulating the contractor's entitlement to additional payment are common in construction contracts, this clause acknowledged that some of the assumptions upon which the price had been calculated were not factually correct and both parties were aware of that. The contract did not specify which assumptions were factually incorrect but if Infraco could show that a pricing assumption was no longer applicable, either because parties were aware that it had never been true or because Infraco experienced difficulties that had been assumed would not arise, this could give rise to a Notified Departure resulting in a claim for additional payment. In such a situation the claim would be based upon Infraco asserting that a deemed Mandatory **tie** Change to the work required to be undertaken and that it would incur additional costs to implement that change. When the terms of SP4 were agreed, **tie** and BBS were both aware that there would be Notified Departures and that some would arise immediately after contract signature. **tie** had no idea how many there would be and made no attempt to estimate the number or the likely financial consequences before signing the contract. Senior management in **tie** thought that there might be between 60 and 100 Notified Departures as a result of SP4, but there were approximately 800. In making that comparison it should be borne in mind that SP4 was not the only part of the contract that could give rise to a Notified Departure. For example, clause 22 of the contract provided that unidentified utilities uncovered by the Infraco contractor would amount to a **tie** Change. However, most of the disputed Notified Departures related to SP4.

- 129.** Section 3.4 of SP4 contained a list of 43 pricing assumptions. An example of pricing assumptions that were known to be untrue at the date of signature of the contract related to the diversion of utilities. The relevant assumptions were 24 and 32. Pricing Assumption 24 was that the utilities diversions were to be completed in accordance with the requirements of the Infraco programme, save for utilities diversions to be carried out by the Infraco contractor. Pricing Assumption 32, that programming assumptions in Schedule Part 15 of the Infraco contract would remain true in all respects, included an assumption that diversion of utilities would have been completed for each of the sectors by specified dates and there would be no slippage in the MUDFA programme. By May 2008, when the parties were in a position to sign the Infraco contract, there were already delays in the MUDFA works and there were a number of areas where MUDFA was the early start constraint for Infraco.
- 130.** Pricing Assumption 1 ("PA1") featured most in the disputes between **tie** and Infraco. In terms of that assumption the design prepared by the SDS Provider would not "other than amendments arising from the normal development and completion of designs" *ibid*, page 0005, paragraph 3.4] be amended in terms of design principle, shape, form and/or specification from the Base Date Design Information ("BDDI"). In a proviso at the end of PA1 normal development and completion of designs was defined as "the evolution of design through the stages of preliminary to construction stage and excludes changes of design principle, shape and form and outline specification" *ibid*, page 0006, paragraph 3.4]. If PA1 were to be given a literal interpretation, the proviso at the end deprived the opening words of meaning. I agree with the advice tendered by Ms Davies QC³ that it was unlikely that it had been intended that the opening words were to be deprived of effect or that the proviso was intended to be devoid of meaning but it is difficult to give it any meaning that does not undermine the opening words. In passing it would appear that the consideration given to normal development and completion of design may have been unnecessary because there would be a Mandatory **tie** Change resulting from the change to the BDDI upon which the price had been fixed (see paragraph 132 below) but it does not appear that Infraco sought to rely upon this.
- 131.** Apart from the difficulty mentioned in the preceding paragraph, there was also a difference of understanding between **tie** and Infraco as to what amounted to normal development of design. That difference was never resolved because the disputes were determined on the basis of their particular facts and the decisions did not resolve matters of principle. The exception was the decision of Lord Dervaird in relation to the meaning of clause 80.
- 132.** A further difficulty arose from the lack of clarity of the terms of PA1. BDDI is defined as "the design information drawings issued to Infraco up to and including 25th November 2007 listed in Appendix H to this Schedule Part 4" [SP4, *ibid*, page 0003, clause 2.3]. These drawings were the basis upon which Infraco had based its negotiations and agreement on price. As a result of the continued development of design after 25 November 2007, **tie** and Infraco were both aware that there would probably be Notified Departures due to design changes. It was, therefore, essential that there was no dubiety about the design baseline from which any changes would be assessed in determining such claims. Despite that, Appendix H does not have a list of drawings and merely states: "[a]ll of the Drawings available to Infraco up to

³ Following the death of Her Majesty Queen Elizabeth II and the accession of His Majesty King Charles III all Queen's Counsel (QCs) automatically became King's Counsel (KCs) but throughout the Report the acronym QC has been used to reflect the position that prevailed during evidence sessions.

and including 25th November 2007" [ibid](#), page 0053]. The failure to list the drawings in Appendix H arose in the Tower Place bridge adjudication where **tie** and BSC disagreed about the drawings that had been available to Infraco at the relevant date. The adjudicator was unable to establish that the drawings upon which **tie** relied had all been issued to Infraco and it was not possible for him to compare the Issued for Construction ("IFC") drawings with the drawings that were part of the BDDI. He also concluded that the parties were unclear why Appendix H had not contained a definitive list of drawings that had been issued to Infraco up to and including 25 November 2007.

- 133.** In most construction contracts there will be changes to the client's requirements as the contract progresses, and it is customary for the contract to provide a mechanism for dealing with such changes. The mechanism for changes requested by **tie** is contained in section 80 of the contract. It had been the subject of negotiation and agreement before the start of negotiations about the terms of SP4. Essentially, if **tie** wished a change to the Infraco works, it had to serve a Notice of Change on Infraco, providing details of the required change. Upon receipt of such a notice Infraco had to provide **tie** with an estimate of the cost of the change, following which parties had to agree the contents of the estimate, failing which either party could refer the estimate for determination in accordance with the dispute resolution procedure ("DRP"). Following agreement or determination of the estimate, **tie** could either issue a **tie** Change Order to Infraco, or withdraw the **tie** Notice of Change except where the estimate related to a Mandatory **tie** Change. There were also provisions within clause 80 about the contents of the various documents and the timetable to be observed. More significantly, in cases of urgency, **tie** could instruct Infraco to carry out the proposed **tie** Change prior to the determination or agreement of the estimate by issuing a **tie** Change Order to that effect. In that event Infraco was bound to implement the **tie** Change but prior to agreement or determination of the estimate was entitled to payment of its demonstrable costs for implementing the **tie** Change.
- 134.** **tie**'s purpose in insisting upon the procedure outlined in paragraph 133 was to enable it to exercise control over expenditure by preventing Infraco from acting upon a **tie** Notice of Change without **tie**'s agreement on the cost of such change. If the cost, as determined following the DRP, was deemed by **tie** to be too expensive it could withdraw the notice and compensate Infraco for its expenses associated with the procedure following service of the notice.
- 135.** Section 3.5 of SP4 provided that there would be a Mandatory **tie** Change if the facts or circumstances differed in any way from the Base Case Assumptions (or any part of them) upon which the contract price had been fixed. The Base Case Assumptions included the BDDI, the pricing assumptions in SP4 and specified exclusions listed in section 3.3 of SP4 as well as certain tram vehicle information. In the case of a Mandatory **tie** Change the procedure outlined in paragraph 133 applied, except that Infraco could issue a Notice of **tie** Change ("INTC") and **tie** could not withdraw the deemed Notice of **tie** Change. Significantly, no work could be undertaken until the estimate for the change had been agreed by **tie** and Infraco or determined in the DRP or unless **tie**, as a matter of urgency, issued a **tie** Change Order before the determination of the estimate, in which case it had to pay Infraco for its demonstrable costs for implementing the **tie** Change Order. This procedure was inappropriate for Mandatory **tie** Changes because it introduced unnecessary delays for work that had to be undertaken and which could have been valued after the event by agreement between the parties or by reference to the DRP. When the terms of SP4 were being negotiated, Mr Laing, of Pinsent Masons, questioned the appropriateness of this

procedure for Mandatory **tie** Changes but his representations were misconstrued by **tie** as an attempt by Infraco to alter a provision that had been settled. **tie** failed to appreciate the distinction in procedure that ought to have been made between a **tie** Notice of Change where **tie** had the option to withdraw the notice if it considered that the cost of implementing the notice was excessive in light of the available budget and a Mandatory **tie** Change arising from the contractual provisions which **tie** could not withdraw. In the latter case a procedure ought to have been devised to permit work to proceed without incurring the delays associated with prior agreement about its cost. As the work had to proceed in any event, agreement about its cost could be deferred until after it had commenced or even after its completion.

- 136.** Although **tie** had intended to enter into a lump-sum, fixed-price contract, the pricing assumptions in SP4 frustrated that aim. The provisions relating to entitlement to additional payments in SP4, coupled with the provisions in clause 80 of the contract as to what should happen in relation to the execution of the works when it was considered that a change was being made to those works, were the principal reasons for the disputes between **tie** and BBS. These disputes caused substantial problems, leading to the breakdown of working relationships and, ultimately, the practical cessation of works. Both parties should accept responsibility for the breakdown in their relationship that affected the ultimate cost of the project.
- 137.** **tie** did not trust BBS because, during the contract negotiations, BBS had demanded and secured price increases reflected in the Rutland Square Agreement, the Citypoint Agreement and the Kingdom Agreement. The last two agreements were reached despite a clause in the Rutland Square Agreement that there would be no further price increases before the signature of the Infraco contract. The Kingdom Agreement resulted from demands for a further sum of £12 million made on the eve of signature of the Infraco contract, coupled with threats to refuse to sign it. When disputes arose BSC was substantially successful on the merits of its claims that there had been **tie** changes entitling BSC to additional payments but **tie** reported savings of about £11 million on the estimates originally submitted by BSC for these changes. On the other hand, **tie** decided in advance of the signature of the Infraco contract that it would resist INTCs by fighting Notified Departures "tooth and nail". This was wholly inappropriate in the context of a public sector contract which should have discriminated between INTCs that were justified in principle and those that were not. It also displayed an attitude towards the Infraco contractor that was inconsistent with the collaborative approach that was required to complete the project at the earliest opportunity, although it must be doubtful whether it could have been delivered on time and within budget once the Infraco contract was signed on terms that were inconsistent with the procurement strategy.

Involvement of CEC

Relationship between ownership and performance of statutory duties

- 138.** CEC was the promoter, owner, funder and financial guarantor of the project, with grant support from the Scottish Ministers, and **tie** was responsible for procuring and delivering it. CEC was the statutory body consisting of councillors who had the strategic role of determining policy, including budget priorities within their local authority, and deciding at all stages whether to proceed with the project. Their role should be contrasted with that of CEC officials who were responsible for advising councillors and implementing their decisions.

- 139.** The absence of anyone performing the role of SRO is mentioned in paragraph 84 above. As the promoter and owner of the project, it was the responsibility of CEC to appoint an SRO. Such an appointment would have resulted in a direct line of reporting from the SRO to CEC and should have ensured that CEC was kept informed of progress and could be reassured that its interests were being protected.
- 140.** Whereas **tie**'s sole focus was on the Tram project, CEC had a number of different roles and functions to perform, including the exercise of various statutory powers as the authority responsible for planning and roads and transport, as well as bridges. The exercise of these powers had an effect upon the progress of the project. As was noted in paragraphs 39 and 40 above, CEC and **tie** were principally responsible for the delays in design. As the local authority exercising the statutory powers mentioned above, CEC ought to have liaised with the prospective designers of the project, and thereafter with PB when it was appointed to undertake the SDS contract, to clarify CEC's design requirements at the earliest opportunity. CEC ought to have provided adequate guidance at the earliest opportunity to assist designers in developing the details of the Prior Approval Designs and Technical Approvals that would be acceptable to it as planning and roads and transport authority. The Tram Design Manual [[CEC00069887](#)], produced around December 2005, only gave guidance on design principles of a very general nature and the delivery of a draft Tram Public Realm Design Workbook [[PBH00018590](#); [CEC02086917](#); [CEC02086918](#); [CEC02086920](#)–[CEC02086934](#)]⁴ in April 2008, which gave more detailed guidance on matters such as surfacing, materials and construction details, was too late because it arrived only one month before contract close.
- 141.** CEC failed to work in a collaborative manner to resolve design issues swiftly and with clarity or to provide a focus on enabling the project to proceed smoothly. The lateness and sheer volume of the comments on design, including the reconsideration of issues that had been rejected at an earlier stage in the design process, were bound to cause delay and expense. It is very surprising that such a disorganised and uncoordinated response was allowed to continue unchecked. In paragraph 48, I have recognised that, as a public body with statutory responsibilities, it would have been inappropriate or even unlawful for CEC to fetter its discretion. However, CEC could, and should, have taken steps to reduce the delays in granting consents and approvals without affecting the proper performance of its statutory duties. As design progressed before and after contract close CEC ought to have co-ordinated the various comments and objections to design from within CEC and ought to have managed the expectations of third parties whose consent was also required. Instead it commented with a number of voices rather than a single, considered voice. The change that came about in consents and approvals after the Mar Hall mediation is striking. There is no suggestion that CEC ignored or in any way compromised its obligations in that period, and yet it dealt with matters in a wholly different way.

⁴ CEC were unable to provide the Inquiry with the "Tram Public Realm Design Workbook" as a single document [[CEC02087292](#)].

Review of Business Cases

- 142.** The Business Case is a document that is critical to identifying what the project should deliver and what the costs will be. It is intended to be a “living” document that is updated to reflect changing situations that arise as a project develops. In this context, it performed the additional functions of informing councillors of the details of the project and providing a factual basis on which a decision could be taken as to whether or not to proceed.
- 143.** The Business Cases were prepared by **tie** with assistance from external advisers. Prior to the decision of Scottish Ministers to withdraw the active involvement of Transport Scotland from the project following the decision of the Scottish Parliament on 27 June 2007, the necessary technical expertise required for the review of the draft FBC had been provided to CEC by Transport Scotland with support from independent professional advisers. The intention had been that Transport Scotland would be involved, along with CEC, in the approval of the FBC. After the withdrawal of Transport Scotland from that role, CEC lacked the necessary expertise internally to undertake a meaningful review of **tie**'s QRA.
- 144.** On 24 September 2007, CEC's officials decided to instruct Turner & Townsend to undertake an external review of the FBC and requested Ms Clark of **tie** to provide certain information to enable CEC to progress the commission. On 28 September, Mr Crosse, of **tie**, advised Mr Fraser, of CEC, that OGC had agreed to undertake the risk review following an OGC review scheduled for the beginning of October and that Turner & Townsend would be “stood down”. Although the OGC risk review provided some reassurance to CEC that review was at too high a level and was of too short a duration to provide what CEC required. Given the size, complexity and value of the project and the potential risks to CEC, a longer, more detailed, forensic-type review was necessary to protect CEC's interests properly. That was what was envisaged in the brief for Turner & Townsend.
- 145.** Having decided to seek an independent review, CEC officials ought to have insisted upon determining its nature and scope as well as the identity of the provider of the service required. The whole point of obtaining independent project assurance is that it is independent from the project manager whose work is the subject of review. It was wholly inappropriate for **tie**, as project manager, to seek to influence the identity of the reviewer or to control the process and the scope of the review. In allowing **tie** to take control of the risk review CEC officials, notably Mr McGougan and Mr Holmes as the responsible directors, showed undue deference to **tie** by failing to insist upon the appointment of Turner & Townsend.

Information provided to councillors

- 146.** It is axiomatic that in preparing reports for the consideration of councillors to enable them to take informed decisions, local authority officials must take care to ensure that the information given to councillors in such reports is both complete and accurate. During the last quarter of 2007, CEC had to take significant decisions at its meetings on 25 October and 20 December in relation to the FBC and whether to authorise **tie** to enter into the Infraco contract and the Tramco contract. At the October meeting councillors had to consider the first version of the FBC (“FBCv1”) and at the December meeting the second version (“FBCv2”). As was normal practice, senior officials provided councillors with reports to assist them in reaching their decisions. In addition, councillors were given other information in a number of forms including a copy of the relevant version of the FBC and, at the October meeting, there was a joint presentation by Mr Gallagher, Mr Renilson and Mr Holmes.

- 147.** The information provided to councillors at the meeting on 25 October was inaccurate, and as such misleading, in the following respects.
- The statement in the Executive Summary of the FBCv1, that the procurement of the main contracts had reached a stage where all material terms, including the capital costs, were agreed, was inaccurate insofar as it related to the Infraco contract. Although there was agreement about certain fixed rates in the Infraco contract, the main terms, including the provisions relating to pricing, risk allocation and the capital costs, were not agreed at that time. They were not agreed until May 2008.
 - The Executive Summary recognised that delay in moving utilities and handing over work sites to Infraco could result in significant financial penalties for which CEC would ultimately bear responsibility. To address that risk, work had started on the diversion of utilities, and progress to date was stated to have been "excellent with no major issues encountered so far" [CEC02083538, page 0036, paragraph 1.85]. The reality was that the MUDFA works were behind programme due to a variety of reasons, including the lack of Issued for Construction ("IFC") drawings, the discovery of significantly more utilities than expected and the existence of underground obstructions impeding the MUDFA works.
 - Mr Gallagher's statements that the contract would be close to a fixed final price, that almost all risk transferred to the private sector, that there was very limited exposure should things go wrong in the contracts, and that the cost of the project would be about £498 million or £500 million, must have provided councillors with considerable reassurance. Unfortunately, such statements were incorrect.
- 148.** The information provided to councillors at the meeting on 20 December included FBCv2 and a report signed by Mr McGougan and Mr Holmes but the evidence disclosed that a draft of this report had been revised by senior employees of **tie**. The involvement of **tie** in drafting the report, including the section on risk, is a matter of some concern. It highlights the reliance of CEC's senior officials on information provided to them by **tie** without satisfying themselves about the accuracy of that information. CEC officials did not have the necessary skills to undertake that exercise and ought to have commissioned multi-disciplinary engineering, transport and project management consultants to advise them. Without such advice they could not fulfil their duties towards councillors in advising them upon the accuracy and implications for CEC of the FBC.
- 149.** The information provided to councillors at this meeting was also inaccurate, and therefore misleading, in the following respects.
- The report referred to the completion of the design "in the coming months" [CEC02083448, page 0001, paragraph 3.2]. There was no reasonable basis for asserting that design would be completed in the coming months. By the date of the report there had been a history of design difficulties and delays and progress was still very slow. The length of time required to complete detailed design was indeterminate because the design programme kept slipping. To suggest that design would be completed in the coming months, while not making members aware of the chronic design delays, was inaccurate and misleading.
 - There was no mention in the report of the delays and difficulties with the MUDFA works, of which the signatories of the report were aware. Mr Holmes explained that omission by stating that he had been relying on assurances that he had received from **tie** about how that work was going to be resolved and integrated with the construction programme. This omission was significant and misleading.

The purpose of the report was to inform councillors of the situation that existed – not of what officials assumed it to be, based on assurances from **tie**. The mere acceptance of **tie**'s assurances and estimates of CEC's risk exposure even where these emanated from a company that was wholly owned by CEC was, to my mind, reckless. It failed to protect CEC's interests, particularly when one has in mind that this was the largest capital project undertaken by CEC and one of the largest capital projects in Scotland where the financial consequences of failure to deliver the project on time could be, and ultimately were, severe.

- FBCv2 stated that all material terms had been agreed, including the capital, operational and maintenance costs and that the capital and maintenance costs of the scheme had been finalised at a level slightly below the draft FBC estimate. This was untrue. There was no agreement as to the costs for the contract for the infrastructure work and intensive efforts were still under way to agree the price.
- The FBC also gave the impression that the estimated cost of £498 million for the construction of line 1a and the purchase and maintenance of the tram vehicles was based on agreed rates and prices. There were no firm prices for the Infraco contract; there was not even agreement as to the rates for that contract, although rates had been agreed for MUDFA.
- The manner in which the estimate of £498 million as the total cost was presented gave the clear impression that it had been built up in some detail from the underlying contracts. From the evidence available to the Inquiry it is clear that, although a range of possible figures was justified by the material available at that time, that range was not given and instead an essentially arbitrary figure was chosen for effect. In December 2007, months before the negotiation on price, Mr Gallagher had made up his mind what price he would report to CEC, and there was a fixed intention that that arbitrary figure was then to be repeated for the FBC.
- The FBC claimed that the bids had been priced with a "less onerous risk allocation" [[CEC01395434](#), Part 5, page 0098, paragraph 7.7], and that the key benefits of the Infraco procurement strategy included "the award of a single turnkey fixed price contract" [[CEC01649235](#), Part 6, page 0114, paragraph 7.110]. In fact, the design had not been progressed as intended, a consequence of which was that the bids had not been priced with a "less onerous risk allocation". There was a significant element of the works for which the consortium would not give a firm price. It could certainly not be said that there was minimal risk allowance within the bids, or that risk premium had been minimised. As matters then stood, **tie** was not in a position to say that it would be in position to conclude a "single turnkey fixed price contract" as they could not get firm prices. Overall, it must have been apparent to **tie**, TEL and the TPB that the procurement strategy had not worked and was being departed from, and yet they presented to CEC that it was still being implemented. By 20 December 2007, when the Wiesbaden Agreement had been completed and was ready for signature on that date, it was clear that the price for the Infraco works had not been fixed and the transfer of risk of design had not been achieved.
- The FBC gives no intimation of just how much of the detailed design was still outstanding. As this was material for the purposes of the implementation of the procurement strategy, this is a striking omission.
- The FBC referred to the strategy of diverting utilities in advance of the Infraco work and stated that the diversion of utilities had commenced in July 2007 and was scheduled to end in winter 2008. It anticipated that the majority of utilities diversion works would be completed prior to commencement of "on street" works

by Infraco. From the evidence available to the Inquiry it is clear that the proposed timescale was unrealistic which ought to have been apparent to **tie** at that time. It meant that the sort of conflicts that the strategy sought to avoid would inevitably become a reality. As a result, the FBC did not accurately represent the situation.

- 150.** The information provided to councillors at the meeting of CEC on 1 May 2008 was also inaccurate in the following respects.
- The statement in the report by CEC's Chief Executive to councillors that 95 per cent of the combined Infraco and Tramco costs were "fixed", with the remainder being provisional sums, was untrue.
 - The statement in that report that the utility diversion works along the tram route were "progressing to programme and budget" [[CEC00906940](#), page 0002, paragraph 3.6] did not reflect reality.
 - The report stated that the final estimate for Phase 1a was £508 million. Although that was the correct figure when the report was drafted the Chief Executive was aware that BBS had made a demand for a further £12 million on 30 April 2008. Although the Chief Executive told the Leader of the Council of this demand, other councillors were not told of it before or during the meeting and he allowed them to take a decision based upon the false assumption that the final estimate was £508 million.
- 151.** Prior to the signature of the Infraco contract the state of knowledge of councillors even became a matter of concern to BBS. Mr Laing, of Pinsent Masons solicitors who acted for the consortium, explained that shortly before contract close there was a CEC meeting at which it was reported that the contract was near finalisation and that it was a lump-sum, fixed-price contract. He thought that there was a risk that CEC might misunderstand the position, and he raised the matter with Mr Fitchie. He recalled that Mr Fitchie was irritated by this and told him in effect that it was none of his business and that CEC was being advised by its legal advisers. The misinformation extended to the media release issued by **tie** and Edinburgh Trams on 14 May 2008 immediately after the signature of the contracts. That release included the following statement:
- "With these final fixed price contracts now completed all parties can now proceed to delivering this project safely to programme and budget."
[[CEC01231567](#), page 0001.]
- 152.** The provision of misleading information to councillors by CEC officials may have been caused by the circulation of draft reports to **tie** and the acceptance of changes proposed by **tie**, particularly regarding the contract negotiations and the progress of design and MUDFA works. Such a level of reliance on **tie** was inappropriate and tends to suggest a failure by senior CEC officials to protect CEC's interests by subjecting the FBC, the draft Infraco contract and generally the information provided to them by **tie** to independent scrutiny. On any view that was a serious omission. Whatever the reason for the misleading information in reports to CEC the signatories of the reports were responsible for their contents.
- 153.** However, the evidence of Mr N Smith's briefing of Mr Maclean and his revision of draft reports to CEC in June and October 2010 caused me to consider whether the misleading reports were truly the result of errors based upon officials' reliance upon inaccurate information from **tie**, or the result of a deliberate policy of withholding information from councillors or simply reckless.

154. The briefing note dated 8 January 2010 to Mr Maclean from Mr N Smith included the following statement:
- "be very careful what info you impart to the politicians as the Directors and **tie** have kept them on a restricted info flow. Given current sensitivities it is critical that this remains in place." [CEC00473789]
155. In a report to CEC on 24 June 2010 Mr McGougan and Mr David Anderson, the responsible directors, provided councillors with an update on the project, including the then current contractual difficulties with the consortium. It noted that the formal adjudications under the DRP had produced mixed results but advised councillors that "the outcome of the DRPs, in terms of legal principles, remains finely balanced and subject to debate between the parties" [CEC02083184, page 0005, paragraph 3.12]. The latter statement about the outcome in terms of legal principles was incorrect, as was accepted by Mr N Smith when he first gave evidence at the public hearings of the Inquiry. Following his evidence the Inquiry undertook investigations to identify the source of this statement and discovered that it had been inserted by Mr N Smith and that he had assured the responsible directors that it was correct. He sought to justify his actions by stating that the statement probably emanated from Mr Jeffrey and in any event it had not been challenged by others to whom copies of the draft report had been circulated. As this was a statement about the outcome of DRPs in terms of legal principles it is hardly surprising that nobody challenged the views of the only solicitor who was involved in the drafting of the report. Mr N Smith was also responsible for the inclusion of a similar false statement in the update report by the responsible directors on 14 October 2010. He had inserted that statement contrary to the terms of an earlier revision by Mr Maclean in which Mr Maclean had deleted detailed references to the DRPs. Councillors rely upon the accuracy of reports to enable them to take informed decisions. Clearly, on occasions, mistakes may occur in the drafting of reports, but that is not the situation with the June and October reports because Mr N Smith was aware that the statements were untrue. As such they were liable to mislead councillors for whom they were prepared.

Lack of scrutiny by CEC

156. There was a failure by CEC to exercise proper oversight of the project with senior officials, including the responsible directors, failing to challenge **tie** and adopting what was described as a "one family" approach. It is apparent from the approach adopted by **tie** that CEC's approach was not reciprocated. **tie** resented any legitimate questioning by members of the "B team" and the responsible directors intervened at **tie**'s request to deflect such questioning. The "one family" approach advocated by the Chief Executive (Mr Aitchison) explained the failures of CEC's senior management to protect CEC's interests as **tie**'s guarantor. In particular, they had failed to subject the project to careful independent scrutiny.
157. As was noted in paragraph 62 above, CEC's responsible directors (Mr McGougan and Mr Holmes) permitted **tie** to countermand their decision to instruct Turner & Townsend to undertake the review of the project desired by CEC in October 2007. The brief for that review would have required an independent examination of the FBC, the draft FBC, the proposed Infraco contract and Tramco contract, the contract Heads of Terms and Risk Matrix prepared by **tie**'s legal advisers (DLA) and Capital Cost Estimates, and incorporating best and final offers provided by bidders. In addition, meetings would be arranged with relevant personnel within CEC and **tie** as was necessary to meet the assignment objectives. Although the substituted OGC risk review provided some reassurance to CEC, that review was at too high a level and

was of too short a duration to provide what CEC required. Given the size, complexity and value of the project, the potential risks to CEC and the concerns that had been expressed, a longer, more detailed, forensic-type review was necessary to protect CEC's interests properly. That was what was envisaged in the brief for Turner & Townsend.

- 158.** On 20 December 2007, CEC delegated power to the Chief Executive (Mr Aitchison) to authorise **tie** to award the Infraco contract and the Tramco contract, subject to price and terms being consistent with the FBC and subject to the Chief Executive being satisfied that all remaining due diligence was resolved to his satisfaction. The delegated power was refreshed on 13 May 2008 by the Policy and Strategy Committee to reflect the increase in price reported to it. Before the Chief Executive could exercise his delegated authority he required to be satisfied that the price had to be consistent with FBCv2 as adjusted to reflect the increased price to £512 million plus a contingent sum of £3.2 million if line 1b did not proceed. The terms of his delegated authority meant that, before he exercised it, he had to be satisfied that it was appropriate to do so. It was not sufficient to rely upon assurances from **tie** or from DLA that the price and contract terms were consistent with the FBC. In that regard he relied upon the responsible directors and Ms Lindsay, the Solicitor to CEC ("the Solicitor"), to confirm that he could issue the necessary instruction to **tie** to award the contracts.
- 159.** The issue of the NIA was a precursor to the award of the contract and also required the authorisation of the Chief Executive. As had happened in the decision to authorise **tie** to award the contract, he relied upon the responsible directors and the Solicitor to confirm that he could sign the NIA. Mr McGougan gave evidence that there was frustration with the consortium at that time for not closing out negotiations, and that one of the reasons for issuing the NIA was to try to "encourage them towards the finish line" [PHT00000043, page 5]. That consideration seems to me to be inconsistent with the obligation to ensure that the price and contract terms were consistent with the FBC.
- 160.** In any event, Mr Aitchison ought not to have authorised **tie** to issue the NIA on 18 March 2008. His authority to do so was circumscribed by conditions that the price and contract terms had to be consistent with the FBC approved by CEC on 20 December 2007 and that all remaining due diligence had been resolved to his satisfaction. Before 18 March 2008 he was aware that the price had increased by £10 million and risks, including those relating to SDS, had been transferred to the public sector. Apart from the inconsistency between the price and contract terms negotiated by that date and the FBC, it was not possible to resolve all due diligence at that stage because the contract terms, notably the price, had not been finalised.
- 161.** The conditions attached to the Chief Executive's delegated power to authorise **tie** to award the contract to BBS were amended by the Policy and Strategy Committee on 13 May 2008 to reflect the increases in price since 20 December 2007. As with the NIA he depended on the receipt of confirmation from the responsible directors and the Solicitor before authorising **tie** to award the contract.
- 162.** Mr McGougan could not remember whether, before signing the report to Mr Aitchison, he had checked that all the outstanding matters identified in the director's briefing note to the IPG on 11 December 2007 had been resolved. He was aware that Ms Andrew and Mr Coyle, officials in the Finance Department providing accounting support to the City Development Department in respect of the Tram project, still did not feel that they had 100 per cent understanding of all the risks that might attach to

the contract and to the project. He himself did not have a complete understanding of the risks arising from the contract, for which CEC would bear ultimate financial responsibility. He stated that he was relying on the processes that had been gone through, the reviews that had been undertaken, the professional advice from industry expert firms and the commercial experience and abilities of **tie**. He also stated that CEC was relying upon **tie** and DLA to a very significant extent. There were no reviews of the contract suite as at May 2008 other than those undertaken by **tie**, or DLA on its behalf, or by CEC officials. Given the lack of experience of CEC officials in the Department of Finance he was effectively relying upon **tie** and DLA whose assessments ought to have been subjected to independent scrutiny if he were to fulfil his responsibilities to the Chief Executive when confirming that he could authorise **tie** to award the contract to BBS. Without such independent scrutiny the Chief Executive could not exercise his delegated powers because he was required to satisfy himself, independently of **tie**, that it was appropriate for **tie** to award the contract to BBS.

- 163.** The Solicitor was also a signatory to the letter to the Chief Executive confirming that he could authorise **tie** to award the contract to BBS. She relied upon Mr C MacKenzie and Mr N Smith, the members of the "B team" from her department, for advice as they were responsible for the day-to-day scrutiny of documents. The relationship between the Solicitor and these solicitors was not harmonious. The solicitors in the "B team" did not consider that they had the necessary experience to advise on the contract documentation and did not think that CEC should rely upon DLA; rather an independent firm of solicitors with appropriate experience should be instructed to represent CEC's interests. The Solicitor disagreed.
- 164.** In August 2007, Mr C MacKenzie sent an email to Mr N Smith telling him that the Solicitor had directed him to read through the draft Infraco contract (then consisting of about 1,000 pages) with a view to reporting "on the implications for the Council on risks, liabilities, step-in rights etc" [[CEC01567527](#)]. The report was to be produced within two days. The email was copied to the Solicitor. Mr Smith replied to the effect that this was an impossible task and he agreed with an earlier email from Mr MacKenzie to the Solicitor that CEC should instruct an independent firm with appropriate experience and that CEC did not have the necessary experience or manpower to undertake this task. He did not copy his email to the Solicitor and Mr MacKenzie did not tell her of the response. No report was produced on the draft Infraco contract and it does not appear that the Solicitor pursued its absence.
- 165.** On 15 April 2008, Mr Coyle forwarded an email and attachments including the draft SP4 and a cost analysis spreadsheet, which included the QRA to the Solicitor, Mr C MacKenzie and Mr N Smith. It is clear from the evidence of Ms Lindsay, Mr C MacKenzie and Mr N Smith that each of them realised the significance of SP4 upon reading it for the first time. However, Ms Lindsay and Mr N Smith stated that they did not read SP4 prior to the signature of the Infraco contract but Mr C MacKenzie agreed that he did. Although Mr C MacKenzie thought that there had been a "read over" of SP4 within the Legal Department that involved Mr N Smith, he could not be certain of that. Accordingly I proceeded on the basis of Mr N Smith's denial that he had read it when he received it in April or at any time before contract close. Although it is understandable that Ms Lindsay, as the Solicitor with a strategic role, did not read SP4 and relied upon Mr MacKenzie and Mr N Smith to draw her attention to any particular issues relating to the contract, Mr N Smith's failure to read it is inexplicable. Unlike the earlier draft document extending to almost 1,000 pages that he had been asked to review and produce a report within two days, the main text of the final

version of SP4 only extended to 14 pages. Had he read it at that time he could have alerted the Solicitor to his concerns before she signed the letter of advice to the Chief Executive.

- 166.** Mr C MacKenzie gave evidence that the draft SP4, when finally produced, was the most definitive document from **tie** that he had seen, setting out the price negotiated, what was to be included and, just as significantly what was not to be included, in the price. He stated that it was evident to him that clauses 3.2 and 3.3 of SP4 excluded a fair amount from the certainty of the lump sum, fixed and firm price of the construction works price. The Inquiry has found no evidence to indicate that before going on holiday on 2 May 2008 he mentioned to Ms Lindsay his increased concerns about the adequacy of the risk allocation because of the terms of SP4 or of his expressing any views or seeking advice about the meaning and effect of the specific provisions of SP4.
- 167.** Although I have accepted that it was reasonable for the Solicitor to rely upon Mr C MacKenzie and Mr Smith to draw her attention to issues arising from SP4, it is surprising that she did not seek a report from them before signing the letter to the Chief Executive confirming that he could authorise **tie** to award the Infraco contract to BBS. That omission and her failure to pursue the non-receipt of Mr N Smith's report in 2007, as well as her earlier failures to return signed copies of letters of engagement to DLA, call into question the management of the Solicitor's department.
- 168.** The failures of the Director of Finance and of the Solicitor and of those whom she managed illustrate that the internal exercise undertaken by senior CEC officials was woefully inadequate as independent scrutiny of the contract suite. In the absence of independent reassurance about the contract suite they should not have agreed that the Chief Executive could authorise **tie** to award the Infraco contract to BBS.

Mediation settlement and reporting to councillors

- 169.** As preparations for mediation progressed it became clear that CEC realistically had no alternative but to negotiate a resolution with BSC at mediation, and had to do so from a position of weakness. The resolution sought by CEC was an agreement based on BSC's Project Phoenix proposal (the "Project Phoenix proposal") which would result in the construction of a truncated line for a price that had a considerable degree of certainty. The other option, favoured by **tie**, was to agree to separate from BSC and to re-procure the contract.
- 170.** **tie**'s estimates of the cost of separating and re-procuring were incomplete by the time of mediation because of limited resources available and priority in their allocation having been given to the Project Phoenix proposal, but they resulted in the cost of separation and re-procurement being substantially less than CEC's preferred option of the Project Phoenix option. On the day before the mediation, CEC's negotiators increased the estimated cost for separation and re-procurement by £150 million, resulting in the favoured option of the Project Phoenix proposal being the cheaper option. This last-minute adjustment of £150 million to the cost estimate for the option of separation and re-procurement substantially improved the prospects of CEC's negotiators leaving the mediation with a deal. The circumstances in which it was done, however, do not inspire confidence that the £150 million increase was grounded in any particularly strong evidence or analysis. The increase was of a magnitude that was unacceptable to Mr Murray, the quantity surveyor at **tie** with the most detailed understanding of the project costs of all those who were at mediation.

- 171.** At the mediation between 8 and 12 March 2011 at Mar Hall Hotel, Bishopton, the principal negotiators were Dame Sue Bruce (Chief Executive of CEC), Mr Emery (Chairman of **tie**) and Mr McLaughlin (Transport Scotland official). Although the Infraco contract was between **tie** and the consortium the mediation was conducted on behalf of CEC, as owners and funders of the project, with senior representatives of **tie** in attendance. Following protracted negotiations and offers and counter offers that were rejected, CEC made a final offer of £362.5 million for the off-street section, with no exclusions and Infraco taking all the risk with the exception of minor utilities. On the face of it, that represented significant progress by CEC at the mediation, at least when the Project Phoenix proposal is taken as the benchmark. It indicates that, as well as negotiating a reduction of £21.5 million in the price sought by BBS for its works (from £384 million in the Project Phoenix proposal to £362.5 million), CEC also successfully negotiated for the removal of most of the exclusions and risks which **tie** had valued at £80 million, albeit on a pessimistic basis. This was described by Mr Nolan as a "massive point", which took a further day to resolve after the price had been agreed. In addition, CEC agreed a target price of £47.3 million for on-street works to St Andrew Square.
- 172.** Many of those present, especially the **tie** representatives, considered that the settlement price was excessive. There is some support for that view when one considers that the project result that BB achieved was considerably better than it had projected both at the outset of the project and on conclusion of the settlement agreement: the projected figure for profit at contract close in 2008 was 11.07 per cent; following conclusion of the settlement agreement in September 2011 it was 7.23 per cent; and the outturn figure on conclusion of the project was 21.21 per cent. Moreover there was no structured calculation of CEC's offer that was described by several witnesses as a "horse trade" (a description accepted by Dame Sue Bruce in her evidence). However, the advantage of the outcome of the mediation was that it heralded the end of an acrimonious dispute that adversely affected the reputation of the City of Edinburgh and which did not reflect well on BBS.
- 173.** The agreement reached at Mar Hall was incorporated into two Minutes of Variation to the Infraco contract, namely MoV4 and MoV5. MoV5 was signed in September 2011 and recorded the final settlement of the dispute between the parties. On 20 May 2011, **tie** entered into MoV4, which was an interim and partial settlement of the parties' dispute. It provided for the recommencement of work on the tram infrastructure in specified priority areas and for the payment of significant sums to Bilfinger Berger ("BB") and Siemens. Its purpose was to vary the Infraco contract between **tie** and BSC. For that reason **tie** had to sign MoV4 although it was Dame Sue Bruce who had led negotiations on behalf of the client and took the ultimate decision to recommend settlement of the dispute on terms reflected in MoV4 and MoV5. **tie** claimed that MoV4 resulted in a breach of the expenditure limit imposed on **tie** by CEC in the Operating Agreement between them. On the evidence available to the Inquiry **tie** was correct in that regard. Expenditure incurred following mediation and before the signature of MoV5 resulted in actual and projected expenditure exceeding TEL's authorised expenditure limit of £546 million. Although MoV4 permitted **tie** and BSC to terminate the Infraco contract if MoV5 was not signed, the financial consequences of such termination plus actual expenditure incurred would exceed the budget of £546 million. Accordingly, **tie** entered into MoV4 at the direction of CEC's officials. CEC's councillors were not asked formally to approve MoV4 before it was signed, and did not do so.

- 174.** Although CEC's approval of the final settlement in September 2011 meant that there were no negative consequences from these actions, in the interim period CEC officials had incurred unauthorised expenditure. Moreover, before signature of MoV4 CEC officials authorised payments of £27 million and £9 million in terms of MoV4. £27 million was certainly paid and £9 million was probably paid before signature of MoV4. Such payments were made in anticipation of the signature of the agreement but were contrary to good governance. They should not have been made. An apparent desire to keep decision making on the project out of the political arena at that stage was no justification for their actions. Officials ought to have kept councillors as a whole informed of significant events and to have sought their approval of the settlement and their authority to incur expenditure above the limit already authorised by CEC before incurring such expenditure. In that regard officials failed to observe the distinction in roles between them and councillors and strayed into the political arena itself.
- 175.** There were several meetings of CEC during summer 2011, as a result of which a decision was taken to terminate the route at Haymarket until there were adequate funds to extend it. Officials did not give councillors any information about the availability of the balance of grant funding before that decision was taken. Termination at Haymarket had been an option that BSC had suggested and it is probable that a less expensive settlement could have been reached although there were other considerations favouring building the line beyond Haymarket at least to St Andrew Square. Ultimately, approval of the settlement occurred only because of the intervention of the Scottish Ministers, threatening to withdraw funding unless CEC's August 2011 decision to seek a line only between the Airport and Haymarket was reversed. The project delay caused by CEC's decision of August 2011 and its reversal in September 2011 increased the cost of the project by £4.541 million. This additional cost could have been avoided if, before being asked to take a decision about the reduced scope, the councillors had been more fully informed about the views of the Scottish Ministers towards funding the project in those circumstances. In my view, any criticism for the increase in costs that resulted from their decision, taken in the absence of such information, should be not be directed towards councillors.

Role of the Scottish Ministers

Conditions of financial support for the project

- 176.** No experience existed in modern times of building a tram line in Scotland but the Scottish Ministers did have access to advice from their officials who had experience in the negotiation and delivery of large transport infrastructure contracts (primarily roads, but also heavy rail) that could assist in the delivery of the Tram project. Until 2007, the Scottish Ministers availed themselves of such expertise in order to protect their proposed grant of £500 million, but thereafter they abandoned the measures that were in place for that purpose.
- 177.** In March 2003, the Scottish Ministers offered CEC a grant of £375 million for the construction of line 1a, subject to the production of an acceptable business case, and in February 2006 they announced an increase of the proposed grant to approximately £500 million, in line with indexation.
- 178.** The contribution by the Scottish Ministers of £500 million towards a total budget for the project of £545 million was a significant commitment of public funds for which the Scottish Ministers were accountable. In implement of their obligations to protect the public purse the payment of the grant was not only conditional on the production

of an acceptable business case that would demonstrate that the total estimated public expenditure on the project would provide value for money by having a Benefit to Cost Ratio ("BCR") of more than 1; as matters progressed various other measures were taken to ensure that their commitment of £500 million towards the cost of this project was an appropriate use of public funds.

- 179.** Following their conditional commitment of grant funding for the project until summer 2007, the Scottish Ministers or officials in the Scottish Executive and, after 1 January 2006, officials in Transport Scotland on their behalf, had involvement in the project in a number of respects:
- as funders;
 - in considering the various drafts of the business cases;
 - in a supporting or facilitative role; and
 - through participation in the TPB.

Funding

- 180.** The evidence to the Inquiry was clear that, throughout the period between 2003 and prior to the election of the minority SNP Government to the Scottish Parliament in May 2007, the Scottish Ministers had emphasised to CEC officials and their technical advisers that the proposed grant was capped at £375 million plus indexation. Moreover, in the proceedings before the Edinburgh Tram (Line One) Bill Committee of the Scottish Parliament the evidence given by the Minister for Transport (Mr Scott) and Mr Sharp clearly indicated that the proposed grant was capped at £375 million plus indexation, resulting in a grant of between £450 million and £500 million, depending on the rate of construction cost inflation, and that release of funds was dependent on the production of a robust and positive business case. Any suggestion that there was a lack of clarity about the limit imposed on funding from Scottish Ministers until after the decision of the Scottish Parliament on 27 June 2007 is without any credible basis in fact.
- 181.** The Scottish Ministers took active steps to protect the public funds to be provided by them to CEC for this project. As at summer 2007, of the total grant monies that the Scottish Ministers had said would be made available, a formal offer of grant had been made on 19 March 2007 in respect of £60 million. In terms of the offer, this money was to be used for utilities diversions, advance works and continuing development and procurement for phase 1a. The conditions attached to the offer had the following principal features.
- The monies were to be used only for continuing the development and procurement of phase 1a of the Edinburgh Tram Network and for advance works, land acquisition and utilities diversions.
 - CEC was required to produce an audit certificate prepared by its Head of Internal Audit, showing actual expenditure met from the grant.
 - If considered necessary, the Scottish Ministers would be granted access to CEC's accounts and records to verify the proper use of the grant.
 - The project governance procedures were those agreed at the TPB meeting on 25 September 2006 and could be amended only with the agreement of the Scottish Ministers.

- CEC was to ensure that action plans for implementation of any recommendations from project reviews were agreed and implemented unless otherwise agreed by the Scottish Ministers.
- There were a number of "project hold points" at which CEC and the Scottish Ministers would "review whether the scheme is continuing to meet its objectives and will determine whether to continue to support scheme development and implementation" [TRSo0004112, page 0005, paragraph 18]. One such point was on receipt of best and final offers from the infrastructure contractors and tram vehicle suppliers. The review at this stage would consider the affordability of the scheme in light of available funds. The next review point was before conclusion of negotiations with the preferred bidders for the infrastructure and tram vehicle supply contracts. At this stage, it would be necessary to have in place a signed agreement between the Scottish Ministers and CEC, covering all aspects of project funding and risk allocation. The final hold point was completion of the FBC.
- CEC had to ensure that robust, transparent, externally verifiable project controls for the project were in place.
- CEC had to comply with the project monitoring and control procedures of Transport Scotland.

Considering drafts of the Business Cases

- 182.** The Scottish Ministers took a keen interest in the business cases from the outset. It was intended that the business cases should contain details of the justification for the project and, among other things, a consideration of the BCR. This was an important factor in any decision of the Scottish Ministers to make funds available to a project. The involvement of officials in Transport Scotland extended both to specifying the matters that would have to be considered in a business case and commenting on its contents. When reviewing the various iterations of the Business Case officials used both internal resources of various disciplines and external consultants.
- 183.** There was good reason for the active role that Transport Scotland maintained in scrutinising and suggesting development of the FBC. Although the development of the trams was the project of CEC, the Scottish Ministers would provide the majority of the funding – at least for phase 1a. With the largest financial stake, it was natural that they would want to consider the benefits that might arise, the governance mechanisms, the procurement strategy and similar issues. In addition, the decision to provide the grant was dependent on there being a BCR greater than 1. In order to be sure of this, Transport Scotland would need to examine, with some care, the estimated cost of the project and its claimed benefits. In the absence of a thorough examination of the business case, it would not be able to satisfy itself of either of these matters. The conditions for the grant referred to in paragraph 181 indicated the intention of the Scottish Ministers, as at March 2007, to continue to maintain an interest in the business cases.

Supporting/facilitating

- 184.** The evidence to the Inquiry demonstrated that Transport Scotland had provided further assistance in addition to provision of funds. The Audit Scotland report carried out in 2007 noted that Transport Scotland took a close interest in the progress and cost of the project. In his evidence to the Audit Committee of the Scottish Parliament on 27 June 2007, the Auditor General observed that it was clear that the project was approaching a critical phase leading up to early 2008, when "cabinet secretaries" and the local authority were expected to be asked to approve **tie's** Final Business Case to allow the infrastructure construction to commence. In response to

a question from the convener of the committee the Auditor General confirmed that "the business plan would be submitted to the twin sponsor bodies, the local authority and Transport Scotland, which would scrutinise it carefully – particularly Transport Scotland, because it is concerned with Parliament's interests. Final approval would then be given by the cabinet secretaries." [SCP00000031] The Auditor General clearly anticipated the continued involvement of the Scottish Ministers in the project, including their approval of the FBC before subsequent grant payments were made.

Participating in Tram Project Board

- 185.** Until June 2007, Mr Reeve was nominated by Transport Scotland to sit on the TPB as its representative. If he was not available Mr Sharp would attend in his place. Mr Reeve accepted that this role would include expressing opinions with a view to influencing the decisions to be taken by the TPB. He said that he took decisions at the TPB on behalf of Transport Scotland and that he provided a conduit through which information would be passed between the Board and Transport Scotland.

Changes in the involvement of the Scottish Ministers after 2007

- 186.** The SNP manifesto for the Scottish Parliament election in May 2007 contained a commitment to abandon the Edinburgh Tram project and the Edinburgh Airport Rail Link. The SNP formed a minority administration after that election.
- 187.** A debate was held in the Scottish Parliament in June 2007 on the future of the Edinburgh Tram project and the Edinburgh Airport Rail Link project. Although the debate concerned both projects, the Edinburgh Airport Rail Link project is beyond the remit of this Inquiry. The Scottish Ministers proposed that both projects should be cancelled, but the Scottish Parliament voted to continue with them. Although that decision was not binding on the Scottish Ministers, they decided to continue with the Tram project despite their manifesto commitment to the contrary. It appears that their reason for doing so was a fear that failure to implement the decision concerning the Tram project could result in a vote of no confidence in the Government, and Mr Swinney explained that he did not want the "first SNP Government in 70 years to be curtailed on the basis of a trams project" [PHT00000050, page 22]. However, the Scottish Ministers instructed officials to "scale back" their involvement in the project. No clear guidance was given to officials from Ministers on what "scale back" meant and what the outcome of that should be.
- 188.** Implementation of the ministerial instruction to "scale back" resulted in the removal of the Transport Scotland representative from the TPB, resulting in the withdrawal of officials from governance arrangements that Audit Scotland had found satisfactory. One of the principal functions of the Transport Scotland representative on the TPB was as a conduit of information in both directions. As a result of the changes made, that was lost, as was the chance for Transport Scotland to influence directly decisions taken by the Board. The decision of Scottish Ministers was taken despite the evidence of the Auditor General to the Audit Committee of the Scottish Parliament on 27 June 2007, mentioned in paragraph 184 above, anticipating the continued involvement of the Scottish Ministers in the project after that date. It is significant also that Audit Scotland recommended in its 2011 report that Transport Scotland should reconsider its role and thereafter it was represented in the membership of the TPB. There was no satisfactory or rational justification for the removal of a representative of the TPB between 2007 and 2011 and it was inconsistent with the practice in other projects undertaken by other bodies in which the Scottish Ministers were providing grant funding.

- 189.** Moreover, instead of the conditions of grant payments mentioned in paragraph 181 above, there would be an agreement to release further funds in January 2008 and that the approval of Transport Scotland for such payment would be based on:
- compliance with standard grant conditions to date.
 - having received a copy of the completed Final Business Case as endorsed by City of Edinburgh Council.
 - having received confirmation that the project had successfully passed a standard OGC Gateway 3 Review.
 - ongoing information received via the standard Transport Scotland reporting process and four-weekly meetings with the City of Edinburgh Council.
- 190.** Under these new arrangements less scrutiny was undertaken by Transport Scotland officials. The existing "hold points" mentioned in paragraph 181 above, when officials would review whether the project was continuing to meet its objectives and whether it was appropriate for Ministers to continue to provide support, were removed. There was no independent review of the FBC by Transport Scotland officials and their external consultants. Had that occurred the misleading statements within it mentioned in paragraph 119 above might have been identified. Moreover, had the Scottish Ministers remained involved to the extent that they had been prior to June 2007, officials would have instructed external solicitors experienced in engineering and construction contracts to provide advice about the draft Infraco contract before contract close, to satisfy themselves that the investment in the project was protected and still appropriate. Had that occurred it is probable that the defects in the Infraco contract would have been identified before it was signed.
- 191.** Although, in public, the Scottish Ministers did not take an active role in the project after May 2007, they did seek to exert influence in the background once disputes between **tie** and Infraco emerged and work on the project ceased. For example, Mr Swinney met Mr Mackay in February 2009 regarding the "Princes Street Dispute", when Mr Swinney told him to "get it sorted" [PHT00000038, page 96]. This resulted in the Princes Street Supplemental Agreement ("PSSA"), in terms of which Infraco was paid on the "cost-plus" basis of payment that had been requested by BSC. The rates that would be paid were specified in the PSSA, but BSC would be entitled to payment for all the time taken. This meant that it was not necessary to reach agreement as to the existence of changes or the value of the work that would be required to implement them. This was a departure from what had been one of the fundamental precepts of the procurement strategy.
- 192.** Mr Swinney also held meetings with representatives of CEC or of **tie** on several occasions throughout 2009 and 2010 and, on 8 November 2010, at the request of the consortium, a meeting was held, attended by Mr Swinney and Mr McLaughlin for the Scottish Ministers, Dr Keysberg for BB and a senior manager for Siemens. It appears that there was discussion about mediation at the meeting on 8 November, following which Mr Swinney had a meeting with the leader of CEC and its Chief Executive and Director of Finance on 16 November 2010. He told them that they were going to mediation. Mr Stevenson also had meetings with various participants in the project including representatives of BBS. No minutes of any of the meetings between Ministers and the various participants in the project were produced to the Inquiry. The absence of minutes of meetings between Ministers and the various participants in the project meant that the Inquiry had no contemporaneous record of what had been discussed at the various meetings.

- 193.** At the mediation at Mar Hall Mr McLaughlin was in attendance and participated as one of three negotiators. Before the final proposal was put to the consortium by CEC Mr McLaughlin telephoned Mr Swinney. The evidence of Mr McLaughlin and Mr Swinney about the reasons for that call was incredible. It seemed to me that this was another example of the involvement of the Scottish Ministers in the project. Their active involvement in the mediation and in the project after 2011 coupled with the activity of Mr Swinney described above illustrate just how far the Scottish Ministers had moved from their stance in 2007. From seeking to distance themselves from major decisions on the project, they were now directing CEC as to what should be done. This may be seen as recognition that their original approach had failed. On any view, any policy that they were "hands off" or that they had a "scaled-back" approach had been abandoned.
- 194.** The actions of the Scottish Ministers during 2009, 2010 and 2011 and in authorising the involvement of officials in Transport Scotland in the management of the project between 2011 and 2014 reinforce my view that the limitations imposed by them on the involvement of officials in 2007 was a serious error and resulted in the failure by the Scottish Ministers to protect the public purse, insofar as their contribution of £500 million was concerned.

Chapter 1

Introduction and Overview

- 1.1 The terms of reference of the Edinburgh Tram Inquiry (the "Inquiry") are recorded in full in Chapter 2 (Establishment and Progress of the Inquiry). In short, they include an obligation to inquire into the delivery of the Edinburgh Tram project (the "project"), from proposals for the project emerging, to its completion, and they specify the particular issues to be considered by the Inquiry. The project should be seen in the policy context in which it emerged, commencing with the White Paper published in July 1998 by the Secretary of State for Scotland, which was entitled 'Travel Choices for Scotland. The Scottish Integrated Transport White Paper' [CECo2083841] (the "White Paper") and the reaction of the City of Edinburgh Council ("CEC") to it.
- 1.2 At the outset, it is useful to have an overview of the project, its components and the issues that arose. This is merely a summary and these various issues are developed in the chapters that follow.

Origin of the project

- 1.3 The genesis of the project can be found in the White Paper, which discussed various transport-related issues, including an integrated programme of action to address local transport circumstances. It was recognised that different solutions would be appropriate, depending upon the particular circumstances of any locality. For example, the demand for road space exceeded supply at certain times and in certain places in Scotland, resulting in traffic congestion, noise and increased air pollution. Particular problems existed in Scotland's major cities, at key points on the trunk road network, and in certain rural areas, although issues relating to the latter tended to be seasonal and related to holiday periods. The problems in cities could often be addressed through the provision of alternatives to building additional road space. Such alternative solutions included scope for better public transport services through the provision of more road space for buses. Moreover, the White Paper noted that:

"There may ... in the longer term, be a place for tram or rapid transit systems in some Scottish cities, although experience shows that the set up costs for these are very high." *ibid*, page 0031, paragraph 4.3.2.]
- 1.4 Local authorities were encouraged to develop Local Transport Strategies to set out their plans and priorities for the development of integrated transport policies in their areas, consistent with the overall objective of sustainable development. It was proposed that a Scottish Public Transport Fund should be set up to fund key projects. Legislation would be introduced to permit local authorities to introduce local road user charging schemes, which this Report will call "congestion charging".
- 1.5 On 29 October 1998, CEC instructed its Director of City Development to prepare a draft Local Transport Strategy that would meet the criteria and guidance set out by central government, and on 31 May 1999 CEC approved phase 1 of a New Transport Initiative ("NTI") to identify major improvements to the city's transport system. The measures included a congestion charging scheme together with a package of improvements to public and private transport, which, to a large extent, would be funded from the income derived from the charging scheme.

Development of proposals for a tram network

- 1.6** On 4 May 2000, as phase 2 of NTI, CEC decided to undertake further development and consultation on a transport investment package for the city, based on income from congestion charging and subject to detailed funding arrangements being agreed. On 19 October 2000, CEC approved its Local Transport Strategy, which identified 80 potential transport projects, including the development of an Edinburgh Tram Network ("ETN"), as noted in the "Vision for Edinburgh" [[CEC01623145](#)].
- 1.7** Waterfront Edinburgh Limited was a joint venture between CEC and Scottish Enterprise Edinburgh and Lothian, formed with the intention of promoting development and regeneration in the Granton waterfront area of the city, in collaboration with local businesses. In 2000/01 it commissioned a team of consultants consisting of Andersen, Steer Davies Gleave and Mott MacDonald to produce a preliminary technical and economic feasibility study of a rapid transit system in north Edinburgh, which would provide a link between the city centre and the proposed waterfront redevelopment at Granton. The report of that study, entitled 'Feasibility Study for a North Edinburgh Rapid Transit Solution' [[CEC01916700](#)], was produced in July 2001. The reason for commissioning the report was to support a bid for financial assistance from the Scottish Public Transport Fund called the Public Transport Fund in the report.
- 1.8** Although the original remit for the report was restricted to assessing the feasibility of a light rail link between the city centre and the waterfront at Granton, following discussions with Forth Ports plc it was expanded to consider the feasibility of a north Edinburgh loop, running from Granton to Haymarket, St Andrew Square, Leith Walk, Ocean Terminal and back to Granton. The feasibility study concluded that such a loop would maximise a number of positive benefits for the area, including economic regeneration and improved accessibility. It was estimated that it could be built for a capital cost of £191.9 million and would have a Benefit to Cost Ratio ("BCR") of 2.65. A BCR reflects the relationship between the anticipated financial benefit associated with a project and the cost of delivering it. A BCR greater than 1 indicates that the anticipated benefits of a project outweigh the costs of delivering it.

New Transport Initiative

- 1.9** In a report to CEC dated 11 September 2001, setting out progress on the NTI over the previous year and seeking approval to submit an application for "Approval in Principle" to the Scottish Ministers, the Director of City Development noted the need for major improvement to the city's transport system, both to sustain the existing level of economic activity and to underpin the continuation of the growth in the south-east of Scotland's economy. It was anticipated that the package of investment for the NTI would include a new tram network for the city. The first tram route, which would probably be built in north Edinburgh, could be in operation by 2009, and a second by 2011. On 18 October 2001, CEC agreed to submit an application to the Scottish Ministers, seeking approval in principle for its "Integrated Transport Initiative for Edinburgh and South East Scotland", in furtherance of its NTI [[USB00000228](#)].
- 1.10** In his report, the Director of City Development explained that extensive consideration had been given to how the NTI, once agreed, could be delivered most effectively, and that a number of issues required to be addressed in establishing such a mechanism, leading to consideration of "innovative alternatives to a conventional local authority approach to project procurement" [[ibid](#), page 19]. These issues were listed as including:

- the major scale of the Initiative, which would involve a project package of £800 million or more and an innovative [congestion] charging system;
- the wide range of skills and expertise that would be required for running the charging scheme and implementing the project package;
- public and stakeholder views about the ability of the local authority to implement the Initiative;
- demonstrating that key conditions for the Initiative had been met, namely –
 - ring fencing of charging revenue,
 - “additionality”, being a net positive difference arising from the economic development of the NTI, and
 - transparency of accounting;
- a requirement to borrow in order to allow early implementation of the project package and to smooth out gaps between expenditure and income;
- transfer of appropriate risks away from the local authority; and
- tax efficiency and liability.

1.11 The report noted:

“Local government is not geared up to handle an operation of this scope and scale without major additional staff, accommodation and equipment resources. All these issues point to the need for a new approach to delivery that can provide greater operational flexibility than a local authority, that can marshal appropriate skills and resources, that can borrow money without public sector constraints, and that can provide independent accounts.” [\[ibid\]](#), page 20.]

1.12 The local authority, however, had to have a “significant direct involvement” [\[ibid\]](#), given that it was the only body that could introduce a congestion charging scheme, provide democratic accountability for overall policy, determine the priority and nature of downstream investment, and seek and receive certain types of grant funding from the Scottish Ministers.

1.13 With these factors in mind, the report proposed that a company (“ENTICO”) should be established, which would be wholly owned by CEC, within the framework of companies already in existence. It was anticipated that ENTICO would be a “procurement, project management and finance management organisation”. Strategic direction and key policy decisions would remain within the control of CEC. Although the passage quoted in paragraph 1.11 identified the need for a new approach to delivery that could borrow money without public-sector constraints, the report recognised that, in the initial years, the company would be entirely dependent on the public sector to fund its activities and would be unable to act independently of CEC until it had the anticipated congestion charging revenue stream. It is axiomatic that a company could not borrow money without having capital assets and/or sufficient income to secure such borrowing.

Strategic Project Review

1.14 In September 2002, Turner & Townsend, management and construction consultants, produced a “Strategic Project Review” on the North Edinburgh Rapid Transit Scheme [\[CECo1868789\]](#). The review considered the development of the scheme, lessons from other schemes, procurement and funding options, and specific scheme issues. It explained that while the North Edinburgh Rapid Transport Scheme was originally

conceived as a linear route connecting the waterfront development site with the centre of Edinburgh, initial feasibility studies had ascertained that the optimum alignment would be a loop, which would utilise the former Crewe Toll-to-Roseburn railway corridor.

- 1.15** At that time, the development of rapid transit schemes in a modern urban environment was relatively mature, and many schemes were either in operation or at various stages of development. Turner & Townsend had reviewed many such schemes, identified fatal and potentially fatal flaws and suggested possible strategies for addressing them in the context of Edinburgh.

tie

- 1.16** On 2 May 2002, the Director of City Development updated CEC on progress of the NTI and sought agreement for a number of steps to take it forward, including the legal framework and budget needed to finalise the establishment of an arm's-length delivery company [[USB00000232](#), Parts 1–6]. While the documents accompanying the Director's report referred to "ENTICO" as the proposed name of the delivery company, he explained that that name was not available as a permanent company name as it was already registered for other purposes, and that the delivery company was, instead, being registered under the name "Transport Initiatives Edinburgh Limited", which later changed its name to "TIE Limited" and is now known as "CEC Recovery Limited". Throughout this Report, "**tie**" is used to refer to that company whatever its name was at the relevant time.
- 1.17** On 30 September 2002, **tie** produced a report entitled 'A Vision for Edinburgh' [[CECo1623145](#)]. It set out a programme for the development and implementation of £1.5 billion worth of transport improvements, using public and private sources of funding including congestion charging. The programme required the early support of the Scottish Ministers
- "principally through agreement to provide £375 million of funding towards the development and construction of three tram lines, which form a key part of the improved transport infrastructure" [[ibid.](#), page 0004].
- 1.18** As indicated in 'Building Better Transport' [[CECo2083844](#)], the Scottish Ministers guaranteed the availability of that sum of money to ensure that funding for at least the first tram line was available as soon as CEC produced a robust Final Business Case ("FBC"). The funding was not conditional on the introduction of congestion charging.
- 1.19** Although, in the early stages of evolution of the ETN, three tram lines were envisaged, development of the project concentrated on lines 1 and 2, with the third line, to the south-east of the city, being deferred to a later date. Line 1 consisted of a northern route, running from St Andrew Square northwards down Leith Walk to Leith, then west to Granton, south to Haymarket and back to St Andrew Square via Princes Street. Line 2 was a linear route from Newbridge to St Andrew Square via Edinburgh Airport, Edinburgh Park, Haymarket and Princes Street.
- 1.20** **tie** elected to proceed under a Development Partnering and Operating Franchise Agreement ("DPOFA") and on 20 April 2004 its board endorsed a recommendation to approve Transdev Edinburgh Tram Limited ("Transdev") as the preferred bidder and tram operator under a DPOFA [[USB0000023](#)]. On 29 April 2004, CEC's approval was sought and granted for **tie** to appoint Transdev as the tram operator for the project. In his report to CEC the Director of City Development explained

that **tie** had pursued the selection of a private-sector operator to assist during the development phases of the project in order to anticipate and mitigate difficulties that other UK light rail schemes had encountered. This strategy had been endorsed by the Scottish Ministers and by Partnerships UK, a body funded by the United Kingdom Government that was intended to create a much greater involvement for the private sector in public projects. The report to CEC [[CECo2083573](#)] summarised the objectives of the DPOFA in paragraph 3.4. These were:

- to provide support for the Private Bill process and the project development stage;
- to assist in refining the system specification and developing durable cost- and revenue-sharing arrangements;
- to engage a long-term partner early, to create ownership and a stable operating organisation;
- to strengthen the capability to manage procurement of the network infrastructure and vehicles;
- to facilitate the incremental construction of the core network;
- to maximise the opportunity to integrate with bus operators; and
- to deliver a fare-setting and through-ticketing regime.

1.21 In 2009, **tie** terminated its agreement with Transdev.

Ministerial and parliamentary consideration of the project

Response of Scottish Ministers prior to 2007

1.22 CEC submitted an application to the Scottish Ministers for approval in principle of its proposals, which reflected the matters discussed in the report by the Director of City Development mentioned in paragraph 1.9 above. In response, the Minister for Enterprise, Transport and Lifelong Learning (Ms Alexander) deferred a decision on the application, but:

- indicated satisfaction with the progress to date on the congestion charging proposals;
- strongly supported the principle of an arm's-length company to deliver the NTI; and
- asked that such a company be established immediately, with an initial remit to develop and refine the NTI proposals and produce a report by 30 September 2002.

1.23 It was proposed that CEC should then submit an updated application, identifying a single investment and charging package. The Minister emphasised the importance of improvements to public transport as part of the package and, to give effect to that, indicated a willingness to support the development work on a west Edinburgh tram line to be established in the context of an ETN. This was in addition to the proposals for a north Edinburgh tram line for which development funding had already been granted.

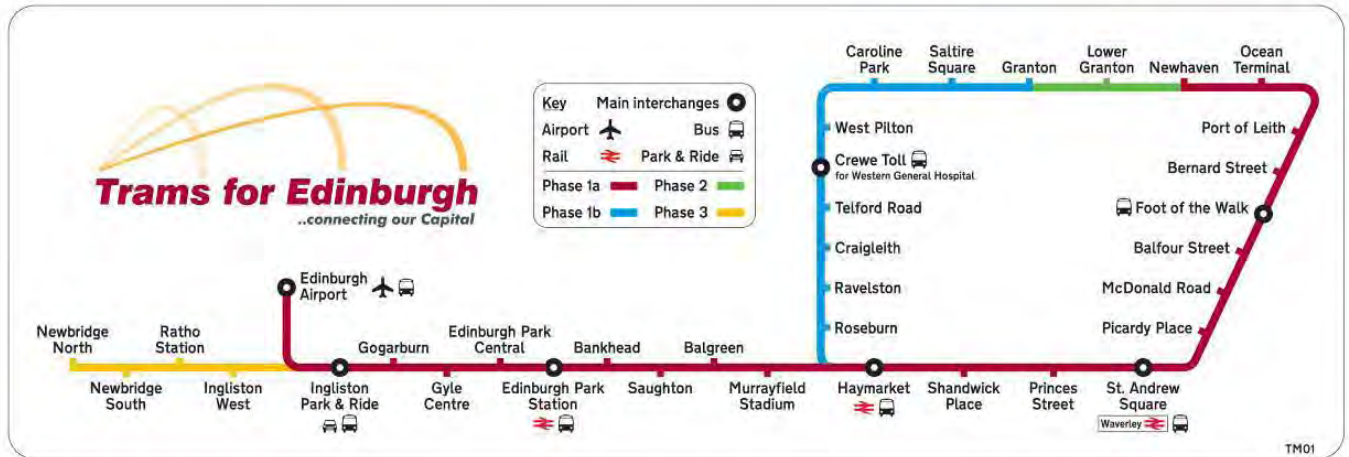
- 1.24** On 21 March 2002, the Minister made a statement to the Scottish Parliament on the Scottish Executive's transport delivery plan [[SCP00000027](#)]. She explained that "[p]romoting high-quality, affordable public transport is vital to our determination to create a more sustainable Scotland". Ten national transport priorities were announced, including the project. The Minister stated:
- "we want to create an effective and modern 21st century public transport system for Edinburgh, worthy of a capital city, in partnership with City of Edinburgh Council and private sector partners through Entico. City of Edinburgh Council is doing preparatory work on a tramline for north Edinburgh and we have invited the council to seek further funding from the Executive for preparatory work on a west Edinburgh tramline."
- 1.25** The first elements of the light rapid transport scheme were expected to be in place by 2004/05.
- 1.26** In March 2003, Scottish Ministers offered CEC a grant of £375 million for the project, subject to the production of an acceptable business case, and in February 2006 they announced an increase of the proposed grant to approximately £500 million, in line with indexation.

The Tram Acts

- 1.27** In January 2004, the Edinburgh Tram (Line 1) Bill and the Edinburgh Tram (Line 2) Bill were introduced in the Scottish Parliament, their purpose being to authorise the construction of lines 1 and 2. CEC was the promoter of this scheme, with **tie** acting on its behalf. Line 1 remained the proposed northern loop (described as a loop from St Andrew Square, along Leith Walk to Leith, west to Granton, south to Haymarket and back to St Andrew Square via Princes Street). It was proposed that line 2 would follow a western course from St Andrew Square, via Princes Street, Haymarket, Murrayfield and South Gyle to Edinburgh Airport and Newbridge.
- 1.28** On 29 March 2006, the Scottish Parliament passed the Edinburgh Tram (Line 1) Bill and the Edinburgh Tram (Line 2) Bill, with Royal Assent to the latter being granted on 27 April 2006, creating the Edinburgh Tram (Line 2) Act 2006. Royal Assent to the Bill for line 1 was granted on 8 May 2006, resulting in the Edinburgh Tram (Line 1) Act 2006. In this report these two Acts of the Scottish Parliament are referred to as the "Tram Acts".
- 1.29** The Tram Acts authorised the construction of lines 1 and 2 of the proposed tram network. The two lines overlapped between Haymarket and St Andrew Square. Planned construction and financial appraisal were based upon a phased approach consisting of phase 1a (Edinburgh Airport to Newhaven) and phase 1b (Haymarket to Granton Square). The sections from Granton Square to Newhaven and from Newbridge to Edinburgh Airport were described as phases 2 and 3 respectively and were omitted from phase 1 of the project. The routes authorised by the Tram Acts and the planned phases are illustrated in Figure 1.1. References in this report to phases 1a and 1b relate to these routes as depicted in Figure 1.1.
- 1.30** While the Bills were still at the stage of being considered by a committee of the Scottish Parliament, **tie** had concluded the System Design Services contract ("SDS contract") with Parsons Brinckerhoff ("PB") for design and technical services in relation to both phases 1a and 1b on 19 September 2005. This was part of the procurement strategy of concluding separate contracts for design and technical services, diversion of utilities and the purchase of tram vehicles prior to entering into the

main infrastructure contract for the construction of the route (the "Infraco contract"). The construction of the line from the Airport to Granton via Newhaven was planned to be completed in phases. Phase 1a was from the Airport to Newhaven; phase 1b was from a spur on phase 1a between Murrayfield and Haymarket at Roseburn to Granton; and phase 2 was from Granton to Newhaven. The proposed construction phases are shown in Figure 1.1.

Figure 1.1: Planned construction phases of lines 1 and 2



Source: "EDINBURGH TRAM NETWORK – Edinburgh Tram Network STAG 2⁵ Appraisal Report – December 2006" [CEC01650279, page 0011]

Parliamentary and local government elections 2007

- 1.31** On 3 May 2007, there was an election for the new session of the Scottish Parliament, as well as local government elections. The result of those elections was that the Scottish National Party ("SNP") formed a minority administration in the Scottish Parliament and the Scottish Liberal Democrats had the largest number of elected councillors, but no overall majority in CEC, so they entered into a coalition agreement with the SNP councillors in order to form an administration. Prior to the elections the SNP manifesto had included a commitment to abandon the project, and the coalition agreement permitted SNP councillors to maintain their opposition to it in accordance with their manifesto.⁶
- 1.32** The Scottish Ministers intended to fulfil their manifesto commitment of abandoning the project. On 4 June 2007, the Cabinet Secretary for Finance and Sustainable Growth (Mr Swinney) asked the Auditor General for Scotland to carry out a high-level review of the arrangements that were in place for estimating the costs and managing the project and the Edinburgh Airport Rail Link ("EARL"). On or about 20 June 2007, the Auditor General for Scotland published his findings in a report entitled 'Edinburgh transport projects review' [CEC00785541]. It was noted that:

"The review examined the process for estimating project costs and project management arrangements for the two projects. It does not provide assurances on the accuracy of the estimated project costs." [ibid, page 0004.]

⁵ Scottish Transport Appraisal Guidance 2.

⁶ Throughout this Report the designation "councillor" means that the person referred to was a councillor for all or part of the period during which the project was being planned and constructed.

- 1.33** It was concluded that the arrangements in place to manage the Tram project appeared to be sound. It was also noted that:
- “[a] range of key tasks needs to be completed before the final business case can be signed off and unless work progresses to plan, the cost and time targets may not be met.” [\[ibid, page 0006.\]](#)
- 1.34** On 27 June 2007, the Auditor General for Scotland gave evidence to the Audit Committee of the Scottish Parliament on the annual report and work programme of Audit Scotland. The Auditor General also gave evidence in relation to the project [\[SCP00000031\]](#). Later that day, following a debate and a vote, the Scottish Parliament called on the SNP administration to proceed with the project within the budget set by the previous administration, subject to an absolute cap of £500 million. The Scottish Parliament noted that it was the responsibility of **tie** and CEC to meet the balance of the funding costs [\[SCP00000030\]](#).
- 1.35** Following that vote, the Scottish Ministers announced that the project funding from Transport Scotland was subject to an absolute cap of £500 million, with no allowance for inflation. Any additional costs had to be funded by CEC. In addition, changes were made to Transport Scotland’s involvement in the governance of the project, which resulted in its relinquishing its seat on the Tram Project Board, ceasing to attend meetings of that board in any capacity and instead receiving regular progress reports from CEC and meeting regularly with CEC officials to have confirmation that all grant conditions were being complied with.
- 1.36** After the ministerial announcement mentioned in paragraph 1.35, the changes to Transport Scotland’s involvement in the governance of the project remained the position until the settlement of disputes between **tie** and Bilfinger Berger Siemens (“BBS”) following the mediation at Mar Hall in 2011 discussed in Chapter 19 (Mediation and Settlement). Following that settlement, officials in Transport Scotland played an active role in securing the completion of the route as far as York Place.

MUDFA

- 1.37** On 21 September 2006, the Director of City Development sought the approval of CEC for **tie** to enter into the Multi-Utilities Diversion Framework Agreement (“MUDFA”) [\[CECo2083472\]](#). While **tie** had already concluded the SDS contract that would result in the design of the route, the first stage in the physical construction of the ETN was the diversion and protection of the utility plant along the route of the tram, in advance of construction of the tram infrastructure. The objective of MUDFA was to appoint a contractor to act as a single point of responsibility for the utility diversion works in relation to the tram network (subject to utility companies reserving the right to carry out works associated with high-pressure gas mains, high-voltage power cables and certain telecommunication cabling works due to the technical complexity and sensitivity of these works).
- 1.38** MUDFA was in two stages. The first was the pre-construction phase, and involved the MUDFA contractor working with **tie** and its consultants to refine the scope and the costs of the second stage, which was the construction stage. Once these costs had been refined they would be fed into the business case that would be submitted to CEC for approval.
- 1.39** It was noted that it was not possible to finalise the scope of the work in the second stage prior to the tender process for MUDFA. The scope of work in the second stage would not be finalised until the MUDFA contractor had been appointed and the pre-

construction stage had been completed. It was estimated, however, that the total value of the contract would be in the order of £50 million and that the value of the pre-construction stage would be in the order of £1 million.

- 1.40** In October 2006, **tie** appointed Alfred McAlpine Infrastructure Services Limited ("AMIS") to carry out the utility diversion work along the tram route under MUDFA [CAR00000300, Parts 1–2]. The programme was set out in Schedule 8 to MUDFA [CAR00005833]. Certain pre-construction services were to be undertaken between October and December 2006, with MUDFA construction works to be undertaken between 2 March 2007 and 27 June 2008.
- 1.41** On 4 April 2007, **tie**'s Construction Director reported to a meeting of **tie**'s Utilities Sub-Committee that AMIS had issued a draft MUDFA Programme Revision 04 showing MUDFA works commencing three months later than the previous programme and showing the main MUDFA works in phase 1a being completed six months later than shown on the previous programme. The report also recognised that issuing utilities design at section levels was slowing the process of approvals from the utility companies.⁷ It was anticipated that issuing drawings and SUC approvals in smaller batches that aligned with the MUDFA construction work sites would improve progress [CECo1638569, page 0010, paragraph 4.4].
- 1.42** A report to CEC's Chief Executive's Internal Planning Group ("IPG") on 31 May 2007 noted that a pilot MUDFA site at Casino Square, Ocean Drive, Leith had been completed between 26 April and 4 May 2007 [CECo1566088]. Additional utilities were uncovered at the pilot site that had not been identified during the original survey works. It was further noted that the latest programme from AMIS, revision 05, showed a start date for the MUDFA works of 2 July 2007 (with works commencing in and around Forth Ports) and an end date for phase 1a of November 2008.
- 1.43** Following the debate in the Scottish Parliament mentioned above, and the subsequent ministerial decision to continue to support the project with a grant of £500 million, AMIS commenced utility diversions work under MUDFA in July 2007. In February 2008, Carillion plc acquired Alfred McAlpine plc, the parent company of AMIS, and its name was changed from AMIS to Carillion Utility Services Limited ("Carillion"). In 2009, Carillion reached an Exit Agreement with **tie** under which it was relieved of its obligations to complete the outstanding works. **tie** appointed Clancy Docwra and Farrans to complete the remaining utility diversion works.

Financial appraisal of the project

- 1.44** Various financial appraisals were undertaken prior to the commencement of the infrastructure works. In some of these appraisals mention was made of an allowance for optimism bias ("OB"), while in others the considered view was that no separate figure was necessary for OB as the contingency (allowances for risk) allowed in the financial appraisal was adequate because it had been "calculated in accordance with HM Treasury guidelines for consider [sic] the impact of Optimism Bias on required funding" [CECo1821403, page 0137, paragraph 9.6]. The Treasury requirement to address OB had arisen from a historical trend of underestimating the cost of public works in the UK [ibid]. By December 2007, when CEC took the decision whether to proceed with the project, no allowance for OB was made in the estimated costs of the project.

⁷ In the papers these entities are described variously as statutory utility companies or SUCs, utility companies, or statutory undertakers. In this Report, unless in text quoted from another document they are referred to as utility companies.

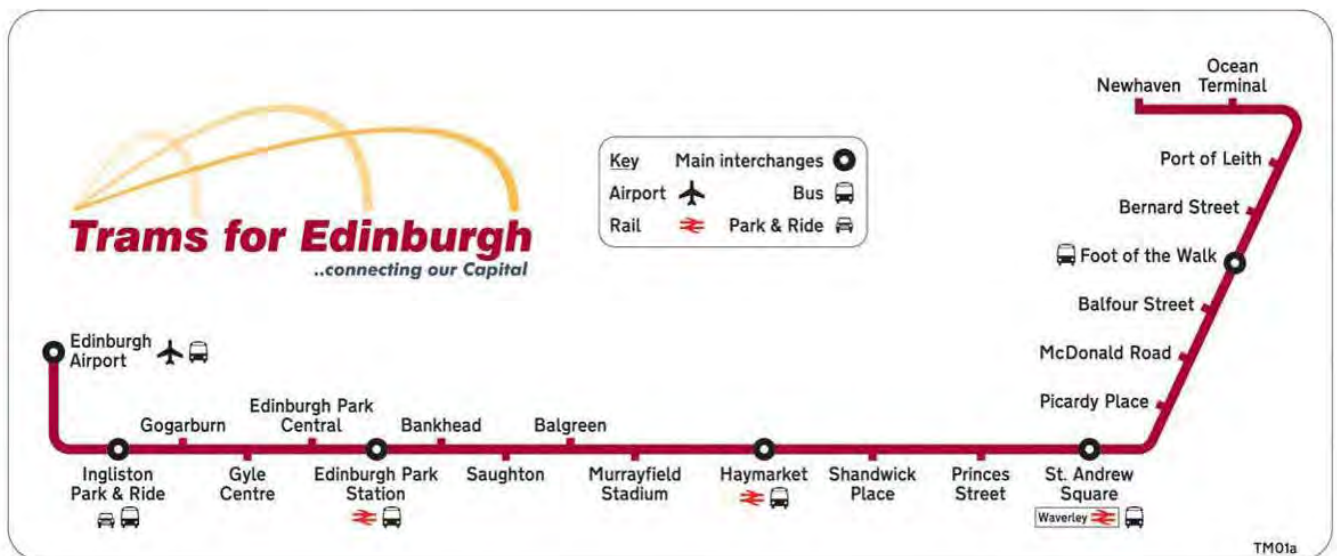
- 1.45** In December 2003, **tie** produced a preliminary financial case for line 1 [[TRSo0000054](#)] that estimated its capital cost at £287.3 million, including a contingency sum of £23.7 million and £44.2 million for OB. The BCR was 1.51. At the same time, **tie** produced a preliminary financial case for line 2 [[TRSo0000016](#)] that estimated the capital cost of that line at £336.3 million, including a contingency of £21.7 million and £57.7 million for OB. The BCR was 1.38.
- 1.46** In September 2004, at the request of the Private Bills Unit of the Scottish Parliament, **tie** produced an update of the above preliminary financial case for line 1 [[CECo0630633](#)] as well as an update of the appraisal for that line in accordance with the Scottish Transport Appraisal Guidance 2 ("STAG 2") [[CECo0551591](#)]. The updated preliminary financial case estimated the total capital costs of line 1 at £274.1 million, including a contingency sum of £23.7 million and an allowance of £31.1 million for OB. The BCR was 1.21. **tie**'s approach to risk management was described as "rigorous" and had resulted in the "comprehensive mitigation strategy" [[CECo0630633](#), page 0010] described in the STAG 2 Appraisal. In a discussion on procurement it was noted that, given its resources and experience, **tie** was "essentially a procuring body, rather than a major project management organisation" [*ibid.*, page 0068]. The preferred procurement option included planning for anticipated initial packages of detail and design and advance works (principally land acquisition and utility diversion works).
- 1.47** In May 2005, **tie** produced a draft Interim Outline Business Case [[CECo1875336](#), Parts 1–7] with Appendices [[CECo1875335](#)], which illustrated that lines 1 and 2 could not be constructed within the funding available from the Scottish Ministers. The estimated capital cost for line 1 (at 2003 prices) was £292.4 million, including a contingency of 10.8 per cent, but it did not include any separate allowance for OB.
- 1.48** In December 2006, Steer Davies Gleave and Mr Buchanan prepared a STAG 2 appraisal of phases 1a and 1b [[CECo1650279](#)]. Capital costs for phase 1 (i.e. for phases 1a and 1b) were estimated at £580 million (including an allowance of 16 per cent, or £81 million, for risk and OB). The estimated cost of phase 1a was £495 million if built alone.
- 1.49** On 21 December 2006, CEC was asked to approve the draft FBC for the ETN dated November 2006 [[CECo2083464](#), page 0006; [CECo1821403](#)]. An accompanying report by the Director of Finance and the Director of City Development noted that the BCR of the whole of phase 1 was 1.63 and that that of phase 1a was 1.10 [[CECo2083466](#)]. The estimated cost of £569 million for the whole of phase 1 provided in January 2006 had increased to £592 million, mainly due to revisions in the programme. During the same period the estimated cost of phase 1a had increased from £484 million to £500 million and the estimated cost of phase 1b had increased from £85 million to £92 million.
- 1.50** The cost estimate of £484 million for phase 1a reported to CEC in January 2006 had included allowances for risk of 24 per cent. In November 2006, **tie** and its advisers had completed a further detailed review of the cost estimate for the project and, as stated in paragraph 1.49, the updated estimate for phase 1a was now £500 million. The levels of certainty and confidence associated with the updated estimate were considered to be relatively high. It was reported that nearly 98 per cent of the costs had been estimated based on rates and prices from firm bids received, known rates applied to quantities, or market rates applied to quantities derived from the Preliminary Design stage. The level of confidence was reinforced by the benchmarking exercises completed and the relatively high allowance for risk. The draft FBC referred to the application of a rigorous quantitative risk analysis ("QRA") as a result of which it was considered that there was a 90 per cent chance that costs would be below the risk-adjusted level. The level of risk allowance included in the

updated estimate represented 12 per cent of the underlying base cost estimates. It was considered to be a prudent allowance for cost uncertainty at that stage of the project and reflected the evolution of design and the increasing levels of certainty and confidence in the costs of phase 1 as procurement had progressed. **tie** had determined that no allowance for OB was required in addition to the 12 per cent risk allowance [CEC01821403, page 0138].

- 1.51** On 25 October 2007, CEC's approval was sought for version 1 of the FBC in respect of phase 1a. A report was provided by the Director of Finance and the Director of City Development [CEC02083538]. The cost of phase 1a was forecast at £498 million and phase 1b at £87 million, based upon non-concurrent construction with phase 1a if a decision to construct phase 1b was made before March 2009. Tram operations on phase 1a were expected to commence in February 2011. The report acknowledged that a number of design-related matters were yet to be finalised but that allowances had been made for these in the estimate of £498 million. The BCR for phase 1a had improved to 1.77 due to the cancellation of EARL and, with the addition of phase 1b, improved to 2.31. The outcome of a detailed analysis of the risks of the project was summarised, noting that there was 90 per cent probability that the final cost for phase 1a would come in below the risk-adjusted level. Version 1 of the FBC would be updated for any material changes arising during the final period of negotiations up to contract close, and CEC's approval would be sought on 20 December 2007 for the updated FBC and to proceed to contract award in January 2008.
- 1.52** As planned, on 20 December 2007, CEC's approval was sought for version 2 of the FBC prepared by **tie**. A report was provided by the Director of Finance and the Director of City Development [CEC02083448]. It recommended staged approval for the award by **tie** of the contracts for the infrastructure works (the "Infraco contract") and for tram vehicle supply and maintenance ("Tramco contract")
- "subject to price and terms being consistent with the Final Business Case, and subject to the Chief Executive being satisfied that all remaining due diligence is resolved to his satisfaction" [ibid, page 0001].
- 1.53** The approval sought was granted by CEC [CEC02083446, pages 0018–0021].
- 1.54** The preferred Infraco contractor was a consortium of Bilfinger Berger UK Limited and Siemens plc, known as Bilfinger Berger Siemens or Bilfinger Siemens Consortium ("BBS"), and the preferred Tramco contractor was Construcciones y Auxiliar de Ferrocarriles SA ("CAF"). It was reported that detailed negotiations between **tie** and BBS and CAF had progressed satisfactorily with a programmed financial close on 28 January 2008. The estimated cost of £498 million for phase 1a including a risk allowance, remained valid.
- 1.55** Although **tie** had reported that financial close was anticipated in January 2008, negotiations between **tie** and Infraco about the contract terms including price and risk allocation continued throughout February, March and April. On 1 May 2008, CEC was advised that a substantial amount of work had been undertaken to minimise its exposure to financial risk, with significant elements of risk having been transferred to the private sector. That had resulted in 95 per cent of the combined Tramco contract and Infraco contract costs being fixed, with the remainder being provisional sums that **tie** had confirmed as being adequate. The net result of the negotiations was a final estimate for phase 1a of £508 million. On 13 May, CEC's Policy and Strategy Committee was advised that the estimated cost of phase 1a was now £512 million (with a further contingent payment of £3.2 million if phase 1b was not built).

- 1.56** Following that meeting of the Policy and Strategy Committee, the Infraco contract was signed in the expectation that phase 1a would be constructed within the budget of £545 million. The extent of the route of phase 1a is shown in Figure 1.2.

Figure 1.2: Tram route for phase 1a



Source: "Edinburgh Tram Network – Final Business Case Version 2 – 7 December 2007" [CEC01395434, Part 1, page 0008]

- 1.57** Ultimately, the route was constructed between Edinburgh Airport and York Place at a reported cost of £776 million. The terminus at York Place was located between the stops shown in Figure 2 for St Andrew Square and Picardy Place.

Chapter 2

Establishment and Progress of the Inquiry

Background to the Inquiry

- 2.1** The background outlined in Chapter 1 (Introduction and Overview) resulted in widespread public concern throughout the course of the Edinburgh Tram project (the "project"). That concern was not confined to residents and businesses along the route of the proposed tram lines throughout the prolonged period of the works when it was apparent that little or no progress was being made on the project; public concern extended throughout the city and beyond, not only because of the impact on the lives of its citizens caused by the apparent lack of activity suggesting that such disruption was unnecessary, but also because of the damage to the reputation of the city of Edinburgh, and of extended journey times to commuters for no obvious benefit to them or to the wider community.
- 2.2** As was discussed in Chapter 1 (Introduction and Overview), on 25 October 2007, City of Edinburgh Council's ("CEC's") approval was sought for version 1 of the Final Business Case ("FBCv1") in respect of phase 1a (Edinburgh Airport to Newhaven). In the report to councillors by the Director of Finance (Mr McGougan) and the Director of City Development (Mr Holmes) the cost of phase 1a was forecast at £498 million, including a risk allowance, and phase 1b (Haymarket to Granton Square) (also referred to as the "Roseburn spur") at £87 million, based upon non-concurrent construction with phase 1a if a decision to construct phase 1b was made before March 2009 [CEC02083538]. On 20 December 2007, CEC's approval was sought for version 2 of the FBC prepared by Transport Initiatives Edinburgh Limited ("**tie**"). The report provided by the Director of Finance and the Director of City Development confirmed that the estimated cost of £498 million, including a risk allowance for phase 1a, remained valid [CEC02083448]. CEC's budget for line 1a was £545 million. On the basis of the figures provided in these reports to CEC it was apparent that line 1a as well as a significant part of section 1b could be constructed within that budget. In a report to CEC's Policy and Strategy Committee on 13 May 2008, CEC's Chief Executive advised the committee that the estimated cost of phase 1a was now £512 million (with a further contingent payment of £3.2 million if phase 1b was not built) and sought and obtained approval to authorise **tie** to enter into the infrastructure contract ("Infraco contract") [USB00000357; CEC01891564, page 0007, item 11]. Following that meeting the Infraco contract was signed in the expectation that line 1a would be constructed within the budget of £545 million. While that budget would not also enable line 1b to be completed, the figures in the report to CEC made it clear that a significant part of line 1b could be constructed within the available budget of £545 million.
- 2.3** The delivery of a tram line from the Airport to York Place (the "truncated route"), as opposed to the promised route extending to Newhaven plus at least part of the Roseburn spur (the "entire route"), and the increased reported cost of £776 million for the truncated route in contrast to the original estimated cost of £545 million for the entire route resulted in significant public concern on a national scale.

Announcement of the Inquiry

- 2.4** In response to a question from Marco Biagi MSP during First Minister's Questions on Thursday 5 June 2014, the then First Minister, Mr Salmond MSP, announced to the Scottish Parliament that Scottish Ministers planned to commission a public inquiry into the handling of the project.
- 2.5** On 12 June 2014, Mr Salmond announced that I would chair the Inquiry and that its Terms of Reference had been agreed in the following terms:
- "to inquire into the delivery of the Edinburgh trams project to establish why it incurred delays, cost considerably more than originally budgeted for and delivered significantly less than was projected through reductions in scope".⁸
- 2.6** In making that announcement, the First Minister indicated that he would be looking forward to "a swift and thorough inquiry". As became apparent from some comments in the media, the phrase used by the First Minister created an expectation in the minds of some that the Inquiry would be concluded within a short timescale. Every inquiry should be conducted as swiftly and as thoroughly as possible, consistent with the need to fulfil its Terms of Reference. Having said that, the timescale for any inquiry will depend upon its particular circumstances, including its likely scale, the likely number and size of documents that it will need to consider in advance of, during, and after the oral hearing, the likely number and whereabouts of witnesses required to give evidence, whether in writing or orally, and the extent to which others co-operate with its investigations.
- 2.7** At the time of my appointment I was not asked for, nor could I have provided, an estimate of the likely timescale of the Inquiry. Unlike the position in many other inquiries, there was no basic data, such as police statements of witnesses to the events under investigation, or other statements or files relating to individual patients or victims or bereaved families, upon which the investigation could build. Nor did I have any clear indication of the volume of material to be recovered, the number and whereabouts of witnesses to be interviewed, and the complexities of that process having regard to the passage of time and the number of documents affecting many of the witnesses. These and other challenges will be considered in more detail below.
- 2.8** In the course of the Inquiry's investigations it became apparent that even those who had been directly involved in the project had no concept of the volume of material relating to it. Accordingly, the phrase used by the then First Minister should be interpreted in the general sense mentioned above. I am reinforced in that view by the omission of any reference to a particular timescale within which I had to submit my report. In many inquiries the Terms of Reference include a reporting date, whereas no such date was stipulated by the then First Minister in his parliamentary statements or in the subsequent Letter of Appointment issued to me.

⁸ See "Official Report: Meeting of the Parliament 12 June 2014" (under First Minister's Question Time: Engagements, direct link: https://archive2021.parliament.scot/parliamentarybusiness/report.aspx?r=9242&mode=html#iob_85724).

The scope of the Inquiry

2.9 By letter dated 12 July 2014, the then Deputy First Minister, Nicola Sturgeon MSP, appointed me as Chairman of the Inquiry. The First Minister's description of the Terms of Reference of the Inquiry in his announcement dated 12 June 2014 provided a broad outline of the scope of the Inquiry, but the Letter of Appointment detailed the Terms of Reference which had been agreed between me and Scottish Ministers prior to 12 June 2014. The Terms of Reference agreed with the Scottish Ministers, and included in an annex to the Letter of Appointment dated 12 July 2014, are as follows:

"1. To inquire into the delivery of the Edinburgh Tram project ('the project'), from proposals for the project emerging to its completion, including the procurement and contract preparation, its governance, project management and delivery structures, and oversight of the relevant contracts, in order to establish why the project incurred delays, cost considerably more than originally budgeted for and delivered significantly less than was projected through reductions in scope.

"2. To examine the consequences of the failure to deliver the project in the time, within the budget and to the extent projected.

"3. To otherwise review the circumstances surrounding the project as necessary, in order to report to the Scottish Ministers making recommendations as to how major tram and light rail infrastructure projects of a similar nature might avoid such failures in future."

A copy of the Letter of Appointment is contained in Appendix 1.

2.10 The scope of the Inquiry was defined by the Terms of Reference outlined above. While that may appear to the enlightened reader to be self-evident, there were indications in the evidence and closing submissions that some participants failed to appreciate that constraint upon me or, if they did, sought to introduce irrelevant considerations. For example, in his evidence on 6 October 2017, Mr Harries volunteered that Edinburgh now has an excellent, reliable and technically sound tram system that operates well [[PHT00000016](#), page 44]. The written submission on behalf of DLA included the following statements:

"DLA acknowledges that the project ran into considerable delay and exceeded its originally stated budget and that identifying the causes of this is a matter of considerable public importance." [[TR100000288_C](#), page 0002.]

2.11 That statement respects the limits imposed upon me by the Terms of Reference of the Inquiry. Unfortunately, it continued as follows:

"However, it will also be submitted that the project has ultimately been a significant success for the City of Edinburgh. At least from the City's perspective, it has acquired a very significant, profit generating asset which has brought with it many social and economic benefits to the City. Particularly in light of the grant provided by the Scottish Government, the asset now owned by CEC is bound to be worth vastly more to the City than the City had to spend to acquire it. Prior to embarking upon the project CEC considered that a tram would bring many social and economic benefits to the City of Edinburgh. It would be inappropriate to speculate on whether all of the anticipated benefits have been obtained. However, the project has been such a success that CEC intends to extend the line further." [[ibid](#), pages 0002–0003.]

- 2.12** Although such a statement might have some relevance in the context of the Court of Session action at the instance of CEC against DLA, the issues raised are not within the remit of the Inquiry. Moreover, it would be inappropriate for me to express any opinion on the merits of any aspects of that Court of Session action or any other litigation. Suffice it to say that I have not found such comments helpful in fulfilling my remit.
- 2.13** For the avoidance of doubt, the scope of the Inquiry does not include issues such as the need for a tram network, the political and economic justification for it, or the operating success or otherwise of the truncated route from Edinburgh Airport to York Place.

Establishment of the Inquiry

- 2.14** It would be understandable for the public to have the expectation that the announcement of the commissioning of the Inquiry and my appointment as its Chair would mean that the work of the Inquiry could commence immediately in accommodation and with staff resources already in place. That would certainly have been consistent with the then First Minister's comments about the speed and thoroughness of the Inquiry.
- 2.15** However, that is not how the system of public inquiries in Scotland operated at that time (and still does). Upon the announcement of a public inquiry its chair must find suitable accommodation, in this case with the assistance of officials in the Scottish Government, and appoint senior staff, notably the Solicitor to the Inquiry and the Secretary to the Inquiry. In turn they are responsible for identifying staff and other resources necessary to fulfil the remit of the inquiry. In short, each inquiry must appoint its own administration but there is no single department within the Scottish Government with responsibility for the establishment and funding of public inquiries.
- 2.16** The House of Lords Select Committee on the Inquiries Act 2005 (the "Act") published its Report on the Post-Legislative Scrutiny of the Act on 11 March 2014.⁹ In that report the Committee concluded that the need for the Secretariat of every inquiry to start from scratch was a major cause of the unnecessary length and cost of inquiries. Accordingly the Committee recommended that there should be a unit within Her Majesty's Courts and Tribunals Service responsible for all the practical details of setting up an inquiry. In the Scottish context the creation of such a unit within the Scottish Government would address such issues and would have the added advantage of providing reassurance on concerns about potential conflicts of interest, which are discussed below. The Scottish Courts and Tribunals Service administers courts and tribunals in Scotland that frequently deal with cases involving the Scottish Ministers in a manner that is beyond reproach, even although the ultimate funding for such courts and tribunals is provided by the Scottish Ministers through the Justice Directorate. The creation of such a unit would also be consistent with the third recommendation in the Report dated 25 October 2018¹⁰ of the Investigative Review into the process of establishing, managing and supporting Independent Reviews in Scotland.

9 The document can be found on the UK Parliament website (www.parliament.uk), direct link: <https://publications.parliament.uk/pa/ld201314/ldselect/ldinquiries/143/143.pdf>.

10 The report can be found on the Scottish Government website (www.gov.scot), direct link: <https://www.gov.scot/publications/investigative-review-process-establishing-managing-supporting-independent-reviews-scotland/>.

- 2.17** Each inquiry is allocated to a sponsor department within the Scottish Government. The sponsor department for the Inquiry was Transport Scotland, an executive agency of the Scottish Government. Although the sponsor department did not interfere in the work of the Inquiry, throughout its duration the Secretary had to remind the sponsor of the delineation between the work of the Inquiry and the interests of the sponsor department and the Scottish Ministers. Consequently, discussions between officials in Transport Scotland and the Secretariat were confined to issues relating to the funding of the Inquiry. Nevertheless, there might be a perception that it was inappropriate for the Scottish Ministers to allocate that agency as the sponsor for the Inquiry, particularly as officials in Transport Scotland had played a significant role in the Tram project and ought to have anticipated being potential witnesses in the context of the Scottish Ministers participating in the Inquiry as core participants.
- 2.18** Although there was no actual conflict of interest between the Inquiry and the sponsor department, most cases concerning a possible conflict of interest are concerned with apparent – as opposed to actual – bias. The creation of a unit within the Scottish Courts and Tribunals Service would remove concerns about potential conflicts of interest where the sponsor department has been actively involved in the subject-matter of the inquiry. If Scottish Ministers were to agree to establish such a unit it would be prudent for them, pending its creation, to take steps to ensure that the sponsor department in any future inquiry has had no prior involvement in the subject-matter of that inquiry.
- 2.19** Following the announcement of my appointment on 12 June 2014, I considered that it was necessary to take steps to establish the Inquiry at the earliest opportunity and to commence work as soon as reasonably practicable, particularly in view of the First Minister's comments mentioned in paragraph 2.6 above. I realised that I would require the assistance of a Solicitor to the Inquiry and Counsel to the Inquiry, as well as a Secretary to the Inquiry. While it was possible for me to appoint the senior members of the legal team, including the Solicitor to the Inquiry and Counsel to the Inquiry, soon after the announcement of my own appointment, the appointment of the Secretary to the Inquiry involved a more protracted process. For that reason, pending the appointment of a full-time Secretary to the inquiry I appointed an interim Secretary to assist me in taking preliminary steps to establish the location of the Inquiry and to commence its investigations.

Inquiry accommodation

- 2.20** Following the First Minister's announcement on 12 June 2014, steps were taken, with the assistance of officials in the Scottish Government, to secure accommodation for the Inquiry Team and for holding the oral hearings. On 20 June 2014, I visited Waverley Gate along with the Solicitor to the Inquiry and the interim Secretary and other officials responsible for accommodation within the Scottish Government. At that location there was vacant office space leased by the Scottish Government and allocated to the budget of Creative Scotland. The office space was adjacent to a larger area that was used infrequently by Creative Scotland and which appeared to me to be a suitable venue for future public hearings. The vacant office space had the appearance of a modern office fitted with adequate portals for the use of modern information technology ("IT"). No indication was given of any possible IT issues. Unfortunately, the inadequacy of the IT provision within the office accommodation soon became apparent and delayed the progress of the Inquiry. This matter is addressed in paragraphs 2.58-2.62 below.

- 2.21** In considering the suitability of any accommodation it seemed to me that a number of factors were important. The first was the capacity, convenience and accessibility of the hearings venue for witnesses, the media and members of the public, particularly those affected by the issues encompassed by the Terms of Reference and wishing to participate in the Inquiry process or simply to observe the public hearings. Secondly, I considered that the office accommodation for the Inquiry Team should be able to accommodate the maximum number of people whom I anticipated might be involved in the investigations and preparations for any public hearings, and should have modern facilities including computer access. Thirdly, although in some inquiries the inquiry office is remote from the venue for any public hearings, I did not consider this to be ideal for the Inquiry and wished the office accommodation to be as close as possible to the venue for holding public hearings.
- 2.22** I selected the accommodation at Waverley Gate because the office accommodation and the adjoining room were each sufficiently large to accommodate the anticipated needs of the Inquiry. In particular, I considered that the room identified for the purpose of the public hearings was large enough to accommodate the legal representatives of the estimated number of core participants and the anticipated number of visitors and members of the media. Having the Inquiry offices and the hearing room adjacent to each other with connecting doors assisted in the efficient conduct of the public hearings. I also considered that it could be used for the purposes of the public hearings without causing undue inconvenience to other occupiers of the building. There was the added advantage that the accommodation was already leased by Scottish Ministers but was used infrequently by Creative Scotland, the agency for which the accommodation had been acquired and which was willing to abandon its use of it in the interests of economy. It could be made available as soon as required.
- 2.23** The office accommodation, also leased by Scottish Ministers and allocated to Creative Scotland, was vacant and available for immediate occupation. The rents being paid by Scottish Ministers, and allocated to Creative Scotland's budget, were £100,000 per annum and £150,000 per annum for the office and adjoining room respectively. The Inquiry occupied only the office accommodation initially, with the annual rental of £100,000 being allocated to its budget. Occupation of the adjoining room was delayed until it was required by the Inquiry. By using the accommodation at Waverley Gate the Inquiry incurred no additional cost to the public purse for its accommodation, even although for accounting purposes the rent was included as a cost of the Inquiry.
- 2.24** Following the public hearings, in the interests of economy the Inquiry Team moved to vacant office space within the Scottish Government offices at Victoria Quay. The rent allocated to the Inquiry's budget for accommodation reduced from £250,000 per annum to less than £13,000 per annum.
- 2.25** In any review of the conduct of public inquiries, consideration should be given to the need to avoid delays by ensuring that at the time of announcing the inquiry there is suitable accommodation available, or at least identified, with any necessary links to the SCOTS network discussed in paragraph 2.60 below.

Appointment of the Legal Team

Solicitor to the Inquiry

- 2.26** Although some inquiries, particularly in England, appoint a Solicitor to the Inquiry from solicitors in private practice, I considered that a senior solicitor within the Scottish Government Legal Directorate ("SGLD") would be more appropriate as the Solicitor to the Inquiry. Such an appointee would be as experienced as a solicitor in private practice, but there were two additional benefits to be gained from such an appointment:
- the appointee would be familiar with procedures in the Scottish Government to enable me to obtain the necessary facilities to start work immediately after my appointment; and
 - the secondment to the Inquiry of such an individual would result in no additional cost to the public purse if, as occurred, the appointee was not replaced within the SGLD, although for accounting purposes his salary was included as a cost of the Inquiry.
- 2.27** In view of my decision to seek the appointment of a senior solicitor from the SGLD, I had discussions with Mr Sinclair, the then Solicitor to the Scottish Government, outlining my requirements for the appointment. In accordance with his recommendation, I had a meeting on 20 June 2014 with Mr McNicoll, Deputy Director in SGLD, with a view to determining whether I should appoint him as Solicitor to the Inquiry. Following that meeting I appointed Mr McNicoll as Solicitor to the Inquiry.
- 2.28** The nature and volume of the legal work involved in investigating the Tram project were such that the Solicitor to the Inquiry considered it necessary to appoint a Deputy Solicitor in the first instance, with the possibility of increasing the Legal Team at a later date. The first Deputy Solicitor to be appointed was Ms Ferrier, who left the Inquiry during the investigation stage to take up another post within the Scottish Government. A number of people held the post of Deputy Solicitor before moving on to other roles within the Scottish Government, principally but not exclusively as a result of securing promotion within SGLD. Similarly, assistant solicitors within the Legal Team moved to other roles within SGLD as the Inquiry progressed. As had been anticipated, all members of the Legal Team were recruited from SGLD and, like Mr McNicoll, were not replaced within that department. Although their salaries were included as a cost of the Inquiry, no additional cost to the public purse was incurred as a result of their employment at the Inquiry.
- 2.29** It is understandable that civil servants should take the opportunity of applying for a promoted post, particularly in circumstances where opportunities for promotion are in short supply, as I understand was the case during the Inquiry. Even when promotion boards are more frequent, membership of an inquiry team should not prejudice the promotion of individuals to other posts. However, changes in personnel will affect the progress of any inquiry because of the time taken to comply with the appointments process and for the new member of the team to become familiar with the inquiry's computer systems and the issues and documents that he or she will be considering. One senior incumbent observed that it took at least three months to become familiar with the work of the Inquiry, during which time she was aware that her work was not as productive as it was thereafter. When this is added to the time taken for the appointment process it can be seen that changes in personnel had an adverse impact on the progress of the Inquiry.

- 2.30** The impact on progress caused by staff changes occurred throughout the Inquiry and continued after the conclusion of the public hearings, following the illness of the Solicitor to the Inquiry. I asked the acting Solicitor to the Scottish Government (Mr Cackette) to appoint a replacement Solicitor to the Inquiry from within SGLD who had previously worked in the Inquiry Legal Team and who had moved to gain experience in other departments but not for reasons of promotion. I explained to him that the reason for my request was to avoid further delays associated with the incumbent becoming familiar with the Inquiry's computer systems, key issues and relevant documents. Mr Cackette was unable to meet my request; instead, he suggested the appointment of a solicitor in private practice who was a consultant in one of the firms of solicitors on the Scottish Government's approved list of firms authorised to provide legal services to it. I rejected that offer as the firm had been instructed by **tie** in the litigation in the Court of Session at the instance of CEC involving a claim for damages against **tie** relating to the Tram project, and there was a clear conflict of interest in my instructing that firm.
- 2.31** I escalated to the Director General for Constitution and External Affairs my concerns about the inability of Mr Cackette to provide a replacement Solicitor to the Inquiry with previous experience of working as part of the Inquiry's Legal Team. The Director General advised me that the solicitors in SGLD with previous experience of the Inquiry were engaged in issues relating to Brexit and the Scottish Government's legislative programme and that those issues had to take priority over the Inquiry. Following a period in excess of three months during which there was no Solicitor to the Inquiry, Mr Glennie, a solicitor from SGLD, was appointed as Solicitor to the Inquiry. As had been the case for others with no prior experience, Mr Glennie required time to familiarise himself with the computer systems, key issues and documents of the Inquiry, which added to the delay in its progress. Mr Glennie was later appointed to a promoted post in the legal department of the States of Jersey. Thereafter Mr McNicoll returned as Solicitor to the Inquiry, having recovered sufficiently from his illness.
- 2.32** In any review of the conduct of public inquiries, consideration should be given to the appropriateness of inquiry staff moving to other posts, apart from promoted posts, within the Scottish Government before the conclusion of the inquiry.

Counsel to the Inquiry

- 2.33** Following the appointment of the Solicitor to the Inquiry it was necessary to identify and appoint Counsel to the Inquiry. I had no hesitation in advising the Solicitor to the Inquiry to instruct Mr Lake QC (now Lord Lake) as Counsel to the Inquiry. His experience at the Bar, including as one of the Junior Counsel in the Lockerbie case, in which he had to deal with substantial quantities of material, his frequent involvement with commercial contracts, including construction contracts, and his reputation as an outstanding member of the Senior Bar in Scotland made him the ideal candidate. I also advised the Solicitor to the Inquiry that I wished to instruct Mr E Mackenzie, Advocate, as Junior Counsel. Mr E Mackenzie was a very experienced Advocate in general practice and had been Junior Counsel in the Penrose Inquiry, as a result of which he had invaluable experience in the conduct of public inquiries. As the investigation progressed it became apparent that there was a need for a third Counsel, and the Solicitor to the Inquiry instructed Mr McClelland, Advocate, who has considerable experience in commercial law, initially as a solicitor and latterly as an advocate. All three Counsel provided me with invaluable advice and assistance throughout the course of the Inquiry and prepared for and conducted the public hearings in an efficient manner despite having to overcome difficulties associated

with late production of documents "discovered by others" and having to deal with litigation at the instance of a core participant against me as chairman of the Inquiry. These issues are mentioned in more detail in the section between paragraphs 2.82–2.90 dealing with difficulties in the recovery of documents.

Appointment of the Secretariat

Secretary to the Inquiry

- 2.34** All inquiries need a dedicated Secretariat, led by the Secretary to the Inquiry, to provide the necessary administration to support their work. In this case, as with many other inquiries, the administrative duties were extensive and varied, including:
- the procurement of a document management system
 - the analysis of documents
 - managing the process of taking statements from witnesses
 - the procurement and installation of equipment for the public hearings
 - maintaining the website
 - the citing of, and managing, witnesses attending the public hearings
 - supervising the budget
- and many other tasks.
- 2.35** Ms Martin commenced as Secretary to the Inquiry on 1 September 2014. The delay between the announcement of the Inquiry and her assuming the role of Secretary to the Inquiry was attributable to the procedures associated with the recruitment of staff from within the Scottish Government, including advertising the post, inviting applications from those interested in the role, interviewing candidates and securing their release from the department currently employing them. Such a delay was replicated in respect of most, if not all, of the civil servants who were ultimately recruited by the Secretary to populate the Secretariat. There was a general reluctance on the part of departments to agree to early release of successful candidates because in many cases such employees would not be replaced due to budget constraints imposed on departments by the Scottish Government, or because of a delay in securing a replacement. These delays adversely affected the progress of the Inquiry, and any review of the conduct of public inquiries should address this issue, particularly if Scottish Ministers wish such inquiries to be concluded quickly.
- 2.36** Apart from appointing civil servants to the Secretariat, the Secretary also appointed agency staff to undertake tasks such as reviewing and coding documents recovered by the Inquiry, interviewing witnesses and preparing statements for their approval, and undertaking various research projects. More significantly, the Secretary recruited an agency worker to undertake the responsibilities of document manager. These members of staff had contracts that permitted them to leave after giving one week's notice of their intention to do so. Equally, the Secretary could terminate their contract by giving an equivalent period of notice. In the section on staffing in paragraphs 2.42–2.45 below, I consider the implications of such arrangements and the appropriateness of using agency staff for certain tasks, as well as the need for careful management of such staff to minimise the risk of their leaving with a significant amount of work unfinished.

- 2.37** On 16 August 2016, an agency worker who had been allocated the task of taking statements and preparing them for the use of the Inquiry, and ultimately core participants, resigned following a disagreement with the Secretary about the quality of his work. At that stage he had a number of statements outstanding and it became apparent that the management of the process of statement taking had failed to take account of the risks associated with the departure of a statement taker before he had completed the work allocated to him. That failure contributed to further delay and expense involved in completing the statements, including re-interviewing witnesses and rewriting draft statements. The Secretary took medical leave of absence early in September 2016 and resigned as Secretary on 7 November 2016.
- 2.38** On 12 September 2016, I appointed the Deputy Secretary to the Inquiry, Ms Worth, to be the interim Secretary until Ms Martin clarified her intentions. Following Ms Martin's resignation I confirmed the permanent appointment of Ms Worth as Secretary to the Inquiry. She had had sole responsibility for the procurement and installation of services and equipment in the room for public hearings and had undertaken numerous other tasks within the Secretariat. From my discussions with Ms Martin when she was in post as the Secretary, as well as my own experience and observations, it was apparent that Ms Worth had fulfilled all tasks allocated to her efficiently and with due regard to economy. The added advantage of her appointment was that she was familiar with the work of the Inquiry and did not require a prolonged period to familiarise herself with the work of the Secretariat. From experience of other staff changes it usually took about three months for a new member of staff to be fully operational, as there was what one former Deputy Solicitor described as a "steep learning curve". Ms Worth reorganised the structure of the Secretariat and saved Inquiry funds by deciding not to appoint a Deputy Secretary or Assistant Secretaries, while at the same time providing me with the necessary support.

Staffing

- 2.39** To support its work the Inquiry recruited legal and administrative staff from within the Scottish Government. There is a challenge in securing staff from within the Scottish Government who have the required experience for projects of this nature. Ideally, it would be helpful to have a suitably qualified and experienced group of staff within the Scottish Government who are available to undertake the legal and administrative work associated with the establishment and progress of a public inquiry as necessary, or to assist inexperienced staff to do so and to provide support and advice thereafter. I recognise that public inquiries may not be commissioned with sufficient frequency to justify retaining such staff solely for the purpose of administering inquiries or acting as consultants to others involved in that task, and that it will be necessary for them to be allocated to other duties in the absence of any public inquiry. However, having such an experienced group of staff available to undertake the legal and administrative duties required for a public inquiry or to assist others in doing so would mean that staff would be available to step in at short notice and undertake the required work, taking advantage of the experience gained in other inquiries. The alternative is to allow inexperienced staff sufficient time to understand the obligations imposed on an inquiry team and address issues without knowing that others had faced and resolved similar issues. It would also assist experienced and inexperienced staff alike if written guidance, regularly updated, were to be available, dealing with the requirements of establishing a public inquiry and recording issues that had arisen in other inquiries and how they had been resolved.

- 2.40** The consequence of not having such a dedicated group of staff is that the inquiry staff will often be undertaking this work for the first time, without the availability of guidance from those with experience of similar inquiries. That proved to be the case for this Inquiry. As a consequence, such staff faced a steep learning curve but on this occasion they addressed these challenges as required. However, it did mean that there was a delay in staff becoming fully conversant with not only the subject-matter of the Inquiry, which is unavoidable, but also with the procedural aspects of its conduct.
- 2.41** There is a risk that lessons learned from undertaking previous inquiries are not retained when people engaged in them move on to other work. Although members of the Inquiry Team were able to speak to people who had been engaged on previous inquiries, and were grateful for the assistance given in that regard, that arrangement should not depend upon goodwill and would be better structured within a formal setting such as the provision of written guidance that is regularly updated and the assistance, as required, of members of the experienced group mentioned in paragraph 2.39 above.
- 2.42** In many inquiries it is not possible to recruit sufficient personnel from within the Scottish Government to undertake all the tasks necessary for the inquiry to fulfil its Terms of Reference. In that event, temporary members of staff must be recruited through agencies. This Inquiry was no different in that regard. The investigation undertaken by the Inquiry Team included the task of reviewing documents, the scale of which will be appreciated when one considers the number of documents recovered and the size and complexity of some of them. Many of these documents were technically complex, and it was necessary to train document reviewers to identify what was relevant from that material and to make the necessary connections between documents. Although there is an obvious commercial advantage to the public sector in using temporary staff for this task, the risk and potential disadvantage of doing so is that employees who have been trained and have acquired such additional skills may leave the inquiry at short notice. Although there was some turnover of agency staff involved in reviewing documents, most document reviewers remained as part of the Inquiry Team for substantial periods of time, and the task of reviewing documents was completed before the commencement of hearings.
- 2.43** As noted in paragraph 2.36 above, the task of taking statements was another function delegated to temporary members of staff. As would have been the case with permanent members of staff, it was necessary to ensure that those recruited to take statements had sufficient understanding of the background to the Inquiry and the key issues that needed to be explored with witnesses. To that end, documents relevant to a particular witness were identified by members of the Legal Team and were collated for the use of the witness and the statement taker. In addition, Counsel to the Inquiry prepared a note of the issues that Counsel wished to be explored with the witness at interview. The risk associated with this use of temporary members of staff was that the period between interviewing witnesses and completing a draft statement often exceeded the period of notice that staff recruited through an agency required to give. This risk is distinct from the increased risks arising from allocating numerous interviews to a particular statement taker, which are mentioned in paragraph 2.37 above.
- 2.44** An added complication was that the Scottish Child Abuse Inquiry commenced after this Inquiry, and a number of statement takers and document reviewers sought and obtained employment as agency staff at that inquiry, particularly in the latter stages of the investigation stage of this Inquiry. In reporting that occurrence I do not intend

any criticism of the agency staff who moved to the Scottish Child Abuse Inquiry. It was perfectly understandable that they should do so, particularly as that inquiry could offer them employment as document reviewers or statement takers for a much longer period. However, the loss of such skilled employees before the end of the investigation stage of this Inquiry presented serious challenges for it, but four statement takers volunteered to complete the interviews of prospective witnesses and the drafting of their statements. The Secretary and I were extremely grateful to them for their professionalism in completing that task, particularly as we knew that the majority of them wished, in due course, to obtain employment with the Scottish Child Abuse Inquiry.

- 2.45** Agency staff were also used as researchers within the Legal Team and as the document manager, who had been appointed by the original Secretary as part of her responsibility for staffing the Secretariat. The use of agency staff for such an essential role as document manager, and arguably for certain researchers, is a high-risk strategy having regard to the ability of such members of staff to leave at very short notice. In any future inquiries, careful consideration should be given to the appropriate tasks that can be undertaken by agency staff without a serious risk of compromising the work of the inquiry. In the absence of the availability of suitably qualified permanent civil servants to undertake skilled tasks such as legal research, or document managers, consideration should be given to the employment of people with the necessary skills as temporary civil servants for the duration of the inquiry. Suitably framed contracts of employment for such temporary civil servants would have the benefit of removing the risks associated with the departure of skilled employees at short notice.

Progress of the Inquiry

General approach

- 2.46** Section 17 of the Act provides that, subject to the Act itself and to the Inquiries (Scotland) Rules 2007 (the "Rules"), "the procedure and conduct of an inquiry are to be such as the Chairman of the Inquiry may direct". Although the Inquiry was initially established as a non-statutory inquiry, I followed the procedures of a statutory inquiry, so far as possible. At the outset of the Inquiry the priorities were to identify and contact those witnesses who appeared to have had a significant role in the project, and to recover at an early stage documents that might be significant in fulfilling the Terms of Reference. I appreciated that this would be an iterative process because it was likely that witnesses, or documents themselves, would provide information leading to the necessity to recover other documents and contact other witnesses. On 26 August 2014, in Inquiry Procedure Direction No 1 I issued guidance concerning the production of documents to the Inquiry. That guidance was published on the Inquiry website, as was all future guidance.
- 2.47** As will be noted in paragraph 2.49 below, difficulties arose in contacting prospective witnesses and in recovering documents. Although such difficulties persisted after the conversion of the Inquiry to a statutory inquiry, the availability and use of statutory powers resulted in persuading witnesses to provide statements and in the recovery of significant documents. Even then, as will also be noted below, there were occasions when documents were not produced when they ought to have been.

Conversion to a statutory inquiry

2.48 When announcing the decision to commission a public inquiry the First Minister advised that the Inquiry would be conducted on a non-statutory basis. This was said to be for two principal reasons:

(i) by operating on a non-statutory basis Ministers anticipated that the Inquiry could be concluded more expeditiously, and

(ii) the Minister for Transport and Veterans had been assured by CEC that it would provide full co-operation and full documentation on all aspects of the Project.

2.49 While there is no reason to question the sincerity of the assurance given by CEC that it would co-operate with the Inquiry, it quickly became apparent that this assurance would not be sufficient, for the following reasons:

(a) In the course of preliminary discussions with officials of CEC the Inquiry Team provided them with a list of members of staff at CEC who had been involved in the Tram project and were of interest to the Inquiry. Some of these CEC employees had since retired or otherwise left the employment of CEC. The Inquiry Team requested that CEC officials provide the Inquiry with the contact details held by CEC for all individuals on the list. The then Solicitor for CEC, Ms Campbell, provided the Inquiry Team with the contact details of most of the people on the list who had confirmed that she was authorised to release such details. However, she stated that she could not disclose the contact details for specified individuals because they did not consent to any private address or other contact details held by CEC being disclosed to the Inquiry Team. The specified individuals were: Ms Lindsay, who had been Solicitor to CEC at a relevant time; Mr McEwan, the Business Improvement Director at **tie**; Mr Poulton, Director of Transport and Tram Monitoring Officer at CEC; and Mr Rimmer, also a Director of Transport at CEC. Ms Campbell also forwarded a letter from Ms Lindsay to her, which suggested that Ms Lindsay would not be willing to co-operate on a voluntary basis with the Inquiry's investigations [[PHT00000027](#), pages 195–204; [TR100000163](#); also [TR100000162](#); [TR100000169](#); [TR100000164](#); [TR100000170](#); [TR100000167](#)]. As Chair of a non-statutory inquiry I lacked the power to compel anyone to participate in the Inquiry process and to co-operate with the Inquiry's investigations.

It was not possible for the Inquiry to make contact with people who were unwilling to have their addresses or other contact details disclosed without potentially time-consuming and expensive enquiries being made to trace them. Furthermore, even if contact could be made it was apparent that there was a real risk that those potential witnesses would not co-operate voluntarily, and in particular would not meet members of the Inquiry Team to discuss their involvement in the project, and there was no means of compelling them to do so.

(b) In addition to considering the actions of CEC the Inquiry would also need to consider the actions of other bodies and individuals involved in the project. CEC could not make any commitments on behalf of any of the other organisations involved in the project or their employees, either current or former, regarding their disclosure of material to, and co-operation with, the Inquiry.

(c) CEC considered that the provisions of the Data Protection Act 1998 would act as an impediment to its providing the Inquiry with full access to relevant material in its possession. In particular, CEC could not provide personal data to the Inquiry in the absence of a statutory basis permitting release of that material. Similar issues would arise in relation to material held by others.

(d) In 2013 CEC had raised separate court proceedings in the Court of Session against DLA and **tie** Limited. The proceedings in both actions had been sisted (suspended), and CEC expressed concern that full participation in the Inquiry could prejudice its position in relation to those proceedings. It was, therefore, unwilling to provide full co-operation with the Inquiry where it felt that to do so could prejudice its position in relation to those proceedings.

- 2.50** In addition, I concluded that the immunity from suit afforded to witnesses and members of the Inquiry panel by section 37 of the Act should provide a reasonable degree of comfort to prospective witnesses that their participation in the Inquiry process would not expose them to the risk of litigation against them. The co-operation of such witnesses would assist in preparing a comprehensive report.
- 2.51** Although Ministers had anticipated that an Inquiry could proceed more quickly if conducted on a non-statutory basis, I am satisfied that no meaningful inquiry could have been conducted in the face of the reluctance of some essential witnesses to assist the Inquiry unless compelled to do so. The project had been the subject of much publicity over the years, and there had been widespread criticism of the apparent impact on the reputation of the City of Edinburgh allegedly due to mismanagement of the project. Having regard to such publicity, it is not surprising that professional people who had been engaged in the project might want to distance themselves from their involvement in it. Accordingly, the reluctance of key witnesses to participate voluntarily might reasonably have been anticipated, whatever assurances had been given by CEC concerning its willingness to co-operate. In my view, it was unrealistic to proceed with an inquiry of this nature on a non-statutory basis. A non-statutory inquiry might be concluded more quickly than a statutory inquiry, because it would have limited access to relevant witnesses and documents and would have no power to gain access to material that had been withheld by organisations and individuals. However, for identical reasons a non-statutory inquiry would certainly not have been thorough and would have been of little value in providing answers to the widespread concerns surrounding the project.
- 2.52** It should be noted that although I have recorded the response and apparent unwillingness of some current and former employees of CEC and former employees of **tie** to co-operate with the Inquiry, that should not be interpreted as a criticism of the individuals or the relevant organisations. In the absence of statutory powers of compulsion there was no obligation on individuals or their employers to co-operate, and they were therefore within their rights not to do so even although that was a decision that obviously was a cause of some disappointment to me.
- 2.53** I have focused on the response of current and former employees of CEC and former employees of **tie** simply because, prior to the conversion of the Inquiry to a statutory basis, assistance had only been sought from CEC and its current and former employees and the former employees of **tie**. Other participants in the project had not been contacted or asked to provide assistance before the decision was taken to convert the Inquiry to a statutory basis.

2.54 Against the background outlined above, on 30 October 2014 I submitted a request to the then Deputy First Minister that the Inquiry should be converted to a statutory inquiry under section 15 of the Act. Ministers agreed to that request and the then Deputy First Minister issued a Notice of Conversion on 7 November 2014. Copies of my letter and the Notice of Conversion are contained in Appendices 2 and 3 respectively.

Use of statutory powers

2.55 In the course of the investigations I issued a total of 207 notices under section 21 of the Act to require prospective witnesses to provide a statement to the Inquiry, to secure the recovery of documents and other material in the possession or control of the recipient of the notice, and to require witnesses to attend public hearings to give oral testimony. Had the Inquiry not been converted into a statutory inquiry it is likely that evidence in the form of such statements and documents, as well as other material, would not have been recovered. Nor could I have enforced any request for a witness to give evidence at a public hearing.

2.56 Although the use of statutory powers resulted in the recovery of evidence, the Inquiry Team endeavoured at all times to seek the voluntary co-operation of prospective witnesses and of those in possession of documents or other material of interest to the Inquiry. Notices under section 21 of the Act involved additional work for the Inquiry Team and consequently resulted in overall delay. An extreme case of such delay was the statutory notice served on Bilfinger Berger ("BB"), which resulted in litigation. This and other difficulties relating to the production of documents are mentioned in paragraphs 2.77–2.90 below.

2.57 Although the conversion to a statutory inquiry provided me with additional powers to secure evidence, it was not possible to compel witnesses and organisations located outside the UK to co-operate with the Inquiry. Nevertheless a number of such witnesses and organisations did co-operate with the Inquiry, and I am grateful to them for that. While it was possible to have the Inquiry converted to a statutory basis without difficulty, this did result in an unwelcome delay in making progress. Had Ministers decided at the outset that the Inquiry should proceed as a statutory inquiry, that delay would have been avoided.

Provision of IT services

2.58 Although the Inquiry occupied premises designed to accommodate the IT requirements of a modern office, and the accommodation was chosen in part with that in mind, a considerable amount of time was taken in setting up the IT systems required to allow the office to function effectively. The existence of local network infrastructure for computer connections created the impression that staff could use them to work effectively and efficiently. Nothing could have been further from reality.

2.59 Soon after the Inquiry took occupation of the office at Waverley Gate, it became apparent that connectivity to the SCOTS network, explained in paragraph 2.60, over a secure virtual private network was extremely poor, and connections were frequently lost. Often disconnections occurred several times per day. Accordingly, I requested a meeting with officials from the Scottish Government ("SG") Information Services and Information Systems Division ("ISIS") to discuss the IT provisions for the Inquiry and to put in place a solution to the disruption to the work of the Inquiry caused by the frequent loss of computer connectivity. The outcome of that meeting on 14 July 2014 was the proposal of a permanent solution to the Inquiry's IT problems, discussed in paragraph 2.61 below.

- 2.60** Although some offices in Waverley Gate were leased to the SG and occupied by public bodies, they were not connected to the SCOTS network, which the tram inquiry intended to use. SCOTS is the SG IT secure network that provides a common hardware and applications infrastructure to core SG departments and associated agencies and organisations. It is managed to information security standard ISO 27001 and forms part of the wider UK Public Services Network. Its users have access to corporate and popular desktop applications and systems, internet, printing, telephony and data storage. SCOTS also provides access to eRDM, the corporate Electronic Records and Document Management System. To ensure that information generated by the Inquiry remained confidential, and was not accessible to other staff in the SG, a customised file plan was developed in eRDM for the sole use of the Inquiry, and access was restricted to Inquiry staff only. Thus, using the SCOTS network enabled the Inquiry to take advantage of the security and resilience of the Government's IT systems without compromising the confidentiality, security and integrity of the documents created or recovered by the Inquiry.
- 2.61** Prior to that meeting in July 2014, Creative Scotland had provided the Inquiry with broadband connectivity, which the Inquiry used to access the SCOTS network. As was noted in paragraph 2.59 above, connectivity was frequently lost, often several times per day, and the work of the Inquiry was disrupted. The permanent solution recommended by officials within ISIS was to install a direct fibre link to the SCOTS network in St Andrew's House. This would include installing a data cabinet in the Inquiry's office and laying down and connecting to it the required cabling. SG had a contract with Vodafone for such installations but there was a lead-in time of 90 days during which time Vodafone was expected to negotiate any wayleave agreements. Within that timescale, on 22 and 23 September 2014, Vodafone installed the internal cabling in the Inquiry's offices but did not install the data cabinet or provide connectivity to the SCOTS network. The consequence of that partial installation was that the existing broadband connections were lost and the Inquiry Team had to use mobile broadband devices to connect their computers to the SCOTS network. Such devices used SIM cards on a specific mobile network to connect to the internet and, due to fluctuations of the mobile signal strength, computer connectivity to SCOTS was frequently lost.
- 2.62** As well as undertaking the partial installation within the Inquiry office mentioned above, Vodafone attempted to install the new link from St Andrew's House to the Inquiry offices in Waverley Gate on three separate occasions but failed to do so. Its first attempt was frustrated because other work was being undertaken at Waverley Gate. On the second attempt it was denied access to St Andrew's House to connect the cable at that location because the security officers there had not been advised to expect its employees and allow them access. On 16 October 2014, Vodafone installed the data cabinet into the Inquiry office at Waverley Gate and connected it with the internal cabling that it had installed earlier but could not carry out the SCOTS fibre work at Waverley Gate because it had not negotiated a wayleave agreement with the building managers. Negotiations between Vodafone and the building managers were protracted and not resolved until 21 November 2014 when the wayleave agreement was signed. Thereafter Vodafone completed the fibre work at Waverley Gate, and completed and tested the connection to the SCOTS network at St Andrew's House, which enabled the Inquiry Team to have reliable computer access from 4 December 2014.

- 2.63** It is questionable whether the matter would have been resolved on 21 November and the connection made by 4 December without the intervention, at my instigation, of the relevant Directors within SG in early November or without my request on 17 November for a meeting with senior representatives of Vodafone and the building managers, coupled with a threat to issue a press release about the matter.
- 2.64** Until 4 December, the Inquiry Team had to work with sub-optimal equipment that frequently lost connectivity and with inadequate systems that affected the efficiency of the Inquiry in the first year of its operation. The time spent by the Inquiry Team in seeking to resolve the difficulties associated with inadequate IT facilities detracted from the work of setting up the Inquiry and procuring the other systems required.
- 2.65** If the timescales for setting up an inquiry's offices and the necessary IT facilities cannot be shortened, Ministers should take account of that anticipated delay and should make allowance for it in assessing likely timescales before commissioning an Inquiry.
- 2.66** Separate arrangements were necessary for the hearing room. In order to provide internet access throughout the Preliminary Hearing and, later, the Oral Hearings, a separate line was commissioned through the SG Procurement framework and installed in the hearing room. This provided secure wired and wireless internet connectivity for the sole use of the core participants and the general public attending the Hearings. In addition, ISIS provided wireless connectivity to SCOTS. This was used only by Inquiry staff supporting me and by Counsel to the Inquiry during public hearings.

Document management

- 2.67** As will be indicated in paragraphs 2.77–2.81 below, the volume of material that the Inquiry needed to recover from prospective core participants was substantial and significantly more than had been recovered for previous public inquiries. It far exceeded what had been expected. This required the procurement of a document management system capable of handling an extremely large volume of material.
- 2.68** On the basis of advice from a consultant who had been involved with previous inquiries in the UK, the Inquiry procured the Relativity document management system, a litigation application for collecting, storing, sharing, reviewing, searching, managing, categorising and coding documents. In discussions prior to the procuring of the system, the Inquiry Team had requested that the system had to be able to manage effectively duplicate copies of documents. The consultant referred to this as “de-duplication” and stated that this was a feature of Relativity. In the event, the system was not as effective at discarding duplicate copies of documents as had been advised, in that the system would not recognise documents as duplicates in circumstances where a person reviewing the material would treat them as such. That had implications for the time taken to review material and make it available to core participants. Nevertheless the system was extremely effective in reducing the number of documents to a more manageable number.
- 2.69** It was also necessary to procure a separate system for the display of documents during the oral hearings, because these were attended by members of the public and the media who did not have access to the documents available to core participants. The document display system used during the oral hearings worked well and no significant difficulties were experienced with the display of documents during the hearings.

Core participants

2.70 Rule 4 of the Rules is in the following terms:

"4.(1) The chairman may designate a person as a core participant at any time during the course of the inquiry (but only with the consent of that person).

"(2) In deciding whether to designate a person as a core participant the chairman must have particular regard for the desirability of including as core participants persons who–

- (a) played, or may have played, a direct and significant role in relation to the matters to which the inquiry relates;
- (b) have a significant interest in an important aspect of the matters to which the inquiry relates; or
- (c) may be subject to significant or explicit criticism–
 - (i) during the proceedings at the inquiry, or
 - (ii) in the report (or any interim report) to be delivered under section 24 of the Act (submission of reports).

"(3) The chairman may, before the end of the inquiry, specify in writing that a person ceases to be a core participant."¹¹

2.71 On 27 May 2015, I issued Inquiry Procedure Direction No 6 – Core Participants – relating to the procedure for applying for core participant status. In response there were nine applications for core participant status. In considering these applications, I took into account the Terms of Reference of the Inquiry and the criteria specified in rule 4(2). I rejected the application on behalf of an organisation because it appeared to me that the members of that organisation wished to explore the extent of compliance by CEC with the Aarhus Convention, which was an issue beyond the scope of the Inquiry. I also rejected an application by an individual, on the ground that he had failed to satisfy any of the particular criteria specified in the rules. At the preliminary hearing on 6 October 2015, I announced the identity of those who had been granted core participant status. Their names and the names of their legal representatives are contained in Appendix 4.

2.72 I was concerned that **tie** had not applied for core participant status, and I expressed my concerns at the preliminary hearing. As was noted in Chapter 1 (Introduction and Overview), **tie** was a company incorporated in 2002, and wholly owned, by CEC to deliver a number of projects, including the Tram project, as part of CEC's New Transport Initiative. Although **tie** was a separate legal entity from CEC it was intended that it would deliver CEC's policy objectives. **tie** still exists, although it is not currently active, and its name has changed to CEC Recovery Limited. The sole Director of CEC Recovery Limited is an official of CEC.

2.73 For the purposes of this Inquiry CEC took the decision that it would not represent the interests of **tie** at the Inquiry. That is a decision that was properly one for CEC to take. However, CEC was also not prepared to fund separate representation of **tie** and its former employees at the Inquiry, notwithstanding that it might reasonably have been anticipated, even at an early stage of parties' consideration of the issues, that **tie** and its office bearers and employees might be the subject of criticism by

¹¹ Rule (4) of Inquiries (Scotland) Rules 2007, available on www.legislation.gov.uk, direct link: <https://www.legislation.gov.uk/ssi/2007/560/article/4/made>.

other core participants, whether justified or not. Consequently although **tie** was a key participant in the project, and could almost certainly have satisfied the requirements for designation as a core participant in terms of rule 4 had an application been made on its behalf, it was not represented as such at the Inquiry.

- 2.74** As was noted in paragraph 2.70 above, rule 4(1) enables me to designate any person as a core participant, but I may only do so with the consent of that person. Therefore in the absence of an application for core participant status it was not possible for me to determine that **tie** should be designated as such. It was undesirable that a body that had such a key involvement in the Tram project, and might be subject to significant criticism, should not be represented at the Inquiry. In 2017 a number of former employees of **tie** sought, and were granted, designation as core participants. They were represented by the same firm of solicitors and Counsel, and used the acronym "SETE" (Selected Ex-Tie Employees). They did so as individuals, and not as representing the interests of the company, which meant that the company remained unrepresented and liable to criticism by other core participants without having the opportunity to present a corporate view of its position.
- 2.75** The individuals granted core participant status in 2017 are listed in Appendix 4.
- 2.76** On 15 March 2018, I received a notice from Mr Dickens, one of the special managers (without personal liability) of Carillion Utility Services Limited (in liquidation) ("Carillion") that Carillion would require to withdraw from the Edinburgh Tram Inquiry (see Appendix 7). Accordingly, on 5 April 2018, I specified that Carillion ceased to be a core participant with effect from that date.

Recovery of documents

- 2.77** The volume of material recovered by the Inquiry was substantial. At the outset I took the decision that all core participants should provide the Inquiry, preferably in electronic form, with all material that they held which I considered to be relevant to the Terms of Reference. At an initial meeting with me, CEC officials offered to supply all the material that they considered to be relevant to the Inquiry's Terms of Reference. Although the offer was no doubt made in good faith, with a view to assisting the Inquiry, I recognised that there would be presentational difficulties if the Inquiry had restricted its investigations to material that a core participant had selected on the basis of what it considered to be the key issues for the Inquiry.
- 2.78** Core participants were asked to estimate the likely number of documents that they could supply to the Inquiry to enable the Inquiry Team to assess the scale of the task facing it. Initially the total number of documents identified was approximately 2 million. However, following further discussion between the original Secretary to the Inquiry and core participants it became apparent that the total number of documents in their possession jointly could be in the region of approximately 500 million. It was likely that this would include a very large number of duplicate copies of documents, given the tendency to send an email with the same copy documents attached to a number of individuals. Even allowing for such duplication, the number of documents in the possession of core participants exceeded what the Inquiry had anticipated and it was clearly impracticable to manage what was likely to be hundreds of millions of documents.
- 2.79** In order to reduce the number of documents to a more manageable level, members of the Inquiry team undertook targeted searches in Relativity, based on an initial assessment of the likely key issues for the Inquiry. This helped to filter out material likely to be of minimal relevance to the Inquiry's Terms of Reference and resulted in a significant reduction of the number of documents to approximately 6 million.

Further refinement of the search criteria resulted in the reduction of the number of documents held on the Inquiry's database, known as Waverley, to approximately 3.065 million.

- 2.80** In the course of their consideration of the material, and in preparation for the Oral Hearings, Counsel to the Inquiry identified the material on the Waverley database that they would wish to put to witnesses when taking their evidence either in a written statement or at a public hearing or both. Such material was copied to a separate database, known as Haymarket. A total of 16,916 documents were saved on the Haymarket database, to which only the Inquiry team and all core participants were given access. This increased to 17,172 after the conclusion of the hearings and during the preparation of this Report.
- 2.81** It is understood that the number of documents recovered by the Inquiry far exceeds the volume of material recovered and considered by other inquiries in Scotland, and possibly in the UK. Therefore the Inquiry had to adopt an untested method of managing and saving documents and, by undertaking a review of them, to select documents that were considered to be of particular relevance to the Inquiry's Terms of Reference and to discard the rest. This selection process had to be started at an early stage in the Inquiry's work, but the Inquiry team kept under review the material saved on the Waverley and Haymarket databases as its understanding of the relevant issues developed. It was recognised that, whichever system for identifying relevant material was used, there was a risk that relevant material would be discarded and irrelevant material retained. To address this concern, at the Inquiry Preliminary Hearing on 6 October 2015 I explained to core participants the process that had been adopted for selecting relevant material. I asked them to consider the material on the Haymarket database, once it was made available to them, and to advise the Solicitor to the Inquiry if they were aware of any material not included on the database that they considered to be relevant to the Inquiry's terms of reference. In adopting this approach I recognised that some core participants would not wish to disclose material that was adverse to their interests, but a different view could be taken of that material by other core participants, resulting in the likelihood of disclosure. The lack of response to that request reassured the Inquiry team that the documents recovered and made available to core participants on the Haymarket database were essentially the most significant.

Difficulties in the recovery of documents

- 2.82** The Inquiry experienced delays in recovering productions from various core participants. It was often necessary to send repeated requests for documents in an effort to obtain them on a voluntary basis without resorting to statutory notices. However, in certain instances, statutory notices had to be used to recover documents within a timescale that was convenient for the progress of the Inquiry as distinct from the priorities of the person in possession of the documents.
- 2.83** Problems concerning the production of documents arose with CEC. As indicated in paragraph 2.77 above, I had an initial meeting with CEC officials concerning the nature of the material held by them. Thereafter there were regular meetings involving the then Secretary and representatives of CEC and Mr C Smith who had acted as a consultant to CEC following the appointment of Dame Sue Bruce¹² as its Chief Executive. These meetings identified material to be produced and the form

¹² Throughout this Report I refer to her by her current name of "Dame Sue Bruce", as she had become known by the time that she gave evidence to the Inquiry, although she was known as "Mrs Bruce" when she was involved in the project as Chief Executive of CEC.

in which it was required. A considerable amount of material was recovered in this way. However, analysis of the material identified that records of significance to the Inquiry were missing, notably those relating to Dame Sue Bruce. Nevertheless, prior to the commencement of the public hearings on 5 September 2017 Inquiry officials had been given verbal assurances by CEC officials that all relevant documents in the possession of CEC had been produced. It was, therefore, a matter of extreme concern for the Inquiry to receive a voicemail message followed by an email dated 27 September 2017 from Mr Clarke, a Senior Solicitor with CEC, notifying the Inquiry that he had "very recently discovered 13 files that appear to be Sue Bruce's paper files in respect of her dealings with the trams" [CEC02087291]. These files were delivered to the Inquiry and required to be analysed by the Inquiry team at the same time as witnesses were giving evidence and after most witnesses from CEC had concluded their evidence. In November 2017, Mr Clarke again contacted the Solicitor to the Inquiry and advised him that further files relating to Dame Sue Bruce had been discovered. This was confirmed by an email dated 10 November 2017, which included the following information:

"... the Chief Executive is moving out of his office. During the clear out that resulted further Sue Bruce papers were discovered. It is obviously of great embarrassment to the Council that this has occurred and I offer an unreserved apology to the Inquiry for this." [CEC02087290]

- 2.84** Although the communications mentioned in paragraph 2.83 emanated from Mr Clarke, I do not attribute personal responsibility for CEC's omissions to him. As a senior solicitor within CEC it is unlikely that he was directly involved in searching for documents; rather, it seemed to me that he was merely reporting the outcome of CEC's investigations to the Inquiry.
- 2.85** On 13 November 2017, the Inquiry received 16 further folders plus paper bundles and Dame Sue Bruce's notebook, all of which had been "discovered" as officials cleared out the Chief Executive's room. The Deputy Solicitor to the Inquiry requested officials in CEC to provide an inventory of the documents produced, and on 15 November 2017 CEC delivered a removable media device containing electronic inventories of files. Following the conclusion of the evidence on 13 December 2017, prior to the Christmas break, the Inquiry team undertook a detailed examination of the material delivered in November and requested that CEC deliver five boxes of material identified in the electronic inventories. These were delivered in January 2018, following the festive break. The late delivery of material by CEC caused inconvenience and was disruptive to the planned progress of the Inquiry. In my view, it also calls into question the sincerity of the assurance mentioned by the then First Minister that had been given to the Minister for Transport and Veterans by CEC "that it would provide full co-operation and full documentation on all aspects of the Project". Such assurances were repeated on numerous occasions following my appointment, and while it is undoubtedly true that the Inquiry received a considerable amount of co-operation from CEC in its investigations, the history of production of documents after the public hearings had commenced is, to my mind, inconsistent with the concept of full co-operation and production of full documentation. An obvious location for paper files and other documentation kept by the Chief Executive at the time of the Tram project would be her office. The discovery of that material, when her successor was moving out of that office, suggests a superficial approach to the search for relevant material and the failure of CEC to devote adequate resources to implementing its commitment given to Scottish Ministers prior to the commencement of the Inquiry. In any event, it is apparent that the systems

for keeping and recording documents within CEC were inadequate as it appears that no one was aware of the existence of the records produced in November and December. Whether such deficiencies in record keeping extended beyond the records of the Tram project or continue to do so are beyond the scope of this Inquiry.

- 2.86** Difficulties also arose with the production of documents by Scottish Ministers. They failed to produce a memorandum from Ms Savage, Head of Programme Management at Transport Scotland, which had been sent to Mr Reeve in Transport Scotland and copied to Mr Morrissey in Transport Scotland as well as to Mr Davis in Cyril Sweett [[SWT0000056](#)] and a record of views expressed by Dundas & Wilson about the Infraco contract. The failure to produce these documents is considered in Chapter 3 (Involvement of the Scottish Ministers).
- 2.87** In a different context, delays to the progress of the Inquiry were incurred as a result of the actions of BB. The documents in question are the monthly progress reports made during the Tram project by BB to Bilfinger Group Management in Germany. The existence of such reports was disclosed on 5 December 2017 by Mr Foerder in his oral evidence. Having considered the matter it appeared to me that the content of monthly contemporaneous reports could be relevant to the issues to be considered by the Inquiry. Accordingly, I instructed the Solicitor to the Inquiry to request sight of monthly reports written between October 2007 and the date of completion of the Tram project. On 11 December 2017, the Deputy Solicitor to the Inquiry sent an email to BB's solicitors to that effect. Thereafter, correspondence continued between the Deputy Solicitor and Pinsent Masons, solicitors for BB, by way of updates on progress in producing the reports to the Inquiry. On 17 January 2018, Pinsent Masons wrote to the Inquiry, stating that the reports contained highly sensitive commercially confidential information and offering to provide the reports with that information redacted. I rejected that offer because it was not appropriate for a core participant or their solicitors to decide upon the nature and extent of any redaction. However, having regard to concerns about apparently commercially confidential information, I authorised the Deputy Solicitor to provide an undertaking to the effect that BB would be notified of any decision to make the material available to core participants and would be given time to apply for a restriction order under section 19 of the Act. At the beginning of February I was concerned that the voluntary basis upon which requests had been made was causing undue delay, and I decided to formalise matters by issuing a notice under section 21 of the Act requiring BB to deliver the reports to the Inquiry on or before 12 February 2018. Such a notice was issued on 6 February 2018. The reports were delivered to the Inquiry on 12 February 2018 in compliance with the section 21 notice. On 1 March 2018, the Inquiry advised BB that it intended to upload the reports to the Inquiry's Haymarket database but would honour the agreement mentioned above. In accordance with that agreement an undertaking dated 6 March 2018 was given that the Inquiry would not disclose any report to any person other than members of the Inquiry team before 5.00 pm on 12 March 2018 or, if an application for a restriction order was received, before the expiry of 24 hours from the time when the Inquiry first advised BB solicitors of its determination of that application. On 12 March 2018, BB submitted an application under section 19(2)(b) of the Act. On 25 April 2018, apart from redaction of sensitive personal information specified in paragraph 3.3.9 of the application, I refused the application for redaction. BB petitioned the Court of Session seeking suspension of my decision and interdict against me, or anyone acting on my behalf, from publishing or disclosing in any way the alleged confidential information in the monthly reports. It also sought interim suspension and interim interdict. A two-day hearing ensued, resulting in an interlocutor dated 8 May 2018 refusing both interim suspension and interim interdict.

BB appealed against that decision to the Inner House of the Court of Session. After a one-day hearing the Inner House, by interlocutor dated 12 July 2018, refused BB's reclaiming motion. Following that decision, Pinsent Masons notified the Solicitor to the Inquiry that BB did not intend to seek leave to appeal to the United Kingdom Supreme Court. Accordingly, I instructed the Secretary to the Inquiry to release the monthly reports to core participants by uploading them to the Haymarket database.

- 2.88** During the court hearings I had been advised that senior counsel for BB had expressed concern on its behalf that the documents would be misinterpreted if they were released. Accordingly, when the documents were released to core participants they were requested to intimate to the Secretary to the Inquiry whether they wished to lead additional evidence and/or make further submissions to the Inquiry based upon the content of the reports. Three core participants responded. CEC advised that it did not wish to lead evidence or to make further submissions. SETE advised that it only wished to make further submissions, whereas BB intimated that it wished to make further submissions supported by two affidavits. On 30 August 2018, I issued a note for core participants that gave BB the opportunity of submitting such evidence about the reports as it considered appropriate, including, but not restricted to, an affidavit or affidavits. In fairness to all core participants, I afforded each of them a similar opportunity and required the production of any such written evidence no later than 1 October 2018, after which I would determine further procedure. On 9 October 2018, I issued a further note recording that Pinsent Masons had submitted a supplementary statement by Mr Gough dated 1 October 2018 and signed by him, and that Beltrami & Company Limited, solicitors, had issued a supplementary submission on behalf of SETE. I required any party wishing to make a supplementary submission arising from the monthly reports, the supplementary statement of Mr Gough and the supplementary submission on behalf of SETE to send a draft of that submission electronically to the Secretary to the Inquiry and to all other core participants no later than 22 October 2018. Thereafter, a further period was allowed until 5 November 2018 to enable core participants to finalise their submissions and to send them to the Secretary to the Inquiry and to all other core participants.
- 2.89** While I accept the entitlement of BB to seek a restriction order under section 19 of the Act and thereafter to seek suspension of my decision if it considered it to be adverse to its interests, a consequence of the assertion of its rights was to extend the period for closing submissions from 24 May 2018 until 5 November 2018.
- 2.90** Different issues arose in respect of documents submitted by DLA. In his written statement Mr Fitchie referred to a file note dated "9 April [2010]" [[DLA00006319](#)]. He stated that it "would have been prepared from my handwritten notes of the meeting" [[TR100000102_C](#), page 191, paragraph 7.320]. There were clearly errors in the typewritten note which appears to have been created on 23 February 2011. In an attempt to clarify matters the Solicitor to the Inquiry emailed Brodies, solicitors for DLA, on 21 December 2017, seeking the original file entry which formed the basis of the file note dated 9 April [2010] and also seeking documentary evidence to support paragraphs 7.517–7.536 of Mr Fitchie's statement. Although draft letters of response were prepared by Brodies they were not sent to the Solicitor to the Inquiry but their contents were addressed in the written submissions on behalf of DLA [[TR100000288_C](#)]. Brodies' search for the material requested by the Inquiry did not disclose the handwritten file note but did disclose other file notes that Brodies believed had been disclosed to the Inquiry. Subsequent searches of the material produced by it to the Inquiry revealed that its belief was mistaken, and it tendered the additional file notes at the stage of closing submissions [[DLA00006478](#); [DLA00006479](#); [DLA00006481](#)].

Presentation of evidence to the Inquiry

- 2.91** Counsel to the Inquiry considered that approximately 213 people who had been involved in the project might be able to provide relevant evidence. Statements were taken from all these witnesses and, once signed, these were made available to the core participants. In order to speed up the process of taking written evidence, some witnesses, who were considered to have a less significant role than others, were asked to complete written questionnaires instead of providing full statements.
- 2.92** A decision was taken by the Inquiry that it would not be necessary to take oral evidence from all the witnesses from whom written evidence had been taken. Counsel to the Inquiry selected those witnesses whose involvement in the project was likely to provide the greatest insight into the issues covered by the Inquiry's Terms of Reference. A total of 85 witnesses, including 2 experts, gave oral evidence over a period of 57 days, from Tuesday 5 September 2017 to Thursday 22 March 2018. Core participants were provided with a list of proposed witnesses and had access to all the witness statements in advance of the public hearings. They had the option of requesting the attendance of other witnesses but none did so, implying that they were content with the selection made by Counsel to the Inquiry.
- 2.93** The Inquiry's Terms of Reference required it to examine the consequences of the failure to deliver the project on time and on budget and to the extent projected. A call for evidence was issued on 12 May 2015, inviting members of the public to make contact with the Inquiry Team to share their experience of the Tram project. In the event, evidence was taken from 12 members of the public, or representative groups, in the form of written statements, and these were presented as written evidence to the Inquiry.
- 2.94** While the Inquiry might have benefited from more evidence from members of the public and representatives of businesses affected by the project to gain an understanding of the impact that the Tram project had had on them, it could not compel the production of such evidence when it was unaware of the individuals affected. The Inquiry endeavoured to encourage representatives of businesses to provide evidence to the Inquiry by contacting individuals and representative organisations inviting their participation, but they either declined to do so or failed to reply. In addition, a number of members of the public and representative groups raised issues that were clearly of particular concern to them: for example, whether the actions of CEC in relation to the Tram project had resulted in a breach of the UK's obligations to comply with the Aarhus Convention. While such matters are undoubtedly of genuine concern to those affected, I considered them to be of doubtful relevance to the Terms of Reference. I received two representations that were not within my Terms of Reference but which raised potential concerns for public safety. These related to the steps leading to and from Murrayfield tram stop and the maintenance of the tram vehicles themselves. Safety concerns about the tram vehicles are a matter for the Rail Inspectorate and the author of the letter expressing concerns about their maintenance had copied it to that body. As a core participant CEC had a copy of the representation expressing safety concerns about the steps at Murrayfield. In his evidence to the Inquiry, Mr Chandler explained that the design of the steps at the Murrayfield tram stop was the subject of numerous iterations of design and consultation with the police and fire brigade as well as a consultee group for blind and disabled people. It had also been approved by CEC [PHT00000020, pages 140–142]. Although the design and safety of these steps were not within my Terms of Reference, it was clear that as a core participant CEC was aware of the concerns and could take such action as it deemed necessary to address them.

- 2.95** The approach to gathering evidence recognised the inquisitorial role of the Inquiry rather than the adversarial approach in court proceedings. Core participants wishing to ask questions of a witness had to give prior notice of the points that they wished to raise and, wherever possible, Counsel to the Inquiry would deal with such issues in his examination of the witness, obviating the need for questioning by a representative of a core participant. Having said that, in certain circumstances a representative of a core participant was permitted to ask limited questions of a witness where that was considered to be the most expeditious way of obtaining evidence on the particular point. By adopting an inquisitorial approach it was possible to conclude the oral evidence sessions within a much shorter timescale than would otherwise have been possible.
- 2.96** At the conclusion of the evidence on 22 March 2018, I adjourned the hearing until 23 May 2018 to enable core participants to prepare, and exchange, drafts of their submissions with the other core participants before finalising the written submissions tendered to the Inquiry in advance of hearings on 23 and 24 May 2018. On these dates representatives of core participants wishing to address the Inquiry were permitted to do so within a timescale that was strictly limited. While I had hoped that the hearing on 24 May 2018 would conclude the evidential stage of the Inquiry it had to be extended to November 2018, as noted above, to enable the Inquiry to take into account the supplementary documents recovered and the additional statement and submissions tendered to the Inquiry on or before 5 November 2018.

Duration and cost of the Inquiry

- 2.97** I am aware that there has been media comment about the duration of the Inquiry. Its duration was determined by the various factors mentioned above. These include:
- the volume of material that I had to consider both in preparation for the public hearings and thereafter in light of the oral and written testimony of witnesses;
 - the need to procure the installation of a branch line on the SCOTS network and internal cabling within the Inquiry office at Waverley Gate;
 - the difficulties with IT during the first six months of the Inquiry;
 - the impact that resolving these difficulties had on the ability of the Inquiry Team to procure document management systems and make progress with its investigations;
 - difficulties in obtaining documents despite the use of statutory powers;
 - staffing issues, particularly the loss of solicitors due to promotion or to gain experience in other departments within SG, and the lead-in time required for the appointment of their successors and for the latter to familiarise themselves with the work of the Inquiry;
 - the illness of the Solicitor to the Inquiry, coupled with the inability of the Scottish Ministers to provide a replacement Solicitor to the Inquiry who had prior experience of the Inquiry, resulting in delay while the incumbent familiarised himself with the work of the Inquiry;
 - further enquiries undertaken following the conclusion of the public hearings; and
 - the need to issue warning letters to persons who might be subject to criticism, and consideration of responses to determine the need for adjustment of the terms of the Report.

2.98 The cost of the Inquiry reflected its duration and the capital costs associated with the installation of the branch line of the SCOTS network, the internal cabling within the Inquiry office and the separate systems required in the room for oral hearings, as well as the cost of the accommodation, staffing requirements and the cost of procuring a document management system. As was indicated above, all the costs were allocated as costs of the Inquiry although the additional cost of the Inquiry to the public purse would be significantly less if recognition was given to the fact that some costs would have been incurred in any event but allocated to a different budget.

Recommendations

Recommendation 1

2.99 Scottish Ministers should undertake a review of public inquiries to determine the most cost-effective method of avoiding delay in the establishment of an inquiry, including consideration of establishing a dedicated unit within the Scottish Courts and Tribunals Service and publishing regularly updated guidance for people involved in the establishment and progress of public inquiries.

Recommendation 2

2.100 In any event Scottish Ministers should not appoint as the sponsor of any public inquiry any department, agency or other government organisation where it, or any of its employees, has had any involvement in the project or other event giving rise to the establishment of the public inquiry.

Recommendation 3

2.101 The guidance mentioned in the first recommendation should include: advice concerning the circumstances in which civil servants in the inquiry team may properly transfer to posts, other than promoted posts, within other government departments or agencies; which positions within the administration of a public inquiry may be filled by the employment of agency staff; and whether longer-term contracts as temporary civil servants are more appropriate for particular positions that cannot be filled by permanent civil servants.

Recommendation 4

2.102 In reporting the cost of a public inquiry Scottish Ministers should report its net cost to the public purse, after discounting expenditure already incurred on accommodation, staff and other resources, as well as the total cost appearing in the accounts of the sponsor department.

Chapter 3

Involvement of the Scottish Ministers

- 3.1** From the narrative in the introductory section in Chapter 1 (Introduction and Overview) it will be apparent that the Scottish Ministers were involved from the outset in the consideration of the construction of a tram network in Edinburgh. It is convenient to consider their involvement before considering the procurement strategy and the negotiation, conclusion and implementation of the various contracts intended to deliver the Tram project. At an early stage, development funding was provided to City of Edinburgh Council ("CEC") to undertake initial feasibility studies. If there was a sound financial basis for the construction of a tram network it was intended that a grant from the Scottish Ministers would make up the majority of the funds required to construct its initial phases. Initially, Government involvement was through officials in the Scottish Executive as well as the Scottish Ministers themselves. On its creation on 1 January 2006, Transport Scotland assumed the functions previously performed by officials in the Scottish Executive in relation to the Edinburgh Tram project (the "project"). The change from management by officials in the Scottish Executive to the involvement of officials in Transport Scotland did not change the role that was played by Scottish Ministers. However, following the election in 2007 of the Scottish National Party ("SNP") minority Government, which was committed to abandoning the project, significant changes were made to the involvement of Transport Scotland. Its new role after 2007 continued until new governance arrangements were established following the Mar Hall mediation in 2011, which resulted in an increase in its involvement once again. This continued until the project was completed.
- 3.2** Transport Scotland is an executive agency of the Scottish Government and, as such, not a body with a distinct legal identity separate from the Scottish Ministers. Despite this, for the period after it had been established it is convenient to refer to Transport Scotland when considering its role and the role of Scottish Ministers.

Evidence provided by Transport Scotland to the Inquiry

- 3.3** Before considering the issues that arise in relation to the role of the Scottish Ministers, it is relevant to note that it was apparent that the Inquiry had not been provided with all the relevant documents by officials in Transport Scotland. Initially, they provided documents in response to a request for all relevant material. When the material was provided, an assurance was given that a search had been carried out and the material that had been made available was all that there was: see letter from Mr Rees to Ms Martin, dated 11 February 2015 [[TRS00031286](#)]; letter from Mr Rees to Mr Murdoch, dated 17 January 2017 [[TRS00031284](#), page 0002, paragraph 3]; letter from Mr Rees to Mr McNicoll, dated 8 August 2017 [[TRS00031285](#)]; and letter from Mr Rees to Mr Murdoch, dated 14 August 2017 [[TRS00031283](#)]. During the course of the Inquiry, from time to time requests were made to officials in Transport Scotland for specific documents or categories of documents. Whether or not additional documents were furnished, the assurance was repeated that all available information had been provided.
- 3.4** I acknowledge that Officials in Transport Scotland produced in excess of 17,600 documents to the Inquiry but despite the assurances mentioned in paragraph 3.3 they did not disclose to the Inquiry documents that, at the very least, must have been in its possession at some time and in some cases documents that it did in fact have. For example, Nadia Savage had been seconded to Transport Scotland from Cyril

Sweett, Construction Consultants, as Head of Programme Management. An internal memorandum from her dated 21 June 2007 [SWT00000056] was relevant in that it recorded doubts that the figure for estimated project costs supplied by **tie** Limited ("**tie**") to Audit Scotland was realistic. This document had apparently been circulated within Transport Scotland, having been sent to Mr Reeve and copied to Mr Morrissey, both of whom were officials there, and had also been copied to Mr Davis in Cyril Sweett. It was very relevant to the subject-matter of the Inquiry and it is notable that it was not among the material supplied to the Inquiry by Transport Scotland. Mr Reeve could offer no explanation for this [PHT00000012, page 122]. Faced with this difficulty, he suggested that the document might have originated in the offices of Cyril Sweett and that perhaps it had not been sent [ibid, pages 126–128]. Although Nadia Savage was an employee of Cyril Sweett, she was on secondment to Transport Scotland as Head of Programme Management and wrote the memorandum in that capacity, as is apparent from the last page. Moreover, the first page contains the logo of Transport Scotland. The Inquiry recovered the document from Cyril Sweett, which clearly indicates that it was sent to Mr Davis. It is inconceivable that it was not sent simultaneously to the main recipient (Mr Reeve) or to the other named official in Transport Scotland (Mr Morrissey). I have no hesitation in rejecting Mr Reeve's attempted explanation of this matter as incredible. The impression that I had was that he wished to distance himself from the email that had been sent to him, about which he had failed to take any action.

- 3.5** A further critical example concerns the advice received from Dundas & Wilson ("D&W") in 2009 regarding the infrastructure contract ("Infraco contract"). D&W has subsequently merged with other firms and is now known as CMS Cameron McKenna Nabarro Olswang LLP. No record of its advice was included in the information provided to the Inquiry by Transport Scotland. The Inquiry became aware of the existence of that advice following an interview with Mr Ramsay, a retired official in Transport Scotland who had been involved in the project as a member of the Transport Scotland team. Mr Ramsay's recollection was that the advice had expressed the view that the contract was not fit for purpose. It appears that that was probably his interpretation of the advice, which included adverse comments about the change mechanism in the contract encouraging disputes rather than a verbatim account of its content (see paragraph 3.65 below). The Inquiry asked Transport Scotland for a copy of the advice but it was unable to locate it. The solicitor for Transport Scotland offered to contact CMS Cameron McKenna, the successors to D&W, to ascertain whether it had a copy of the advice. The copy of the letter in the possession of the Inquiry [TRS00031282] was recovered in this way.
- 3.6** That relevant documentation was not provided initially is very disappointing. It is not possible to say that there has been deliberate concealment of documents or even a lack of willingness to search for them. The Inquiry has had experience of the software systems used by the Scottish Government to store documents in electronic format, and it is clear that in those systems there is scope for documents to be lost even where everyone involved is trying their best. This does, however, raise the concern that if documents cannot be found now, they might not have been readily available during the implementation of the project. In that situation, knowledge and information would have been lost and decision-making would have been impaired. A better way of storing and retrieving documents and the data that they contain is required.

Scottish Ministers' involvement pre-2007

3.7 Before considering the changes in 2007 to the involvement of the Scottish Ministers or of officials in Transport Scotland on their behalf, it is useful to consider the scope of their involvement at the earlier stage. At that time they had involvement in the project in a number of respects:

- as funders;
- in considering the various drafts of the business cases;
- in a supporting or facilitative role; and
- through participation in the Tram Project Board ("TPB").

These can be considered in turn.

Funding

3.8 In response to the Integrated Transport Initiative developed by CEC in March 2003, the Scottish Ministers confirmed the availability of funding up to the level of the £375 million sought for the project. In a statement in March 2003, the Minister for Enterprise Transport and Lifelong Learning ("Minister for Transport"), Mr Gray MSP, said that Scottish Ministers were able to guarantee the availability of the £375 million worth of funding that the preliminary business case indicated would be required [CECo2083547, page 0004, paragraph 3.13]. The same commitment is recorded in the Scottish Executive publication 'Building Better Transport' in March 2003 [CECo2083844].

3.9 As it was apparent that it would take some time to bring the project to fruition and it was known that construction costs were rising, there was pressure from CEC and/or **tie** to have this sum increased by reference to an inflation index to meet those costs. Initially there was no undertaking from the Scottish Ministers to do so [PHT00000013, page 129]. Mr Sharp, the Head of Major Projects at Transport Scotland, noted that no indexation assumptions had been made on any public transport projects [PHT00000015, pages 42–43]. The Preliminary Financial Case of September 2004 [CECo0630633] said that affordability was assessed on the basis that there would be no indexation [PHT00000013, pages 130–135] and the Interim Outline Business Case of May 2005 [CECo1875336, Part 1] also assumed that the grant was capped at £375 million. In January 2006, however, a Report to CEC [CECo2083547, page 0004, paragraph 3.14] noted that the Scottish Ministers had indicated a willingness "to consider" indexation of the £375 million, provided that a substantial capital contribution was made by CEC. Thereafter, a note of advice to the Minister for Transport, dated February 2006 [TRS00002128], recommended indexation but said that it had been made clear to CEC and **tie** that the Government contribution was capped. Shortly after that, in February 2006, the Scottish Ministers indicated that its contribution would be indexed in line with general construction cost inflation.

3.10 While the indexation meant that a larger sum would be paid, it did not increase its value in real terms. There was a separate issue as to whether there would be scope for CEC to seek any additional funds from Ministers if required. In this regard, a consistent line was taken by the Scottish Ministers, from the announcement of the grant in 2003 until 2007, that no additional funds would be provided.

3.11 The limit on funding was apparent from the advice to the Minister for Transport from Mr Sharp dated 3 February 2006, which had recommended that the Scottish Ministers agree to indexation of their contribution [[ibid](#)], but noted in paragraph 11

“We have made it clear to CEC and Tie that the Executive commitment is capped and any future shortfall would be for CEC and Tie to deal with.”

3.12 This advice was in advance of the appearance on 7 February 2006 of the Minister for Transport (Mr Scott MSP) before the Edinburgh Tram (Line One) Bill Committee of the Scottish Parliament. The record of the proceedings of that committee is also of assistance in determining what information about grant funding was in the public domain [[CEC02083972](#)]. The evidence given by the Minister and Mr Sharp clearly indicates that the proposed grant was capped at £375 million plus indexation, resulting in a grant of between £450 million and £500 million, depending on the rate of construction cost inflation, and that release of funds was dependent on the production of a robust and positive business case [[ibid](#), pages 0016–0017, columns 1772–1773]. The Convener of the Committee summarised the position in relation to grant funding as follows:

“The minister made it abundantly clear that the money available is an index-linked and capped £375 million.” [[ibid](#), page 21, column 1781.]

3.13 Notes prepared by KPMG of a meeting with officials in Transport Scotland on 6 March 2006 [[TRS00002205](#)] noted that all costs over and above the Scottish Ministers’ budget would have to be funded by CEC. A paper dated December 2006 prepared by Mr Sharp and presented to the Transport Scotland Investment Decision Making Board [[TRS00003241](#)] noted that “Ministers are committed to a capped contribution of £375 million in 2003 prices towards phase 1a”. An email dated 30 January 2007 from Mr Sharp to Mr Ramsay, Ms Davis and Mr Spence [[TRS00003584](#)], colleagues in Transport Scotland, recorded that Ministers had said repeatedly that there would not be any funding beyond the £375 million indexed. The position disclosed by these documents – that the grant was capped – was reflected by CEC and **tie** in documents prepared by them. So, the Preliminary Financial Business Case in September 2004 [[CEC00630633](#)] noted that there would be no monies beyond the £375 million then committed. In May 2005, the Interim Outline Business Case [[CEC01875336](#), Part 1] assumed that the grant was capped at £375 million.

3.14 Mr Ramsay, the Project Manager of the project within Transport Scotland, explained that Ministers had made it quite clear what the maximum funding would be. He said also, however, that he thought that the previous administration had given rise to some dubiety that he thought was intentional [[PHT00000012](#), page 198]. He said that, as far as Transport Scotland was concerned, it was always the case that all costs over the Scottish Ministers’ budget would be funded by CEC [[TRS00002205](#) and [PHT00000012](#), page 198] but that there was an element of ambiguity about high-level discussions with Ministers relating to the probability of top-up funding. However, no commitment had been given to that effect.

3.15 On the other hand, in his witness statement Mr Sharp stated that, as at summer 2007, there was no cap on the grant funds [[TR100000085_C](#), page 0032, paragraph 72]. He pointed to the fact that such an approach would not have been consistent with other projects and considered that discussions on the issue of who would bear the overruns were intended to resume after the Scottish Parliament election in May 2007. Despite this, when asked about the existence or otherwise of a cap, in his oral evidence Mr Sharp said that the Scottish Ministers had made it clear to CEC that it should not expect any more funding [[PHT00000015](#), page 43]. With reference

to his advice to Ministers concerning indexation [[TRSo0002128](#)], he said that the Executive's position was that CEC was not entitled to any more money and both the Minister for Finance and the Minister for Transport were clear that that was the message that had to be conveyed to CEC. Mr Sharp said that he had been clear with CEC that there would not be further discussions ahead of the Scottish Parliament election and that an increase would be inconsistent with the coalition partnership agreement [[PHTo0000015](#), pages 53 and 60]. The result was that the Ministers' position was, he said, fixed until the election.

3.16 Mr Sharp did say that both the Ministers and CEC understood that that was a position that was "not necessarily sustainable in the long term" [[ibid](#), page 45]. However, as noted above, in an email to colleagues dated 30 January 2007, he expressed the matter in quite direct terms by saying:

"Transport Scotland and Scottish Ministers have therefore given specific guidance about additional capital funding which may be forthcoming – there won't be any." [[TRSo0003584](#)]

3.17 He noted there that Ministers had repeatedly said that there would not be funding beyond the £375 million indexed. He agreed that this removed ambiguity [[PHTo0000015](#), page 50]. His email noted that the position might change but he accepted that that was, of course, always the case [[ibid](#), page 52]. That is not the same as saying that there was even an understanding that additional funds might be provided. Even taking Mr Sharp's own evidence in isolation but as a whole, I reject the contention in his statement that there was no cap on the grant funds prior to 2007. The evidence to the contrary, including the contemporaneous records and his oral evidence, is overwhelming. It is apparent that the proposed funding of £375 million with indexation was capped long before the election in 2007 and that both CEC and **tie** were aware of that.

3.18 Dr Reed, the Chief Executive designate of Transport Scotland from 2005 and thereafter its Chief Executive between its formation in 2006 and his retirement in 2009, was of the view that the position prior to July 2007 was that if there had been an overspend there would have been a negotiation as to how it would be funded [[PHTo0000013](#), pages 153–154]. Clearly, this falls short of there having been any commitment to provide additional funds but, in my view, it is possible to go further than there merely being no commitment to provide more funding. The contemporaneous documents and announcements make it clear that there was an intention not to provide additional funds. If the suggestion that there would have been a negotiation is intended to give the impression that there was an apparent willingness to consider making available additional grant monies, I reject it as being inconsistent with the other evidence. It is, of course, the case that it would have been open to Scottish Ministers at a later stage to change their minds and to provide further funds despite having said that they would not. That was always the position, and it remained so even after the ministerial announcement in 2007. On questioning during the oral hearings, Dr Reed ultimately accepted that the funding from Ministers was capped at the same amount before and after 2007 and that the Scottish Parliament decided in June 2007 that the project was to be carried out within the scope of the funding already agreed by the previous administration [[ibid](#), pages 142–143]. Having regard to the various documents to which he was referred, such a concession could not have been withheld [[ibid](#), pages 128–141; [CECo2083844](#); [CECo1875336](#), Part 1; [TRSo0002128](#); [TRSo0002205](#); [TRSo0003241](#); [TRSo0003584](#)]. His subsequent strained interpretation of the proceedings of the Scottish Parliament in June 2007 as supporting his contention that there was ambiguity about the amount

of grant funding that was available [[PHT00000013](#), pages 143–149] does not bear scrutiny. It is clear from the terms of the amendment in the name of Ms Alexander MSP, which was agreed to by the Parliament, that the desire was for Scottish Ministers to proceed with the project “within the budget limit set by the previous administration” and that it was “the responsibility of Transport Initiatives Edinburgh and the City of Edinburgh Council to meet the balance of the funding costs” [[SCP00000030](#), page 0013, column 1140]. In effect, the decision of the Parliament was in favour of the status quo that had existed for several years. I will deal with the proceedings in the Scottish Parliament in more detail in a later section of this chapter.

- 3.19** Mr Bissett, of **tie**, said that there was “jockeying for position” by officials in Transport Scotland and CEC in relation to the issue of further funding [[PHT00000028](#), pages 18–19]. Mr Bissett’s recollection was that, at that time, discussions between CEC and Transport Scotland officials were concerned with whether or not there would be indexation of the grant of £375 million. However, a document dated 3 February 2006, which contained advice to Scottish Ministers, stated expressly that it had been made clear to CEC that the Executive commitment was capped and that any shortfall would be for CEC and **tie** to deal with [[TRS00002128](#)]. While Mr Bissett said he had not heard such a statement, the document indicated that Transport Scotland was quite clear that it had been made to CEC. As with the evidence of Dr Reed, to the extent that Mr Bissett’s evidence is intended to suggest that, prior to 2007, the grant was not capped at £375 million plus indexation, I reject that evidence. The financial commitment of the Scottish Ministers to the project before and after 2007 was identical.
- 3.20** In paragraph 21 at page 0061 of the submission for the Scottish Ministers [[TR100000291_C](#)] it is suggested that, prior to the vote in the Scottish Parliament in June 2007 and Mr Swinney’s subsequent announcement that CEC would be given £500 million and “not a penny more” [*ibid.*, page 0050, paragraph 6], there had been a degree of ambiguity as to the nature and extent of such funding. For the reasons outlined above, I reject that submission as being inconsistent with the evidence.
- 3.21** The final issue to consider in relation to the funding position at this time is the conditions under which monies would be made available and the degree of oversight that would be maintained. As at summer 2007, of the total grant monies that the Scottish Ministers had said would be made available, a formal offer of grant had been made on 19 March 2007 in respect of £60 million [[TRS00004113](#)]. In terms of the offer, this money was to be used for utilities diversions, advance works and continuing development and procurement for phase 1a. The conditions attached to the offer [[TRS00004112](#)] had the following principal features:
- the monies were to be used only for continuing the development and procurement of phase 1a of the Edinburgh Tram Network and for advance works, land acquisition and utilities diversions;
 - CEC was required to produce an audit certificate prepared by its Head of Internal Audit, showing actual expenditure met from the grant;
 - if considered necessary, the Scottish Ministers would be granted access to CEC’s accounts and records to verify the proper use of the grant;
 - the project governance procedures could be amended from those agreed at the TPB meeting on 25 September 2006 only with the agreement of the Scottish Ministers;
 - CEC was to ensure that action plans for implementation of any recommendations from project reviews were agreed and implemented unless otherwise agreed by the Scottish Ministers;

- there were a number of "project hold points" at which CEC and the Scottish Ministers would "review whether the scheme is continuing to meet its objectives and will determine whether to continue to support scheme development and implementation" [ibid, page 0005, paragraph 18]. One such point was on receipt of best and final offers from the infrastructure and tram vehicle suppliers. The review at this stage would consider the affordability of the scheme in light of available funds. The next review point was before conclusion of negotiations with the preferred bidders for the infrastructure and tram vehicle supply contracts. At this stage, it would be necessary to have in place a signed agreement between the Ministers and CEC, covering all aspects of project funding and risk allocation. The final hold point was completion of the Final Business Case ("FBC").
- CEC had to ensure that robust, transparent, externally verifiable project controls for the project were in place.
- CEC had to comply with the project monitoring and control procedures of Transport Scotland.

Considering drafts of the business cases

- 3.22** As part of the process for deciding whether to make the grant necessary for the project to proceed, the Scottish Ministers considered the business cases for the project. In their document entitled, 'Building Better Transport' in March 2003 [CEC02083844] they indicated that provision of funding would depend on CEC's providing a "robust final business case" and the Scottish Ministers took a keen interest in the business cases from the outset. It was intended that the business cases should contain details of the justification for the project and, among other things, a consideration of the Benefit to Cost Ratio ("BCR"). This was an important factor in any decision of the Scottish Ministers to make funds available to a project.
- 3.23** The involvement of Transport Scotland extended both to specifying the matters that would have to be considered in a business case [TRS00002378] and commenting on its contents. When reviewing the various iterations of the business case it used both internal resources of various disciplines and external consultants. For example, at the stage of examining the draft FBC prepared in December 2006, it used its internal resources, including economists, to examine these matters, and also engaged KPMG and Cyrill Sweett as consultants to assist [Mr Reeve PHT00000012, page 100].
- 3.24** In March 2007, Transport Scotland provided comments on the draft FBC [TRS00004145] and in April 2007 CEC and tie provided Transport Scotland with a combined response to its comments on the draft FBC, which identified the steps that were to be taken to address the various issues that had been raised [TRS00004273; TRS00004274; TRS00004275; TRS00004276]. Mr Reeve accepted that a substantial amount of work had been carried out by and on behalf of Transport Scotland [PHT00000012, pages 101 and 104] and Mr Sharp considered that it had carried out a very thorough review [PHT00000015, page 81]. Despite this extensive involvement, Mr Ramsay was concerned that the TPB had not adequately responded to the concerns and scepticism voiced by Transport Scotland [PHT00000012, page 178]. He considered that Transport Scotland had never fully forced the issue.
- 3.25** As noted above, at that time there was no commitment to provide funding for cost overruns and, indeed, there had been no formal offer of a grant that applied indexation to the sum that was initially announced. On that basis, it could be said that all the risk lay with CEC and that Transport Scotland need not concern itself with the final outturn costs. Despite this, there was good reason for the active role

that it maintained in scrutinising and suggesting development of the FBC. Although the development of the trams was the project of CEC, the Scottish Ministers would provide the majority of the funding – at least for phase 1a. With the largest financial stake, it was natural that they would want to consider the benefits that might arise, the governance mechanisms, the procurement strategy and similar issues. In addition, the decision to provide the grant was dependent on there being a BCR greater than 1 [PHT00000013, page 135]. In order to be sure of this, Transport Scotland would need to examine, with some care, the claimed benefits [PHT00000012, page 184; PHT00000013, page 165]. It would also require to be satisfied as to how much it would cost. In the absence of a thorough examination of the business case, it would not be able to satisfy itself on either of these matters. Initially, Dr Reed sought to claim that, in relation to the draft FBC, Transport Scotland simply took reassurance from CEC that the assumptions were correct. Only when pressed did he admit that it had been examined in detail [ibid, page 167]. Initially, he also resisted the suggestion that that was because Transport Scotland needed to be sure that this was an appropriate project into which to invest £500 million, but he came to acknowledge that, too [ibid, page 168]. His lack of candour – even on a matter such as this – is remarkable. It appears to me to link to the purported justifications for the change of role of Transport Scotland that was shortly to follow.

- 3.26 The conditions for the grant referred to in paragraph 3.21 above indicated the intention of the Scottish Ministers, as at March 2007, to continue to maintain an interest in the business cases. In their submissions to the Inquiry, the Scottish Ministers note that they were not the only party to require the business cases. That is entirely true but does not detract from the reviews that they carried out and the apparent and appropriate importance that they attached to the business cases at this stage of the project.

Supporting/facilitating

- 3.27 The evidence to the Inquiry demonstrated that Transport Scotland had provided further assistance in addition to provision of funds [Mr McLaughlin PHT00000011, page 153]. The Audit Scotland report carried out in 2007, which will be considered in more detail in Chapter 23 (OGC and Audit Scotland), noted that Transport Scotland took a close interest in the progress and cost of the project. This role does not appear ever to have been clearly defined but, as noted in the submissions for the Scottish Ministers, it is apparent from the use of terms in relation to their role, such as “partner”, “family”, “promoting” or “joint working” [TR100000291_C, page 0047]. Dr Reed described it as a partnership between the Scottish Ministers and CEC, on the basis that staff from the Executive had an informal role and had been closely involved in bringing the project forward and taking it through the parliamentary stages [PHT00000013, pages 124–125]. This was presumably carried out because it was considered to be of benefit to Scottish Ministers as well as to CEC/tie. This may at first appear a trite observation, but it is relevant to keep it in mind when reviewing the changes that were made in June 2007.

Participating in Tram Project Board

3.28 Until June 2007, Mr Reeve was nominated by Transport Scotland to sit on the TPB as its representative. If he was not available Mr Sharp would attend in his place [Mr Reeve [TR10000067_C](#), page 0008, paragraph 27]. Mr Reeve described his role there as follows:

"I had the portfolio of rail projects and the Edinburgh Tram Project was one of them. My function on the Tram Project Board was to represent the interests of Transport Scotland as part of the Scottish Government. I was able to take decisions on behalf of the Scottish Government where I was properly empowered to do so or report to Ministers where necessary. My role also was as a member of the board to offer advice on the basis of my experience of major projects elsewhere." [libid](#), page 0018, paragraph 61.]

3.29 Mr Reeve accepted that this role would include expressing opinions with a view to influencing the decisions to be taken by the TPB. He said that he took decisions at the TPB on behalf of Transport Scotland and that he provided a conduit through which information would be passed between the Board and Transport Scotland.

Changes in 2007

3.30 The result of the Scottish Parliament election in May 2007 was that the SNP formed a minority Government. The manifesto on which the party had contested the election included a commitment not to proceed with the project if it should be elected. The outcome of the election naturally, therefore, gave rise to uncertainty as to whether the project would proceed. On 4 June 2007, Mr Swinney, then the Deputy First Minister, requested the Auditor General for Scotland "to carry out a high-level review of the arrangements in place for estimating the costs and managing the Edinburgh trams and Edinburgh Airport Rail Link (EARL) projects" [[CEC00785541](#), page 0004, paragraph 1]. Mr Swinney said that he did so in order to get a dispassionate view on the condition of the project [[TR100000149_C](#), pages 0025–0026, paragraph 72]. Transport Scotland has no record of any letter on behalf of Mr Swinney confirming the scope or purpose of the review. The report [[CEC00785541](#)] was provided a little over two weeks later, on 20 June 2007.

3.31 No clear justification was given for seeking the review of the project from Audit Scotland when such reviews might normally be carried out by Transport Scotland or its predecessor organisation in the Scottish Development Department on behalf of Scottish Ministers. It would be the body presumed to have relevant experience. The project was not a Transport Scotland one, so there was no obvious concern as to lack of impartiality. Witnesses from Transport Scotland were not aware of any other occasion on which a Minister had made such a request of Audit Scotland in relation to a project at this stage [Mr McLaughlin [PHT00000011](#), page 156]. Both Dr Reed and Mr Sharp were of the view that Transport Scotland would have been better placed than Audit Scotland to give an in-depth report on the project at that time [[PHT00000013](#), page 123; [PHT00000015](#), page 113]. Transport Scotland's experience was of heavy rail projects, but that was to be expected as this was the first ever light rail project in Scotland. In answer to my questions, Mr McLaughlin said that if one wanted to look within Government departments for expertise that might assist with light rail, one would look in the first instance for experience in heavy rail [[PHT00000011](#), page 158]. While Mr Swinney suggested that there might have been presentational difficulties in requesting that Transport Scotland undertake the review in June 2007, the consequence of his decision to invite Audit Scotland to do so was

that the expertise then available was not brought to bear. The decision is unfortunate for that reason. This is not just of academic interest. Transport Scotland had been involved in the project for years and had a degree of accumulated knowledge. As noted above, Audit Scotland had had just over two weeks to prepare its report.

3.32 Despite the above, it is not clear to me that, as at summer 2007, had Transport Scotland been instructed to report on the project, it would have been able to identify the particular problems that were later to cause so much difficulty. Nonetheless, very considerable weight appears to have been attached to the Audit Scotland report by some MSPs, councillors, **tie** officials and Transport Scotland officials and it was seen as giving the management of the project a "clean bill of health" [**SCP00000030**, page 0020, column 1154]. That it was construed in this way is surprising. It should have been apparent to all concerned that there had been just weeks to consider the project and that the remit had been fairly narrow.

3.33 By way of illustration of the importance attached to it, Mr McLaughlin, Director of Major Transport Infrastructure Projects at Transport Scotland between March 2007 and March 2015, who did not have any formal role in relation to the project until 2010, said:

"If Audit Scotland had crawled all over the project and they said thought [sic] it was robust and had a good chance of delivering a successful project, why would Transport Scotland have thought differently at the time?" [**TRI00000061_C**, page 0012, paragraph 28.]

In the public hearing when he was asked about the above comment he explained that it related to governance and management structures, rather than suggesting that the Auditor General had undertaken a wholesale review of the project [**PHT00000011**, page 210]. However, in his written statement he observed that the Auditor General had said that estimates in the project had been subjected to robust testing. The use of the phrase "crawled all over" suggests a detailed scrutiny that was not possible within the short timescale available and without the detailed knowledge of the project that had been gained by Transport Scotland as a result of the involvement of its officials over several years (before and after the creation of Transport Scotland). A review of governance carried out in a period of days cannot supersede or supplant any requirement for detailed scrutiny of the project and monitoring implementation. The councillors who placed reliance on the report might be forgiven for not having had a detailed understanding of the background issues, but the approach of Mr McLaughlin, who would have had that understanding, is remarkable. The pretence that the project had been vetted and found to be sound might have contributed to the lack of appropriate examination of it at later stages and is considered in later chapters.

3.34 Once the report was obtained from Audit Scotland, the matter was brought to a head by a motion put before the Parliament by the Government on 27 June 2007. The debate and vote proceeded in the context of a motion before the Parliament, which was in the following terms:

"That the Parliament endorses the Government's transport priorities and notes that the Government party proposed during the election campaign not to proceed with the Edinburgh Trams and current EARL projects, but planned an additional crossing for the River Forth." [**SCP00000030**, page 0012, column 1137.]

3.35 The motion was amended and, as agreed to, read:

"That the Parliament notes that the Edinburgh Trams project and EARL were approved by the Parliament after detailed scrutiny; further notes the report of the Auditor General for Scotland on these projects and, in light thereof, (a) calls on the Scottish Government to proceed with the Edinburgh Trams project within the budget limit set by the previous administration, noting that it is the responsibility of Transport Initiatives Edinburgh and the City of Edinburgh Council to meet the balance of the funding costs and (b) further calls on the Scottish Government to continue to progress the EARL project by resolving the governance issues identified by the Auditor General before any binding financial commitment is made and to report back to the Parliament in September on the outcome of its discussions with the relevant parties." [ibid](#), page 0038, column 1189]

3.36 From the transcript of the parliamentary proceedings [[SCP00000030](#)] it appears that the debate lasted approximately two hours. During it, reference was made to the report from Audit Scotland. There was no reference to the content of the draft business case. Ms Boyack MSP noted that the FBC had yet to be produced [ibid](#), page 0017, column 1148]. This was in the context of resisting any suggestion that the project should be stopped until the FBC was available. That indicates that there had been no consideration of the sort of detailed matters contained in the FBC. During the debate, Mr McLetchie MSP noted that in response to publication of the Audit Scotland report, the Scottish Conservatives had said that "not a penny more of public funding should be committed by the Scottish Executive to the project" [ibid](#), page 0021, column 1155] and that it should be made clear that it was the responsibility of **tie** and CEC to bridge any funding gap. Mr Swinney noted that Mr McLetchie had said that the project should be delivered as people expected it to be delivered, and he posed the question whether it would be legitimate for **tie** or CEC to come back with a proposal that was scaled down from the one before the Parliament. Mr McLetchie responded that it would not. In his comments in closing the debate, Mr Swinney returned to this and said "[t]he danger with the project is that there is an unwillingness to deliver it as the people of Edinburgh expected it to be delivered when it was launched" [ibid](#), page 0032, column 1177]. The natural inference from this is that it was considered important that the whole of phase 1a of the project, at least, should be delivered with the grant money that the Scottish Ministers were providing.

3.37 Following the vote, in a point of order Mr Swinney noted the terms of a letter from the former First Minister, Donald Dewar MSP, that "except in certain circumstances, the Scottish Executive is not necessarily bound by resolutions or motions passed by the Scottish Parliament" [ibid](#), page 0039, column 1192]. He then went on to say:

"I confirm to Parliament that the Government will accept and implement the provisions in the resolution that has been agreed by Parliament in relation to the Edinburgh trams project"

and he welcomed the commitment that the project must be delivered within the budget limit set by the previous administration. Below I consider the significance of this further.

Actions of Transport Scotland/the Scottish Ministers following the vote

3.38 The final decision to make the changes in the role undertaken by Transport Scotland in the project following the vote was that of Mr Swinney. In order to consider the basis on which the decision was taken, it is useful to set out the chronology of events following the parliamentary vote:

2 July 2007: email sent on behalf of Mr Swinney [TRS00031280]

This indicated that he was looking for advice on how to take forward Parliament's view of the Edinburgh Airport Rail Link ("EARL") project. It asked for a description of the alternatives available in that regard and how the tram scheme would fit into the changed picture. The focus of this was plainly on the EARL project, in relation to which Parliament had determined that governance issues required to be addressed before any funding commitment was made.

6 July 2007: advice to the Cabinet Secretary for Finance and Sustainable Growth (Mr Swinney) from Dr Reed [TRS00004523], sent under cover of an email of 9 July 2007 [TRS00004522]

In relation to EARL, this noted that, following a press statement by Mr Swinney after the parliamentary debate, the working assumption was that the governance review that Mr Swinney had said would be undertaken would lead to the cancellation of that project. This suggested that the Minister might have predetermined the outcome of the review, and it was inconsistent with the decision of Parliament in relation to EARL. The Inquiry Terms of Reference are restricted to the project therefore I have not examined this further in so far as it related to EARL. It does, however, have some bearing on the justifications advanced by the Scottish Ministers for the change in the role of Transport Scotland, and I return to it in that context below.

3.39 Dr Reed's advice put forward five options for the cap that was to be imposed on the grant for the project. In relation to future governance, it said:

"Future Governance and the Role of Transport Scotland

"1 The Parliament's decision places the risk of any cost overruns on the Tram Scheme with the City of Edinburgh Council, and makes it clear that responsibility for managing and delivering the scheme rests with the promoter.

"2 To achieve this clarity of roles, and ensure that situations could not arise subsequently in the governance of the project which might generate further calls on central funding, I propose that Transport Scotland's future engagement with the Edinburgh Tram Project should be on the basis of revised grant conditions and once these conditions are in place, Transport Scotland staff should withdraw from active participation in the governance of this project." [TRS00004523, page 0008.]

11 July 2007: email sent on behalf of the Cabinet Secretary [TRS00004536]

This noted Mr Swinney's preference as to how the cap on the grant should be expressed, and stated that Transport Scotland should "scale back" its direct involvement. This email was forwarded on the same day by Mr Morrissey of Transport Scotland, with a note that it was necessary to define and agree what was meant by "scale back". Thereafter, meetings were held within Transport Scotland to consider what its involvement should be.

18 July 2007: email chain [TRS00004547] including an email of 17 July 2007 from Mr Sharp

This contained a report of a meeting of the TPB on 12 July 2007. It noted that the decision to provide £500 million and transfer the risk to CEC had produced “a very positive atmosphere” [ibid, page 0002]. However, it recorded that, within the TPB, Mr Mackay, Mr Stewart and Mr Renilson were all in favour of Mr Reeve’s continuing to be a member of the Board and for Transport Scotland to be actively involved in the project. It also noted that Mr Gallagher had said nothing on the issue but that it was known that he did not share that view. It noted that Mr Spence of Transport Scotland was “preparing a separate paper on what ‘scaling back our involvement’ means in practice” [ibid]. In response to Mr Sharp’s message, Dr Reed emailed, saying:

“I am getting very strong signals from the Cabinet Secretary that TS should not be on the project board – he reiterated this at the Portfolio Meeting on Tuesday morning. Of course we need to fulfil any obligations under the SPFM [Scottish Public Finance Manual], but we need to withdraw from active engagement in the delivery of this project and – crucially – in any decision-making processes that could compromise the new arrangements for allocation of financial risk for this project.” [ibid, page 0001.]

- 3.40** In response, Mr Reeve said that the advice from Mr Swinney was helpful but he recorded his concern about the risk of withdrawing from governance arrangements that Audit Scotland had found satisfactory. He was of the view that “[w]e must have a well recorded reason for making these changes”. He went as far as to pose the question of whether it was worth considering seeking a direction from the Cabinet Secretary that normal governance processes should not be followed in this instance. This would have been an extreme and highly unusual step. It is of note that Mr Swinney explained that there had been no request for a ministerial direction since the SNP first formed the Government in 2007 [PHT00000050, page 58]. It is apparent that, in suggesting it, Mr Reeve was aware of that fact. He described it as a “nuclear option”, but felt that it would provide clarity and cover. While no such direction was formally sought, the fact that it was considered is a significant matter. It suggests a concern on the part of Mr Reeve at what was being proposed and whether there would be adverse consequences.

20 July 2007: advice from Mr Spence, Deputy Head of Major Projects, Transport Scotland, to Dr Reed of Transport Scotland [TRS00004559]

This contains the first explanation as to what “scaled back” would mean in practice. It includes the following elements:

- standard grant conditions were to be used;
- Transport Scotland to give up its seat on the TPB.

- 3.41** It states that the requirements for approval by Transport Scotland of the project at nomination of preferred bidder and financial close “appear confused” and are “unnecessary”. Instead, it suggests there would be an agreement to release further funds in January 2008 and that the approval of Transport Scotland would be based on:

“[c]ompliance with standard grant conditions to date.

“[h]aving received a copy of the completed Final Business Case as endorsed by City of Edinburgh Council.

"[h]aving received confirmation that the project has successfully passed a standard OGC Gateway 3 Review.

"[o]ngoing information received via the standard TS reporting process and 4-weekly meetings with the City of Edinburgh Council." [ibid](#), page 0002.]

3.42 The advice concluded:

"The above arrangements detail an appropriate role for Transport Scotland in line with the wishes of the parliament [sic] whilst maintaining the appropriate controls expected/required in relation to the investment of public funds." [ibid](#), page 0004.]

3.43 Other sources shed further light on what was happening in July 2007. In an email exchange dated 1 December 2010 between him and Mr Middleton, then Chief Executive of Transport Scotland [[TRSo0011413](#)], Mr McLaughlin, said that his recollection of what had happened in 2007 was that:

"Ministers wanted to take what was described as a light touch. Malcolm [Reed] put a note up recommending approach to take to meet that expectation." [ibid](#), page 0001.]

3.44 In similar vein, Dr Reed said that "explicit expression" of the wish that Transport Scotland should withdraw from the project came from the Cabinet Secretary [[PHT00000013](#), page 164]. In July 2007, Mr Ramsay prepared a paper on governance. He acknowledged that, in doing so, he had had a "steer" from the Minister as to the extent of the involvement that he wished Transport Scotland to have [ibid](#), page 38]. He said that the process of determining what was to happen went on for some weeks following the Minister's initial declaration of what he wanted to see [ibid](#), page 46].

3.45 In relation to the comment made by Mr McLaughlin in his email of 1 December 2010, while Mr Swinney did not accept that he used the term "light touch" [[PHT00000050](#), page 34], he agreed that he would have set out his view of the role that he wanted to see Transport Scotland performing. When asked what that role was, he replied:

"I wanted Transport Scotland to monitor the effectiveness of the - - the effectiveness and appropriateness of the use of public finance in accordance with their responsibilities in that respect for the GBP500 million, and I wanted them to put in place a reporting arrangement that would enable them to do that, but I wanted the operational - - I wanted the leadership of the project to be clearly vested within the City of Edinburgh Council and I wanted the operational delivery of the project to be clearly the responsibility of the City Council, who had decided it should be undertaken by tie." [ibid](#)]

3.46 The chronology reveals two key matters: the first is the striking fact that a decision to "scale back" the involvement of Transport Scotland was taken and then, only thereafter, was there consideration of what this meant in practice, and the second is that that decision was taken by Mr Swinney. When this was put to him, Mr Swinney did not accept the first of these. He said that he wanted Transport Scotland "to establish an approach to the governance of the project which enabled them to fulfil my expectations" [ibid](#), page 37]. It does not appear, however, that those expectations or that strategy were articulated prior to the decision to scale back being taken. He elaborated his expectations as being:

"that the City of Edinburgh Council should be leading the project, and they were responsible for delivery, and we were principal funders of that project, with the appropriate protections through the requirements of the Scottish Public Finance Manual." [ibid](#)]

- 3.47** He later accepted that the terms of the email of 17 July 2007 showed that "discussions are still ongoing within Transport Scotland on that question [of what is meant by scaling back]" [\[ibid, page 51\]](#). The following exchange then took place:
- "Q. So we have got the decision to scale back, but no clear understanding of what that is actually going to involve?"
- "A. That is under consideration."
- 3.48** This recognises that the decision to act was made prior to considering what was involved. It meant that the Cabinet Secretary was giving his "strong signals" that Transport Scotland should not be involved at a time when there was no clear picture as to what its role would be. If Mr Swinney and Transport Scotland did not know precisely what was involved in scaling back, they could not be in a position to know what effects that scaling back would have. I find it a matter of concern that a decision as important as this was taken in this manner. The clear picture is of a decision being taken to suit the Minister's political wishes, with the detail of it and the justification for it being left to be worked out later.
- 3.49** The role of Transport Scotland was modified in accordance with an email and attachment from Mr Spence dated 20 July 2007 [\[TRS00004558; TRS00004559\]](#). The four principal elements of the diminution in the role of Transport Scotland were:
- there was no longer a partnership arrangement in which Transport Scotland provided a supportive or facilitating role;
 - Transport Scotland withdrew its nominee from the TPB;
 - the conditions attached to the grant were varied;
 - the basis on which a decision would be taken to make available the remaining grant was changed.
- 3.50** The first aspect was ill defined, and no clear action was taken in respect of it. In relation to the second, the effect of taking the Transport Scotland nominee from the TPB restricted the flow of information that had previously existed. Mr Jeffrey was of the view that Transport Scotland should have had a seat on the TPB and that, had that been the position, it would have resolved any concern about the briefing of Transport Scotland [\[PHT00000032, pages 10–11\]](#). He also considered that, throughout the course of the contract, it would have been of assistance to have had a party outside it who could engage in the discussions [\[ibid, pages 11–12\]](#).
- 3.51** In relation to the third change, in 30 August 2007, CEC accepted the terms of a letter from Transport Scotland dated 22 August 2007 [\[TRS00004780\]](#), varying the March grant conditions. That letter stated that it sought to "vary the offer of grant to City of Edinburgh Council contained in our letter to you of 19 March 2007 following the position reached in Parliament on Wednesday, 27 June 2007" [\[ibid, page 0001\]](#). Although there was a change to the conditions of the grant, it remained the position that the grant was solely for £60 million and the use that was to be made of it did not change. In view of the evidence seeking to justify the change (which is considered below), it is relevant to note that this did not make available the entire grant that had been earmarked for the project – the initial sum of £375 million, increased in order to reflect inflation. For present purposes, the most important elements of the changes in conditions are:
- the veto on changes to governance was removed and replaced with an obligation on CEC to "ensure that appropriate project governance arrangements are in place for the project and enforced accordingly" [\[ibid, page 0002\]](#);

- the requirement to implement recommendations from reviews was deleted;
- all the "project hold points" were removed;
- the reporting requirements were reduced.

3.52 The formal offer to pay the grant up to a limit of £500 million was made five months later, in a letter of 17 January 2008, and was accepted by CEC on 24 January 2008 [[CEC00021548](#)]. Clearly, this was after the date on which CEC had approved the FBC. Despite this, the letter included the following conditions precedent for payment of the grant:

"[Scottish Ministers be provided with] [e]vidence that the Council has approved a Final Business Case for the Edinburgh Tram Network containing

"(a) an affordability assessment for Phase 1a (as defined in Clause 3.2.1 of Schedule 1) within a maximum capital cost of £545,000,000 (five hundred and forty five million pounds);

"(b) a Benefits Costs Ratio greater than 1; and

"(c) no projection of a requirement for an ongoing subsidy for the Edinburgh Tram Network during the operational phase.

"3.2.2 Evidence that an OGC Gateway Review has been completed and that all recommendations have been implemented and in so far as such recommendations relate to future activities robust arrangements have been made to implement such recommendations." [[ibid](#), page 0003.]

3.53 The grant letter also refers to conditions contained within Schedule 1 [[CEC00021547](#)], which included the following:

- the Council was to carry out the project with all due diligence;
- the grant was to be paid in instalments;
- the Scottish Ministers had to be satisfied that the grant would be used for the purposes of the project.

3.54 The conditions clearly mirror the criteria expressed by Mr Spence in his email of 20 July 2007 [[TRS00004558](#)]. When taken together with the change to conditions made in August, it meant that there were no "hold points" and there would not be a review by Transport Scotland of the business case. In an email dated 15 October 2007 [[TRS00004991](#)], Lorna Davis, the Assistant Project Manager in Transport Scotland dealing with the project, had said that a light review would be required inter alia to show that the scheme remained affordable and demonstrated a BCR in excess of 1. As noted above, a BCR exceeding 1 would normally be a requirement for payment of grant from the Scottish Ministers. The expression of concern by Ms Davies was disregarded. In their submissions to the Inquiry, the Scottish Ministers described what was done in relation to the FBC as a "light review" to check the conditions precedent [[TR100000291_C](#), page 0013, paragraph 24], which does not accurately reflect the position. In fact, there was no provision for any review by the Scottish Ministers and the grant was to be made available as long as CEC was satisfied with the FBC.

3.55 In view of the history of involvement of Transport Scotland and the amount of the grant being paid, it is remarkable that it was considered appropriate to have conditions that made no provision for Transport Scotland to consider and express itself satisfied with the contents of the business case. The affordability assessment required by the conditions entails a consideration of funds available but assumes a maximum capital

cost of £545 million. The BCR requires evaluation of the benefits but is also inevitably susceptible to changes in cost. It is a key factor in determining how funds are to be made available for projects but the effect of this letter is that Transport Scotland would carry out no assessment of its own of this key matter before committing Ministers to pay £500 million. Instead, it was to be left for evaluation by the recipient of the funds, with no requirement as to how robust the findings had to be, or how sensitive to particular inputs. Although Transport Scotland was therefore entirely dependent on CEC's analysis of the business case, Mr Ramsay said that there was no understanding of what work CEC would undertake to satisfy itself that it was adequate [PHT00000013, page 23]. There was also no awareness of what steps were being taken to ensure that risk was transferred to the contractors, as was required by the FBC. Mr Swinney considered that the approval by CEC would be no different to the work that Transport Scotland would have done on the FBC had it been approving it [PHT00000050, page 63]. This was on the basis that both Transport Scotland and CEC were bound by the SPFM. I consider this reasoning to be spurious and I reject it. There was no proper basis for any conclusion that CEC would carry out the same extent of work as Transport Scotland. The history of the business cases and the prior input from Transport Scotland demonstrated clearly that this was not the case. This does not require hindsight: all the considerations that indicated that a separate review was required were present and should have been taken into account.

- 3.56** The letter of 17 January 2008 stipulated that the offer of the grant was made on the Terms and Conditions contained in Schedule 1 attached to it [CEC00021548; CEC00021547]. The conditions specified certain matters as an "Event of Default". These included, "the Council ceasing or threatening to cease to deliver the Project or any material part thereof" [CEC00021547, page 10, clause 13.1]. Where such an event arose, there was no requirement to pay further instalments of the grant and the Ministers could "reassess, vary, make a deduction from, withhold or require repayment of the Grant or any part thereof" [ibid, page 0012, clause 13.4.2]. The Scottish Ministers were entitled to serve a "Cure Notice" on CEC at any time. In response, CEC was required to agree a Cure Plan with the Scottish Ministers and thereafter to implement it. A Cure Notice could be served *inter alia* if CEC had failed to comply with the obligations of the grant or there was an Event of Default. Conversely, a failure to agree a Cure Plan with the Scottish Ministers in response to such a Notice and thereafter to implement it satisfactorily could amount to an Event of Default. In relation to the Cure Notice/Cure Plan and Event of Default procedures it should be noted that while ceasing or threatening to cease to provide the project was an Event of Default and could engage the Cure Notice procedure, there was no provision for the Scottish Ministers to become involved purely as a result of escalating costs or significant delays to the project. Nor was there scope for the Scottish Ministers to become involved if it was becoming apparent that the assumptions that underlay the FBC and had formed the basis of the decision to provide the grant were erroneous. This is material as, when problems arose, it became apparent within Transport Scotland that, despite the very substantial financial commitment to the project, no powers to intervene were available to it [PHT00000012, pages 96–97].

Involvement by Transport Scotland/the Scottish Ministers after summer 2007

Provision of information and influence

3.57 The grant conditions required CEC to provide reports to Transport Scotland at regular intervals and in a prescribed format. In fact, this format was not adhered to, but that was not the subject of comment at the time. It is of note that Mr Ramsay expressed concern as to the quality of the information that was being provided in the four-weekly reports by **tie** and transmitted to Transport Scotland by CEC. From examining them it is apparent that the real issues affecting the project are not set out with any clarity. By way of example, the anticipated dates for completion of the works do not make sense and were not revised as they continued to slip and the updates in the formal four-weekly reports as to the outcomes of the dispute resolution procedures did not present an accurate picture. However, in addition to the standardised reporting undertaken in terms of the requirements of the grant letter, Mr Ramsay notes that there was:

"an ongoing engagement with the Council, and an openness on the Council's behalf to speak to us about their problems, which varied from time to time according to the sensitivities in time." [PHT00000013, pages 40–41.]

3.58 He described what happened as an "informal line of intelligence" *ibid.*, page 42]. Mr Jeffrey, the Chief Executive of **tie**, said that he had regular discussions, initially with Mr Reeve and thereafter Mr McLaughlin [PHT00000032, pages 12–14 and 33–34]. In addition to obtaining information as to the problems with the contracts and the progress of the various contractual mechanisms being employed in an attempt to resolve them (see Chapter 11, Contract Negotiations), at these meetings Transport Scotland would seek information about the options available to **tie** and the strategies that it intended to pursue. It was a feature of all these informal meetings that no minutes or records of the contents of discussions were kept for any of them. It is clear that there was scope for provision of information in both directions. If such a channel was to be maintained, I consider that it would have been preferable that it be maintained in the more formal setting of the TPB. The informality of communication means that it is not possible to know now what was being said. That is not just a problem for the Inquiry. A lack of record of the communication increased the risk of misunderstandings on the part of those involved at the time as to the content of the communications or of their being forgotten or overlooked.

3.59 In addition to these discussions there was contact at the most senior levels. Meetings took place between Mr Swinney as Cabinet Secretary, on the one hand, and Mr Mackay and Mr Jeffrey on the other. Mr Swinney accepted that this showed that he was taking an increasingly active role in the project and seeking to influence or resolve issues [PHT00000050, page 127]. It is obvious that this is inconsistent with the "scaled-back" approach that had been instituted at his request. Mr Reeve was asked about having sought detailed information from Mr Jeffrey in March 2010 about various aspects of the project. He accepted that this was at odds with the scaled-back approach and would not have been expected had the project gone well [PHT00000012, page 168]. Mr Reeve noted that, as 2010 went on and the problems continued to increase, the Ministers became more involved *ibid.*, page 171]. Discussions between Mr Swinney and representatives of CEC and/or **tie** were described by Mr Reeve as being "[n]ot unusual, but not frequent" *ibid.*, page 172]. Once again, the Inquiry is unaware of the detail of the various discussions involving the Minister and the representatives of CEC or **tie** because of the absence of any

notes or minutes recording the discussions. There are therefore clear indicators that, even then, the formal channels required by the scaled-back approach were recognised as not being adequate.

- 3.60** Mr Stevenson, the Minister for Transport, Infrastructure and Climate Change, said that Transport Scotland acted as a “critical friend” in relation to the project and encouraged a different approach if appropriate [PHT00000055, pages 45–52]. However, he accepted that this was essentially speculation on his part. There are no records of any such encouragement. When asked about the absence of such records, he sought to qualify his position. In this part of his evidence, as elsewhere, he often refused to give clear answers to straightforward questions. I found his evidence in this regard wholly unsatisfactory and place no weight on it.
- 3.61** Other witnesses emphasised this informal route of communication and provision of information, which undoubtedly supplemented the one provided for in the grant conditions. It is not satisfactory, however, to have a situation in which, in the context of provision of a large amount of public funds, these matters were left to improvised measures rather than formal structures. This is all the more so when no record has been kept of what information was given and advice or instructions were rendered at the meeting. The absence of such information stifles examination and inhibits the holding to account of those who were involved. The rationale for adopting this approach of covert influence was said by Mr Swinney to be to avoid a perception that the control for resolution of these issues lay anywhere other than with CEC [PHT00000050, page 86]. Three issues arise from this. The first is that had Transport Scotland had a measure of control there would clearly have been a benefit that might have prevented the problems from arising in the first place. The second issue is that the control that Transport Scotland might have been in a position effectively to exercise might not have been of the issues as such but of the decision-making within **tie**. The third is that it is not appropriate that public authorities, including Ministers, should act in a covert manner in the exercise of their functions – particularly when this involves the expenditure of substantial sums of public money.

Princes Street

- 3.62** The details of the Princes Street dispute are considered in Chapter 16. What is of note for the purposes of this chapter, are the pivotal role of the Cabinet Secretary (Mr Swinney) in promoting resolution of the dispute and the advice taken by Transport Scotland in relation to the Infraco contract.
- 3.63** As problems developed with the delivery of the tram infrastructure, Mr Swinney tasked Mr McLaughlin with meeting **tie** personnel to monitor what was happening [PHT00000011, page 159]. Mr McLaughlin said that the purpose of these meetings was to get a better understanding of the position. In particular, at the instance of Mr Swinney, scrutiny by Transport Scotland increased significantly at the time of the Princes Street dispute. Daily briefings were provided [PHT00000013, page 16], reflecting the increasing concern within Transport Scotland [*ibid*, page 17]. Ultimately, Mr Swinney, together with Mr Stevenson, met Mr Mackay, the Chairman and Interim Chief Executive of **tie**, regarding the dispute. At that meeting, Mr Swinney told Mr Mackay to “get it sorted” [PHT00000038, pages 95–96; PHT00000050, page 111]. While there is agreement that that is what was said, there is disagreement as to what was meant by it or should have been taken from it. Once again, no record was made of the contents of discussions at the meeting. Mr Swinney said that what he meant was that **tie** should fix the issue and ensure that works were able to proceed. He clarified that he would have meant that **tie** should carry on doing whatever it felt

was best and he just wanted it to get the end result. He said that he was content that plenty of time had been given to resolve the issues and that he had not required that they be addressed at once [libid, page 113]. He denied having given the impression that he wanted things sorted at once. That, however, was what Mr Mackay had taken from the meeting, about which he gave evidence that:

"I spoke to him about our values and standards and my values and standards and the fact that we were charged with looking after the public purse. I told him that the only way to break this impasse was to pay more and that we had already paid for Princes Street in the agreements. I was told to get it sorted out and to break the impasse." [TR100000113_C, page 0079, paragraph 291.]

- 3.64** Although Mr Swinney said that he was happy for contract mechanisms to be used, it is notable that none was under way at that time. It seems unlikely that Mr Swinney would have been sufficiently concerned about the situation in Princes Street to have requested a meeting with Mr Mackay simply to tell him to use the contract mechanisms to resolve matters and that there was no rush to end the dispute, particularly in the context of "rising public concern and political pressure about the fact that Princes Street was in a mess for a prolonged period" [PHT00000050, page 111]. In the context of a major and very visible dispute right at the start of the contract, when no mechanisms were being used to achieve resolution, and after having outlined his views that the only way to break the impasse was to make additional payment, it was quite reasonable for Mr Mackay to believe that Mr Swinney's request to "get it sorted" meant that he wished the works to proceed without any further delay and accepted that there would be a financial penalty. The only manner in which the dispute could be resolved without any further delay was for tie to agree a variation of the contract and agree to pay for the work on the basis of demonstrable cost, as occurred. I consider that that is what Mr Swinney intended should be understood by his request, and I reject his denial.
- 3.65** There was an appreciation within Transport Scotland that the issues thrown up by the dispute and the agreement that brought it to an end had the potential to increase the project cost. This gave rise to concern as to whether there was any potential exposure of the Scottish Ministers to this additional cost. With this in mind, Mr Ramsey in or about June 2009 instructed D&W to consider whether there was any such exposure [PHT00000012, page 223]. He also provided D&W with a copy of the Princes Street Supplemental Agreement ("PSSA"), which had brought the dispute to an end, because of concern as to whether it was a continuing source of dispute [PHT00000013, page 11]. That firm advised that there was no such exposure, but also commented on the Infraco contract. The tenor of the advice was that the form of the contract could tend to encourage disputes, create a hostile atmosphere and divert management resources [PHT00000012, pages 225–226; TRS00031282]. D&W considered that the PSSA did not finally resolve the underlying disputes and might have opened the way to further disputes [PHT00000012, pages 226–227]. Perhaps more significantly, in view of the emphasis in 2007 on having a fixed-price contract, it was its view that there was no fixed-price element at all to the works under the PSSA. The change from what was intended to be a fixed-price contract to one in which D&W considered that there was no fixed price at all was an example of Mr Ramsay's general concerns that the contract was not fit for purpose [libid, page 228]. He stated that he shared the advice with colleagues in Transport Scotland, notably Mr Reeve and Mr McLaughlin, but he had not advised Ministers that there was this negative view of the contract, nor did he know whether anyone else had done so. I accept the evidence of Mr Swinney and Mr McLaughlin that they were unaware of

this advice, and I conclude that Mr Ramsay was mistaken in his recollection that he would have mentioned it to Mr McLaughlin, because Mr McLaughlin was not involved in the project in 2009. Mr Reeve's evidence supports Mr Ramsay's recollection of events that the advice was shared with him, and I accept that Mr Ramsay shared the advice with him [*libid*, pages 161–162]. However, the advice was not shared more widely within Transport Scotland and was not given to the Ministers. It would have been helpful for this information to have been shared more widely within Transport Scotland in 2009 [Mr McLaughlin [PHT00000011](#), page 171] and it could have had an effect on other decisions taken in relation to the contract. Mr Swinney recognised that had the information been known to Transport Scotland officials, it would have been reasonable for them to have made it known to CEC, and he said that if he had been aware of the information he would have felt obliged to so pass it on [[PHT00000050](#), pages 120–121]. It is obvious, however, that it would have been very much more helpful to have had that information about the shortcomings of the Infraco contract prior to its signature.

- 3.66** When D&W's comments about the contract were raised with Mr Reeve in the course of his evidence at the hearings and he was asked whether this was not something that it would have been better for Transport Scotland to have been aware of prior to committing to pay the grant, he resisted that suggestion and said that was a matter to have been considered by CEC [[PHT00000012](#), pages 164–165]. His approach is extraordinary. The Scottish Ministers were investing a large sum of public money in the project. To be satisfied that they could get value for their money, they would have needed to be confident of what could be delivered by the project. That confidence would have depended, in part, on having reassurance that it could be delivered broadly within the cost estimates. The terms of the contract and their effectiveness in delivering the project within budget were a large part of that. To commit half a billion pounds to a project and say that it was not the concern of the Scottish Ministers whether the contract designed to deliver that project was fit for purpose shows scant regard for any need to safeguard public funds.

Insistence on mediation

- 3.67** In late 2010, work under the Infraco contract had all but ceased. Mr McLaughlin said that there was no credible strategy for moving things forward from **tie** at that point [[PHT00000011](#), page 175]. On 8 November 2010, at the request of the consortium, a meeting was held, attended by Mr Swinney and Mr McLaughlin for the Scottish Ministers, Dr Keysberg for Bilfinger Berger and a senior manager for Siemens [*libid*, page 172]. Mr McLaughlin said that there was discussion about mediation at the meeting but no commitment was made. Nonetheless, he said that it appeared to be the next credible step [*libid*, page 174]. Mr Swinney then had a meeting with the leader of CEC and its Chief Executive and Director of Finance on 16 November 2010, and said that he told them that they were going to mediation [[TR100000149_C](#), page 0066, paragraph 191; [PHT00000050](#), page 135]. This shows just how far the Scottish Ministers had moved from their stance at the outset of the works. From seeking to distance themselves from major decisions on the project, they were now directing CEC as to what should be done. This may be seen as recognition that their original approach had failed. On any view, any policy that they were "hands off" or that they had a "scaled-back" approach had been abandoned.

Mediation

- 3.68** Shortly before the mediation, in February 2011, Audit Scotland published a report entitled 'Edinburgh trams – Interim report' [ADS00046, Parts 1–2]. This stated that the Scottish Government “needs to consider Transport Scotland’s future involvement in providing advice and monitoring the project’s progress” *ibid*, Part 1, page 0009]. It seems to me, and it was accepted by Mr McLaughlin, that this was a hint that Transport Scotland should be involved in the project formally once again [PHT00000011, page 194].
- 3.69** At the mediation at Mar Hall, the position of Scottish Ministers remained ambiguous. They were represented there by Mr McLaughlin but took the formal line that their approval was not required for any deal reached. Mr McLaughlin nonetheless initially described himself as one of the principal negotiators *ibid*, page 176] and this was confirmed by Mr Bell [PHT00000025, page 51], Mr McGougan [PHT00000043, page 85], Mr Emery [PHT00000052, pages 10 and 50–51] and Mr Jeffrey [PHT00000033, pages 69–70]. Dame Sue Bruce said that Mr McLaughlin provided the link to the Scottish Ministers and gave a view as to how things were going from their point of view [PHT00000054, page 12]. The witnesses conducting the negotiations with BSC on behalf of CEC at the mediation were Dame Sue Bruce, Mr Emery and Mr McLaughlin. Before final settlement was achieved the other representatives of CEC and *tie* and their professional advisers were involved in discussing various options as the principal negotiators returned from their negotiations and in advising on the cost of the project following any potential agreement with BSC [PHT00000043, page 85]. Later in his evidence, however, Mr McLaughlin was keen to play down his role as being purely that of an observer [PHT00000011, pages 191–193]. He considered that the purpose of having a representative of the Scottish Ministers present was to give confidence to the contractors that the Scottish Ministers were taking an interest in the outcome. That, however, does not explain why such an interest would be of any practical relevance to the contractors unless Scottish Ministers were indicating their approval of any negotiated settlement. His later evidence is inconsistent with his original evidence and with the body of consistent evidence from the other witnesses mentioned above and I reject his evidence that he was merely an observer. He was a principal negotiator along with Dame Sue Bruce and Mr Emery although Dame Sue Bruce alone had authority to agree any settlement of the dispute. The details of what happened during the mediation are considered later in Chapter 19. However, it is notable that, prior to the deal finally being agreed, Mr McLaughlin telephoned Mr Swinney *ibid*, page 185]. He stressed that this was not to obtain approval, and his evidence in that respect was supported by Dame Sue Bruce [PHT00000054, page 12], but no explanation was offered for why it was considered necessary to report what was hoped to be the final deal to the Cabinet Secretary at this stage, before it was agreed. Mr McLaughlin said that it was because the Minister was interested to know how the mediation was progressing, but this does not explain why a telephone call had to be made before the final offer was made to the contractors. Mr McLaughlin also said that the Minister wanted to make it absolutely clear that any cost over £500 million would be the responsibility of CEC. That explanation, however, does not make sense. If anything, an intervention at that juncture might give the impression that the Ministers were involved and in some sense standing behind settlement.

Post-Mar Hall

- 3.70** Later in this report I consider the response of CEC to the outcome of mediation and the steps taken by Transport Scotland (see Chapter 20, Post-Mar Hall). For present purposes, two matters bear upon the involvement of the Scottish Ministers:
- After CEC voted on 25 August 2011 to terminate the tram line at Haymarket, on 30 August Mr McLaughlin wrote to Dame Sue Bruce on behalf of the Scottish Ministers, indicating that no further grant monies would be paid [CEC01721794]. This threat bore immediate fruit. The letter from Transport Scotland was considered to be a change of circumstances and a further meeting of CEC was called to reconsider the decision. At that further meeting on 2 September 2011 [CEC02083154], it was resolved that the line would be continued to St Andrew Square/York Place.
 - Once the grant had been reinstated following the decision to construct the tram line to St Andrew Square or York Place, it was a condition of the grant that officials in Transport Scotland would be involved in the governance of the project [TRS00031263; PHT00000011, pages 197 and 202]. Mr McLaughlin agreed that the joint project forum on which he sat as the Transport Scotland representative was, in essence, the equivalent of the TPB. So, by this time, matters had come full circle. Although the project remained the responsibility of CEC and any cost in excess of the grant of £500 million would fall on it rather than Transport Scotland, the latter had a more significant role.
- 3.71** Mr McLaughlin agreed that Transport Scotland had knowledge, expertise and interests relevant to the project [ibid, page 207]. He described the input that it provided in this period after Mar Hall as “[i]ntelligent client expertise” [ibid, page 227]. Mr Swinney described the role of Transport Scotland as giving advice and support [PHT00000050, page 130]. The involvement of Transport Scotland at this stage was generally found to be of benefit to the project [PHT00000011, page 204]. The expertise of Transport Scotland could, however, have been available throughout the project. Although Mr McLaughlin claimed that, after the Mar Hall mediation, matters were different in that **tie** was no longer involved in the project, its role had been taken on by Turner & Townsend. If the involvement of Transport Scotland in addition to the experience and expertise provided by Turner & Townsend could be accommodated at this stage without compromising the funding limit imposed by the Scottish Ministers, I can see no reason why a similar arrangement could not have been provided immediately after the parliamentary decision on 27 June 2007. Had that occurred, I consider on balance that it is likely that the project would have had a far better outcome.

Justifications for change of role for Transport Scotland

- 3.72** Mr McLaughlin said that he was not aware of any other situation in which a decision had been made to withdraw Transport Scotland from a project in the way done for the project [ibid, page 208]. That, together with its eventual reintroduction into the governance procedures, raises the question of whether it was ever appropriate that it was withdrawn. A number of justifications for the decision have been put forward, which can be considered in turn.

- 3.73** When evaluating the justifications for the changes made in July 2007, it is necessary to have in mind how matters then stood in relation to the project. There was already concern within Transport Scotland as to the slow progress of the Multi-Utilities Diversion Framework Agreement ("MUDFA") works [PHT00000012, page 108]. There was also concern about the delivery of the design works under the contract for System Design Services ("SDS contract") *ibid.*, page 109]. Mr Ramsay said that Transport Scotland knew about the design weaknesses and was sceptical of the Scottish Transport Appraisal Guidance methodology used by *tie* *ibid.*, page 175]. Mr Ramsay noted in his statement that, as at August 2007, Transport Scotland remained suspicious of the risk registers prepared by *tie* [TR10000065_C, page 0061 and PHT00000013, pages 48–50]. Mr Reeve was at pains to point out that these matters were the responsibility of *tie*. That is correct. It fails to consider, however, that these were indicators that the strategy of having cleared utilities and a largely complete design that was a key element of the procurement process was not working. The result of the changes in 2007 was that Transport Scotland would have less information as to these issues and no control over them being fixed [PHT00000012, page 111]. The issue is whether, in view of the knowledge on the part of Transport Scotland of the emerging problems, there is justification for Transport Scotland stepping away from the project.
- 3.74** A further matter that requires to be borne in mind when evaluating the purported justifications is that, as early as 2010, it was apparent that there was some concern as to the withdrawal and the possibility that the decision would be criticised. This is apparent from the email exchange between Mr Middleton and Mr McLaughlin on 1 December 2010, referred to in paragraph 3.43 above. In my view it is necessary to distinguish the reasons for the decision that were referred to at the time that it was taken and those that have been put forward only at a later stage. It is regrettable to say so, but it is clear that, in both the written and oral evidence of witnesses from Transport Scotland and the Scottish Ministers, there has, in my opinion, been a concerted attempt to rewrite history so as to present the decision in a more favourable light than it merits. For example, Mr McLaughlin was at pains to distance himself from the contents of his memorandum in December 2010 [TRS00011413]. It was written to the Chief Executive of Transport Scotland in response to his request to know what had happened, at a time when the reason for the decision was coming into focus. It is clear that the recollection of matters would be better than it was when he gave evidence, some seven years further on. It is therefore surprising that Mr McLaughlin would not accept what was contained in his email. To the extent that the account of evidence he gave contradicts that email, I reject it. I view the content of the email as the most reliable guide to what happened.

The parliamentary vote

- 3.75** In relation to justification for the change of approach, both at the time, in 2007, and during the Inquiry hearings, a number of claims were made as to what was decided by the Parliament which do not stand scrutiny. There was some dispute in the evidence and submissions to the Inquiry as to the effect of this vote. Mr Swinney's evidence was that the vote clarified the government's position [see, e.g., PHT00000050, pages 19–25]. Dr Reed claimed that the vote expressed the wish of Parliament that the responsibility for managing and delivering the project should rest with the promoter [TRS00004523; PHT00000013, page 169]. However, in advancing this claim, he proceeded on the basis that the will of Parliament could be determined from the contributions of an individual MSP during the debate. This is manifestly not the case. I am surprised that a senior civil servant would even seek

to advance such an argument. Nonetheless, the approach that the decision of the Parliament determined what the involvement of Transport Scotland should be is repeated and adopted in the submissions for the Scottish Ministers, which state:

"The Scottish Executive accepted the clear will of the Scottish Parliament in respect of the tram project as expressed in the resolution [passed on 27 June 2007]." [TR100000291_C, page 0050.]

3.76 An examination of the transcript of the parliamentary proceedings [SCP00000030] shows, however, that there was no such expression of will. The will of the Scottish Parliament is clearly stated in column 1189 of the *Official Report*, where it is recorded that, by a majority of 81 to 47, the Parliament agreed to the amended motion in the name of Mr Swinney. In so far as it relates to the project, that motion was in the following terms:

"That the Parliament notes that the Edinburgh Trams project and EARL were approved by the Parliament after detailed scrutiny; further notes the report of the Auditor General for Scotland on these projects and, in light thereof, (a) calls on the Scottish Government to proceed with the Edinburgh Trams project within the budget limit set by the previous administration, noting that it is the responsibility of Transport Initiatives Edinburgh and the City of Edinburgh Council to meet the balance of the funding costs ..." *ibid.*, page 0038, column 1189.]

3.77 If anything, calling "on the Scottish Government to proceed" with the project could give the impression that it was intended that it should have some involvement beyond the provision of grant finance. I am reinforced in that view by the fact that the Auditor General's report, which Parliament took into account, had considered the governance arrangements at that time. These included the involvement of officials from Transport Scotland in assessing the various iterations of the business case for the project and in attending the TPB. A reasonable inference is that, in calling on the Scottish Government to proceed with the project, Parliament intended the Government to exercise the same oversight of the project as previously. The general tenor of the decision was that the status quo should be maintained. When I asked Dr Reed about this, he accepted the point [PHT00000013, page 149].

3.78 It was apparent from Mr Swinney's evidence that he considered that the parliamentary vote in June 2007 had committed the Scottish Ministers to providing grant funding for the project. I do not agree. As noted above, on 19 March 2007, the previous administration had offered CEC a grant of £60 million for utilities diversions, advance works, project development and procurement of phase 1a of the project [TRS00004113]. As I note above, the letter making the grant available had a Schedule of Terms and Conditions attached to it that included various "hold points" at which Ministers could determine whether to continue to support the project [TRS00004112]. In response to questions about the subsequent abandonment of these hold points after June 2007, Mr Swinney responded:

"But my argument is you cannot view that in isolation from the parliamentary decision that had been taken to commit GBP500 million to the project and for the project to proceed. Where we had quite clearly, in our actions after May 2007, said: we do not want this project to proceed; and Parliament essentially had said to us: we want it to proceed, and we want to put GBP500 million into the project; and I had accepted that point." [PHT00000050, page 47.]

- 3.79** When asked if there was still to be a final decision in relation to the grant, he said, "I think that decision was taken on 27 June 2007, to all reasonable observations" [*ibid.*, page 41]. Again, consideration of the proceedings of the Parliament shows that this was not the case. The matter that had been put before the Parliament in Mr Swinney's motion was endorsement of the new Government's transport priorities and noting that, prior to the election, the SNP had proposed to cancel the tram and EARL projects. In effect, the new Government sought to have Parliament endorse the decision to abandon the project. The decision of Parliament was not to scrap it but for the Government to "proceed" with it. It was not a vote by the Parliament that grant funding should be provided irrespective of the merits of the project as brought out in the FBC or that Ministers, having provided funding, should not have any involvement in management of the project or monitoring how the funding provided by them was used. The debate lasted a little over two hours and no reference was made to the contents of the business case or any criteria that would have to be fulfilled for grant finance to be made available.
- 3.80** Even taken in isolation, Mr Swinney's evidence demonstrates that the approach that the vote committed the Government to providing funding, and nothing more, is unsound. In the first place, in his evidence, he referred to the statement noted above, which he made at the end of the parliamentary debate, that the vote did not bind the Government but that, despite that, the Government would accept and implement the resolution [*ibid.*, pages 11–12; [SCP00000030](#), page 0039]. In the second place, he explained that the decision to accept and implement the resolution was a political one, reflecting the reality that this was a minority Government that did not wish a challenge to its continuation in office six weeks after the election of the first SNP Government in seventy years [[PHT00000050](#), pages 21–22]. Finally, when he was later asked about the hold points he also appeared to accept that the Scottish Ministers were not bound to commit funds to the project. In response to a question as to his claim that after the vote the Scottish Ministers could not have taken advantage of the hold points mentioned in paragraph 3.78 to halt the project, he said:
- "Well, I'm simply – I'm simply trying to set this within the political context and the explanation I gave to Lord Hardie some time ago, that Parliament had very clearly voted to proceed with this project in a hotly contested political environment where the Government had lost a vote in Parliament and, having lost the vote in Parliament, the Government was in my view obliged to reflect on that, and we *chose* on that occasion to accept the view of Parliament and to proceed accordingly" (emphasis added) [*ibid.*, page 49].
- 3.81** It could not be clearer that the decision to proceed was that of the Government rather than that of Parliament. The willingness of the Government to act independently of the parliamentary vote is also apparent from its reaction to the vote in so far as it related to EARL. It is apparent from the advice of 6 July 2007, noted above [[TRS00004522](#); [TRS00004523](#)], that no regard was paid to the views of Parliament in relation to EARL. The resolution of Parliament in relation to EARL was to progress that project and to seek to resolve governance issues identified by the Auditor General. Instead, it was apparent that the intention of the Government from the outset thereafter was that it should be cancelled.
- 3.82** It is, in my view, fanciful to suggest that the vote committed the Government to providing grant finance of the sum previously announced without the safeguards previously in place, including further scrutiny of the business case. I do not believe that anyone involved genuinely believed this. There is certainly no mention of this in the communications about it that occurred in the aftermath of the parliamentary

vote. That argument appears to have been concocted when it became apparent that the project was in trouble and that the approach of Transport Scotland/the Scottish Ministers might be subject to criticism.

3.83 In making that decision to proceed with the project it would be reasonable for MSPs to assume that the Government would evaluate it before committing to spend £500 million of public money. While that would have been appropriate, the changes to the grant conditions that were part of the desire to “scale back” the involvement of Transport Scotland meant that it was not done. The view that the Parliament had decided that the project should be implemented come what may was said to justify the removal of these hold points. Mr Swinney appeared to regard them as being inconsistent with the vote [PHT00000050, page 46]. He also considered that the hold points exposed Scottish Ministers to the risk of calls to provide additional funding, simply on the basis that one of the review criteria at a hold point was the affordability of the scheme in light of the funds available [ibid]. The following exchange then took place in his evidence at the hearings:

“Q. But this [the existence of hold points] would give the Scottish Government two opportunities to examine all the data and say: no, this project doesn't make sense anymore, it will cost too much, it won't give benefit. That's correct, isn't it?”

“A. But it – it would also expose the Government to the possibility of having to make a – take some action to deal – to address the issue of the comments in the light of the funds available for implementation.” [ibid]

3.84 It appears from this that Mr Swinney did not have a clear idea of the value that the hold points provided to Scottish Ministers and therefore what abandoning them would entail. He said that the decisions in relation to the changes to the role of Transport Scotland were taken by a politician – him – and that they might therefore be considered political. It is not my function to comment on decisions that are political in that sense and I do not do so. In my view, however, the decision in relation to the changes in grant conditions demonstrated more than this. The decision disclosed a willingness to relinquish any responsibility for the proper management of Government funds. Mr Swinney pointed out that the Scottish Ministers do not have close control over the expenditure of the sums totalling in excess of £10 billion provided annually by them to local authorities [ibid, page 125]. That is correct, but this was grant funding for a specific project to achieve objectives in which the Scottish Ministers had a clear interest. That puts it in a different category from the monies provided to fund the services and activities that are generally required of local authorities.

Balance of risk

3.85 A further argument has been made that the decision of Parliament and the Cabinet Secretary in summer 2007 represented a material change in the balance of risk that justified a withdrawal by Transport Scotland. This change was said to arise from the statement that no funding would be provided in addition to the sum of £375 million as index-linked. Mr Sharp took the view that once the Scottish Ministers had made it clear that they would not pay any more, they faced only two risks. The first was that nothing would be created as a result of the expenditure of the grant monies. The second was that if a cost overrun was so great that the refusal of the Scottish Ministers to contribute further meant that CEC had to abandon other council services to meet the cost of the project, Ministers would not find it politically sustainable to maintain their opposition to providing additional funding [PHT00000015, pages 119–120]. Of course, this fails to take account of the risk – which came to pass – that pressure on CEC's finances could prevent the completion of the line for which Transport Scotland had provided the grant.

- 3.86** Mr Sharp sought to justify the decision to withdraw Transport Scotland in the following terms:
- “My view was that if you were taking the decision that you were contributing GBP500 million and that all cost overrun risk lay with the Council, it was logically consistent and indeed arguably imperative that Transport Scotland should step away from the detail of the project.
- “To want to be on the Project Board, to want to be involved, when taking no risk, is wanting to have your cake and eat it. You cannot say that we have no responsibility and then do things that impact on the project.” [ibid](#), page 115.]
- 3.87** This justification is based solely on the issue of risk of making contributions over and above the grant money initially committed. The argument is that if CEC bore all that risk and Transport Scotland bore none, then Transport Scotland ought not to be involved in taking decisions and that governance should be structured so that it was clear that the risk of cost overruns fell on CEC and steps were taken to minimise any calls on Transport Scotland.
- 3.88** The starting point for evaluating these points is to consider the extent to which there was any material change in the funding situation in summer 2007. The submissions for the Scottish Ministers refer to various observations to the effect that the statement by Mr Swinney in 2007 that there would be no additional money was a material change. In addition, it is apparent from the minutes of the TPB meeting on 12 July 2007 [\[CECo1018359\]](#) that its view was that the announcement had led to a transfer of risk. An examination of the position in relation to the funding commitment before and after the vote reveals, however, that there had been no such change. As noted above, there is ample evidence that the position taken by Transport Scotland prior to the vote was that the funding from the Scottish Ministers was capped. There was never an undertaking, a commitment or even an understanding on the part of Transport Scotland that it would provide additional funds. Mr Swinney accepted that it had been made quite plain prior to the vote that there would be no increase in the grant beyond the indexed sum of £375 million [\[PHT00000050\]](#), page 18]. He recognised that, while CEC could come back to seek additional money, that remained the position even after the vote and the statement [\[ibid\]](#). The point is that, both before and after the vote, the position of the Scottish Ministers was that such a request would be refused. While it is always possible for an application for additional funds to be made, whatever the stated position of Ministers, the prospect of such an application’s being successful is negligible where Ministers have made it clear that it will be turned down. Mr Stevenson acknowledged that the cap introduced was not new but was an indexation of the sum of £375 million originally earmarked [\[PHT00000055\]](#), page 56]. Dr Reed accepted that there was no change to the position on the availability of funding from the Scottish Ministers, as it had been understood before summer 2007 [\[PHT00000013\]](#), page 141]. Even without the position being acknowledged by these witnesses, that is the inevitable conclusion of an examination of the contemporaneous documents.
- 3.89** Many of the statements referred to by the Scottish Ministers in their submissions to suggest that the matter of availability of further funding was open prior to the parliamentary vote underline the absence of any undertaking, or even understanding, in this regard. The true picture emerges only when that absence is seen alongside the express statements that *no* further funds would be made available. In the situation where there had been such categorical statements it is unsustainable to suggest that, just because the matter had not been accepted by CEC/[tie](#), the issue

was still open. This applies to the reliance by the Scottish Ministers on the treatment of Risks 268 and 269 in the Project Risk Register in the period from late 2006 to September 2007 [TR100000291_C, page 0057, paragraph 17.3]. It is said that this is evidence that a funding limit had not been fixed prior to the election and therefore the introduction of the limit amounted to the reallocation of risk. I do not agree. Risk 269 related to securing an agreement on financial overrun risks between Transport Scotland and CEC [Papers for TPB Meeting on 23 January 2007, CEC01360998, page 0034]. It is clear that **tie** and the TPB were keen that there should be such an agreement, but the inclusion of these risks in the Register emphasises that no such agreement was in place. The position of the Scottish Ministers – expressed by Transport Scotland – had consistently been that no additional funds would be made available for the project. In his evidence Mr Sharp was clear that this would not be resolved before the Scottish Parliament election [PHT00000015, page 72] and that, as matters stood at that time, anything in excess of the announced grant would have to be paid by CEC [*ibid*, page 60]. It is understandable that CEC and **tie** would aspire to a situation in which the burden of overruns was shared. It is understandable that they might not wish to consider the matter closed. The evidence, however, is that it had already been made clear that no additional monies would be provided. While no substantive change in the position had been brought about by Mr Swinney's announcement, it is fair to say that it appears to have had the effect of driving home to the TPB the point that there was a cap. As Mr Gallagher put it, one of the benefits of the Government saying "£500 million and not a penny more" was that it focused people's minds [TR100000037_C, page 0053, paragraph 177].

3.90 The submissions for the Scottish Ministers contain a variation of this argument, to the effect that, prior to the vote, there was no commitment to provide funds. They argue that the Parliament committed funds to the project and that, as there had previously been no commitment and therefore no cap, the cap attached to the commitment of funds by the Parliament must be new. For example:

"[u]ntil the announcement that a grant capped at £500m would be made available to CEC, there had only been 'in-principle funding support' from the Scottish Executive and there was no settled position on which party would bear the cost of any overruns" [TR100000291_C, page 0047, paragraph 2]

and

"[t]he decision of the Scottish Ministers to accept the will of the Scottish Parliament converted the 'in-principle funding', which was under threat at the time, into an unqualified commitment while simultaneously clarifying the position on liability for cost overruns" [*ibid*, page 0051, paragraph 10].

3.91 This argument is clutching at straws and is incorrect in all of its components. Prior to the vote there *had* been a commitment to provide funds. Prior to the vote there had been a cap in the availability of those funds. The vote in Parliament did not amount to a commitment to pay the grant, still less a commitment that payment should be made regardless of the state of the project.

3.92 As I have set out above, I consider that there was a cap prior to June 2007. I reject also the claim that there was a change in the status of the commitment of the Scottish Ministers to the grant as a result of either the vote or the ministerial announcement. I do not accept that, prior to the vote, there was only "in-principle funding support" as claimed by the Scottish Ministers. The announcements in relation to the grant referred to it as a commitment. Although release of it, or parts of it, was subject to submission of satisfactory iterations of the business case, this is quite

different from it being only an offer of funding “in-principle”, as the Scottish Ministers now seek to assert. Following the announcement, in terms of the grant letter referred to above, the grant sum committed remained £60 million and not the whole sum. The offer of the whole sum came later, in January 2008. Even then, a business case was required even although Transport Scotland would have no part in evaluating it. The change of the role of Transport Scotland in relation to the evaluation of the business case is one of the changes that the Scottish Ministers seek to justify by the change of balance of risk. To suggest that it is also the *cause* of the shift in risk produces a circular argument. This circularity of approach was apparent also in the evidence of Dr Reed when he appeared to argue that the change in risk allocation arose from the withdrawal of Transport Scotland from governance and the removal of ambiguity as to the respective roles of Transport Scotland and CEC [PHT00000013, page 141]. I reject these arguments as justifications for what was done.

Clarity of roles

3.93 In the justifications offered for the change in role of Transport Scotland, a need for clarity in relation to the roles of the various parties is a common theme. This justification appears particularly to have been used in relation to Transport Scotland's relinquishing the seat that it had on the TPB. In their submissions to the Inquiry, the Scottish Ministers state that clarity would be achieved by “making it absolutely clear that the project was being undertaken by CEC and TIE, and that Transport Scotland's involvement was only in providing the approved funding” [TR100000291_C, page 0012, paragraph 20]. Mr Swinney was concerned that as matters were moving to a new phase of the contract there should be “absolute clarity about who was responsible for project delivery” [PHT00000050, page 26]. He said that he was concerned from the experience of other projects where there had been uncertainty about leadership and competing approaches to delivery it was essential to have “absolute clarity about where leadership lay and where operational responsibility lay” *ibid.*, pages 26–27]. Mr Stevenson also relied on the need for clarity of roles and possible confusion as to where responsibility lay when he said:

“In line with our desire to improve clarity of responsibility for delivery of the project, we withdrew Transport Scotland from the Tram Project Board as their presence may have given the appearance of Transport Scotland bearing some responsibility for delivery of the project. We were clear that we were funders and funders only.” [TR100000142_C, page 0003, paragraph 5.]

3.94 The claimed need for clarity about the roles of the parties involved was closely tied up with the concern that, if matters went wrong, the Scottish Ministers should not be required to contribute to additional costs. In their submissions, the Scottish Ministers said:

“if cost overruns occurred while Transport Scotland was actively involved in project governance, Transport Scotland could be seen as partly responsible for those overruns with further calls for central government funding being made.” [TR100000291_C, page 0048, paragraph 2.]

3.95 In this regard, Mr Stevenson contradicts Mr Swinney in that he states that concerns as to possible calls for more funding were *not* a reason for withdrawing Transport Scotland [PHT00000055, page 16]. Mr Swinney's version is supported by the contemporaneous documentation, and I therefore conclude that it was a factor. Despite the apparently unequivocal statements regarding funding noted above, Dr Reed felt that the governance arrangements in place until summer 2007 would probably have created an expectation that Transport Scotland would meet a share

of cost overruns [PHT00000013, pages 143, 154 and 157]. As justification for that he referred to the construction of the Aberdeen Western Peripheral Route *ibid*, page 157]. That, however, was a Government-funded project so the Scottish Ministers would always have been liable for cost overruns and it was therefore not a good comparator. In examining other projects, it is of note that the refurbishment of Waverley Station was a Network Rail project that the Scottish Ministers were funding and Transport Scotland continued to participate in the steering group in relation to it. That was not regarded as having caused any difficulty *ibid*, page 127].

- 3.96** I do not consider that the degree of involvement that Transport Scotland would have had in the project had the changes not been made was such that it could be said to have been involved in day-to-day management with the result that it should bear financial responsibility for the overrun. While I acknowledge that there could be political pressure, it seems to me that a clear statement having been given at the outset that there would not be more money, it would have been a situation where Ministers might have been expected to take the difficult decision and refuse requests for further grant monies. Accordingly, it does not seem to me that the concern as to future calls for additional funds should have weighed heavily in deciding what was appropriate.
- 3.97** In relation to the pure issue of demarcation of responsibilities, it is useful to consider whether there was ambiguity in the roles undertaken by the various parties prior to June 2007. In my view, there was not. There is no written record of any concerns having been raised as to the possibility of confusion of roles prior to July 2007, and Mr McLaughlin was not aware of there having been any concern about this [PHT00000012, page 3]. He considered that the roles were quite clear prior to July 2007 *ibid*, pages 17–18]. He noted in his statement that the Tram project was not a Scottish Government one and there was never any doubt that it was a CEC project [TR100000061_C, page 0002, paragraph 3; PHT00000011, page 152].
- 3.98** Mr Swinney expressed the concern that frequently issues that are the proper responsibility of other organisations are presented as the responsibility of Government [PHT00000050, page 38] and that "Government is very regularly presented with calls for it to do certain things that are the proper responsibility of other people" *ibid*, page 39]. On this basis, he said that he wanted it to be crystal clear that CEC was the owner of this project and responsible for its delivery. He considered that even one person from Transport Scotland sitting on the TPB would generate an expectation that Ministers would have to explain any difficulties that arose *ibid*, page 40]. There would be the possibility of Transport Scotland's being involved in having to meet any further issues or calls that might come in relation to the project *ibid*, page 44]. This cannot be reconciled with the role that was played by Transport Scotland in the project following Mar Hall. At that stage, there did not seem to be any expectation that Transport Scotland should be responsible for the project or required to explain problems that arose. The additional costs of the project were the sole responsibility of CEC.
- 3.99** Mr Stevenson said that he was concerned that the TPB might be required to take decisions that affected the interests of Government and that having someone from Transport Scotland sitting on the Board could give rise to what he termed "substantial risks" [PHT00000055, page 6]. Despite this he accepted that the respective roles of CEC and Transport Scotland were quite clear both before and after the parliamentary vote *ibid*, pages 7–8].

- 3.100** As an example of the problems that might arise from Transport Scotland's representation on the TPB, Mr Stevenson was concerned that had Mr Reeve continued to sit on the Board and the Board had decided to approach Scottish Ministers for more money, Mr Reeve would also be involved in considering Ministers' response [[ibid](#), pages 10–11]. In my view this concern is exaggerated. It is remarkable that a Minister was of the view that such a conflict could not be avoided by the simple expedient of not involving Mr Reeve in the deliberations within Transport Scotland. When it was pointed out to him that Transport Scotland had resumed an active role with no apparent difficulty after the Mar Hall agreement, he sought to avoid questions by pointing out that that was after his time as a minister [[ibid](#), page 9]. This is true, but does not change the fact that it clearly undermined his purported rationale for changing the role of Transport Scotland from 2007. Surprisingly, it did not appear that Mr Stevenson had given any consideration to the rationale for Transport Scotland's having had a representative on the TPB in the first place [[ibid](#), pages 13–15]. Had he known that, he would have been able to weigh it and the advantages that it might have conferred in the balance before taking decisions to reduce the involvement of Transport Scotland.
- 3.101** Mr Ramsay said that it was made clear to him when he started work in relation to the Tram project that it was a CEC project and that CEC had said that matters were entirely for it as the owner of the project rather than for Transport Scotland [[PHT00000013](#), page 31]. He said that there was no doubt as to roles prior to the election. His view was that perhaps the Ministers entertained a doubt that was not shared by [tie](#) or Transport Scotland. Despite the clear understanding of the roles, after the parliamentary vote Mr Ramsay wrote a paper on project governance, in which he noted that the effect of the financing option that would later be selected by Ministers was that CEC expected that there would be only a very minimal engagement/oversight from Transport Scotland [[TRS00004511](#)]. His view, however, was that such a hands-off approach was not appropriate for a project funded from the public purse to the extent that the Tram project was. With some prescience, he said that it was written with "the knowledge that we would be openly criticised for continuing to fund such a project with such a hands-off approach" [[PHT00000013](#), page 34]. Unsurprisingly, Mr Ramsay said that the size of the grant in this case influenced his view about control, financial control and probity [[ibid](#), page 43].
- 3.102** On the other hand, Mr Reeve considered that any active role in the project by Transport Scotland might make the project, and in particular cost overruns, its problem. This makes little sense and no justification is given for it, but even if there was a risk, the point I make above in paragraph 3.96 applied – it is a situation where the Government, having given advance warning of its attitude, would simply have to reject demands for further funding. Transport Scotland had been involved in the project for years while stating quite clearly that it would not provide money in excess of the proposed grant. The vote and the ministerial announcement afterwards reiterated that there would be no further money. It is not apparent why confusion as to the role of each party should emerge thereafter.
- 3.103** When Dr Reed was asked about what he meant in referring to the "Iministerial decision that the financial risk for the project should lie entirely with CEC" [[TR100000066_C](#), page 0058, paragraph 123], he referred to the ministerial determination that "the project was now CEC's to run in a way that it hadn't been unambiguously before then" [[PHT00000013](#), pages 150–151]. This, however, is said elsewhere to be a *consequence* of the risk moving to CEC rather than the factor that gave rise to the transfer of risk. The confusion among the witnesses who sought

to justify the decision to withdraw Transport Scotland from the project was striking in this respect. It created a circularity in the reasoning: the governance must be changed to reflect a change in risk, the risk had changed as a result of the change in governance arrangements and so on. Dr Reed denied this [ibid, page 163], but it seems plain and, later, he accepted that the risk transfer viewed in this light was a result of the decision of the Scottish Ministers to withdraw Transport Scotland from the project [ibid, page 155].

- 3.104** Mr Sharp said that perhaps the main reason for the withdrawal of Transport Scotland was to make CEC take greater responsibility for the project [PHT00000015, pages 124 and 126]. This rationale fails, however, to consider what would happen if, in fact, CEC (or **tie**) did not adequately discharge this responsibility [ibid, pages 128–129]. If the desire was truly to encourage CEC to assume a greater onus, it would be reasonable to expect that there would be some follow-up by Transport Scotland to assess that its action was having the desired effect and some action plan in case it did not. This would particularly be the case in the situation, described by Mr Sharp, that there was doubt as to the ability of the CEC to step up [ibid, pages 129–132]. Despite this, there was no follow-up by Transport Scotland.
- 3.105** Although the need for clarity of roles was the suggested justification for the withdrawal of Transport Scotland, it is striking that, as time passed, the Scottish Ministers, and Transport Scotland on their behalf, appeared happy to intervene in a way that could have caused confusion as to roles. As noted above, at the time of the Princes Street dispute, Mr Swinney requested that Mr Mackay come and see him to discuss the situation and told him to get it “sorted” (see paragraph 3.63). Mr Swinney resisted the description of this as “pulling strings”, but in my view that is exactly what it was. It is of note that this intervention was not with CEC – the party they were funding – but required a direct contact between the Minister and the representative of the CEC delivery vehicle. I cannot reconcile this with Mr Swinney’s claim that he sought to exercise influence through the “proper channels”. Thereafter the contact and “influence” continued and developed. In 2010, notwithstanding all that had been said about roles, Mr Swinney had eight meetings with personnel from **tie** in relation to the project. Once again, his contact was with **tie** rather than CEC. His purpose in these meetings was, he accepted, to influence the project [PHT00000050, page 127]. He sought to draw a distinction between, on the one hand, giving directions openly, which he claimed would create confusion around leadership, and taking decisions and exerting influence behind closed doors, which he said would not. Apart from the issue that it cannot be good governance to have decisions behind closed doors, for which the decision-maker is not accountable, it seems to me that this is capable of giving rise to just as much confusion as to change of roles. The Minister had cut out the middle man – CEC – and was seeking to exert direct influence on **tie** through informal means. There could hardly be greater scope for confusion as to roles.
- 3.106** The concern that the project should be the responsibility of CEC – and seen to be such – was a valid one but, as noted above, this was well established prior to the 2007 election. There was therefore no need for change in June 2007. Mr Swinney’s concern as to having even a single representative on the TPB seems excessive. He accepted that he could not recall any report to him from Transport Scotland, CEC or any other person involved in the project expressing concern that there might be confusion between the role of Transport Scotland and that of CEC [ibid, page 56]. No such report has been uncovered by the Inquiry in the course of investigating this matter. It is notable that, in other projects, Transport Scotland has maintained a role without problem. However, even if there was any justification for the change to the

composition of the TPB, that would not justify the changes to the grant conditions and, in particular, the withdrawal of Transport Scotland from any consideration of the FBC and the contract. That involvement and those conditions should correctly be seen as officials in Transport Scotland protecting the interests of Scottish Ministers and safeguarding the proper use of public funds rather than undertaking any part of the project management for **tie**.

- 3.107** Although avoiding requests for further funding was on the minds of those involved in taking the decision, it is not a valid justification for the changes made to the role of Transport Scotland in 2007. The limit on funding had been made plain prior to the election and was reiterated by Mr Swinney following the vote in Parliament. As I have noted above, a request for additional funding could have been dealt with robustly.
- 3.108** The last aspect of the clarity of roles – compelling CEC to manage the project by removing the support that it had – was referred to by Mr Sharp. He said that, in stepping back, the Scottish Ministers gave CEC no choice but to fulfil the role Transport Scotland had been performing. He said that the view of the Scottish Ministers was that CEC would put in place a scrutiny regime that “would deliver at least as well as the one that had involved Transport Scotland” [PHT00000015, page 123]. To say that there was “no choice” and to make that assumption was, however, naïve. No safeguards or checks were in place to ensure that CEC would take on this role. As events unfolded, it became apparent that it had not. In my view, it should have been apparent at the time that there was such a risk.

New phase of the project

- 3.109** While recognising that the vote did not change the fact that CEC was responsible for delivery of the scheme, and always had been, Mr Swinney was concerned that the need for clarity was underlined by the move to a new phase of the project. Moving to a new phase was also relied on by Mr McLaughlin [PHT00000011, page 224; PHT00000012, page 1] and Dr Reed [PHT00000013, page 161].
- 3.110** At the time that the changes to the role of Transport Scotland were made, **tie** was undertaking work to appoint a contractor for the Infraco contract. This had not yet reached the stage of best and final offers and selection of a preferred bidder, but it was intended that the final decision as to which bidder would be awarded the contract should be made by the end of the year. The SDS contract and MUDFA had both been awarded, although little had been done under the latter and work had been stopped pending the results of the election. In this situation, and because it seemed that it was difficult to demarcate phases in the way that was being assumed, I was interested to know what was being done at the time that the decision was taken that amounted to a new phase. Accordingly, I asked Mr Swinney where the act of concluding the contract fell as between the project and formulation stage on the one hand and the delivery phase on the other. His response was:
- “Within – I would say it emerges within – well, there are of course different contracts at stake here, but I certainly would see the delivery phase being responsible for the formulation of the contracts that would be yet to be ascribed in the project.” [PHT00000050, page 32.]
- 3.111** This answer is far from easy to follow but I take it to mean that the conclusion of the contract falls within the delivery phase. If that is so, it seems an odd way to categorise it. However, even if that categorisation is accepted, it is notable that the contract stage had started in some respects some time earlier and would not be complete

for Infraco until May the next year. Whatever the demarcation line, it is clear that in June 2007 there was no move to a new contract phase, so this still does not provide a justification as to why action was taken in July and August 2007.

- 3.112** It had always been known that a delivery phase of the project would come and yet at no time prior to summer 2007 had it been suggested that such a change would have to be made when it did [PHT00000012, page 1]. In relation to the delivery phase, Mr Stevenson spoke in dramatic terms of the “first contact with the enemy” [PHT00000055, page 8]. However, there had been contact with the contractors as bidders for some time before the decision to change the role of Transport Scotland. There was no apparent change in their status at the time of that decision and the real change in status did not happen until the contract was awarded nine months later.
- 3.113** Although the merits of these positions as to when the delivery phase commenced could be debated, one thing that was clear was that, at the time of the decisions as to the role of Transport Scotland in June 2007, there had been no movement to another phase. The change that had occurred was the new Government. To attempt to disregard that and claim that it was a change in phase of the works was disingenuous at the very best.

Other projects – SAK and Holyrood

- 3.114** Mr Swinney and Mr Stevenson suggested that in withdrawing Transport Scotland from the project they were seeking to apply lessons learned from the Stirling–Alloa–Kincardine (“SAK”) railway project. At the outset, it is notable that there was no reference to the SAK project in any papers or advice leading up to the decision or in any written record of it. Mr Swinney sought to explain this away [PHT00000050, pages 30–32], but I found his comments hard to follow and unconvincing. Had it been a factor to any material extent and, in particular, if it was a factor of the importance that it was given by the Ministers in their evidence, I consider that it is inconceivable that there would not have been *some* written record that it had been taken into account.
- 3.115** In addition to the absence of any mention of it, when the circumstances of the SAK project are examined, they do not provide any justification for what was done in the Tram project. The decision taken in SAK was that Transport Scotland should *increase* its role in the project to the extent that **tie** was the only party removed from it [Mr McLaughlin PHT00000012, pages 21 and 28]. While it is clear that in the SAK project **tie** had inherited problems from the previous promoters, its performance in that project could not engender any confidence such as to lead to a lesser degree of scrutiny in the Tram project. The evidence available suggested that there had been shortcomings on the part of **tie** with project management and reporting in SAK. The Audit Scotland report that considered the SAK project [CEC01318113] noted that **tie** did not have the correct skills and experience, that control and challenge were weak and that specifications were not formalised. While still at Transport Scotland, Mr Sharp produced a speaking note that was drafted for Mr Stevenson to use in a Holyrood debate. He explained that he had spoken to the Minister before preparing the note and that his intention in drafting it was that its terms should reflect the Minister’s views. In relation to SAK, it notes:

“tie ltd given audition for a starring role through Project Management of SAK rail project ... But they fluffed their lines ...” [PHT00000015, page 105.]

- 3.116** One of the concerns in relation to performance by **tie** of its project management role concerned the inadequacy of its reporting and, in particular, an unwillingness to report bad news [**ibid**, pages 106–107]. Taking these at face value, they would have provided justification for increasing the role of Transport Scotland in the Tram project rather than reducing it.
- 3.117** Mr Swinney said that the problem with the SAK project had been that there were “too many cooks” [**PHT00000050**, pages 94–95] and he was concerned to avoid this in the Tram project. However, when asked, Mr Swinney could not identify which party in the SAK project was superfluous, although he suggested that the roles of project funder and project manager had overlapped there [**ibid**, page 101]. It is of note also that the report by Audit Scotland in relation to the SAK Project did not identify lack of clarity of roles or number of parties involved as a factor that had contributed to cost overruns. Mr Swinney’s attempts to point at some of the costs identified by the Auditor General and suggest that they were part of project management [**ibid**, page 97] was unconvincing and gave the impression that no consideration had in fact been given to whether the report’s terms were at all supportive of the allegations made. In my view, there was nothing in the Audit Scotland report to support the assertion that SAK was a project in which the problem arose from a lack of clarity regarding leadership or there being “too many cooks” [**ibid**, pages 94–95]. For completeness, I would note that Mr Swinney confirmed to the Inquiry, after he had given oral evidence, that the decision taken in relation to SAK to remove **tie** and pass the project to Transport Scotland was his and was made with the intention of having a simpler structure and improved governance [**TR100000266**].
- 3.118** Mr Stevenson also sought to rely on the SAK project, and claimed that operational complexity was an issue in relation to the problems that arose in SAK. In relation to the cost increases for the SAK project noted in the Audit Scotland report, he appeared to take the view that the existence of increases in cost after contract award was itself indicative of poor management [**PHT00000055**, page 34]. This is not what the Audit Scotland report says, and I reject Mr Stevenson’s evidence in this regard. He appeared to want to interpret evidence to suit his hypothesis and was happy to speculate in order to do so. The Audit Scotland report noted concerns about project governance and, as noted above, the solution to that was to *increase* the role of Transport Scotland so that it undertook project management *and* funding. It is not apparent to me how this can provide the justification that Mr Stevenson says that it can. Certainly, nothing said by Mr Stevenson gave any indication of how it could provide such a justification.
- 3.119** Even if the SAK rail project had been considered, therefore, what happened there would not have justified the decision to withdraw Transport Scotland from the Tram project. However, taking together the lack of any reasoned and credible explanation as to why the actions in the SAK project had any bearing on the Tram project and the absence of any contemporaneous reference to SAK as being a reason for decisions in it, I reject the evidence that SAK was taken into account at all.
- 3.120** Mr Swinney also claimed that lessons had been learned from the construction of the Holyrood Parliament building and the report into that by Lord Fraser [**PHT00000050**, page 104; **WED00000624**]. He claimed that one of the points that he thought came out very clearly was that there had been a lack of clarity about decision-making between various players who were involved in that project’s delivery [**PHT00000050**, page 105]. In the course of giving evidence at the hearings, he agreed to identify what it was in Lord Fraser’s report that he had relied upon. He subsequently wrote to the Inquiry [**TR100000266**]. In this letter, he states:

"In my thinking and decisions about the Edinburgh tram project, I did not have any of these specific points from Lord Fraser's report in mind, as I did not at the time recall the report at that level of detail. However, looking over Lord Fraser's report now in order to provide a response to the Inquiry, I consider these points to be the source of the impressions that I had formed about Lord Fraser's report – impressions which, in part, shaped my views about the governance arrangements for the Edinburgh tram project." [\[ibid\]](#), page 0002.]

- 3.121** The specific points he was referring to are considered below. However, this letter confirms the view – which I had reached from the absence of any reference to the construction of the Parliament in any of the contemporaneous written records of reasons for his decision – that, in reality, Lord Fraser's report did not inform his decisions in relation to the Tram project.
- 3.122** The issues in the report that Mr Swinney said in his letter were the source of the "impressions that [he] had formed about Lord Fraser's Report" [\[ibid\]](#) were:
- "that, when construction management is used, it is necessary to have well-defined roles and responsibilities from the start" and "an experienced and efficient team with good leadership (para 6.6)". This, however, is merely a note of evidence that Lord Fraser had heard from a single witness and in relation to using the construction management form of delivery of the project. That form of delivery does not aim for a fixed price and was therefore completely different to what was proposed for the Tram project.
 - that "the lack of clear lines of responsibility" between the project manager and the architect was an issue. It is not apparent to me how this issue has any bearing on the role of Transport Scotland in the project, as it was neither the designer nor the manager. The passage of the report referred to by Mr Swinney [\[WED00000624, pages 0109–0110, paragraphs 8.31–8.32\]](#) and the conclusions that follow from it [\[page 0251\]](#) actually addressed communications rather than responsibility, which casts further doubt on their relevance.
 - that in the parliamentary debate and the papers that informed it, mixed messages were given regarding the precise roles envisaged for the Holyrood Progress Group [\[ibid\]](#), page 0167, paragraph 10.41]. Again, I cannot see a way in which what is said in the report in this regard is relevant to the decision to withdraw Transport Scotland.
 - that one individual acted as de facto leader of the project team and sat as a member of the team whose role was to oversee the work of the team and himself [\[ibid\]](#), page 0168, paragraph 10.45]. The report notes that this blurred the lines of communication. The problem was that an individual was both the leader of the project team and a member of the body intended to oversee the work of himself and that team. No such issue has been identified in relation to the role performed by Transport Scotland on the Tram project.
 - that one of the recommendations of the report had been that "where civil servants are engaged on public projects, governance should be as clear as is now required in the public sector" [\[ibid\]](#), page 0264, paragraph 6]. It is not apparent what relevance this had to the Tram project as it stood in summer 2007. Even in relation to the Holyrood project, it is not something that is developed to any extent within the narrative sections of the report. It is not apparent what element of public-sector governance Mr Swinney had in mind, nor is its relevance to the project. What is of note, however, is that the changes made after the election removed the power of the Scottish Ministers to veto changes to governance arrangements.

Conclusions on justifications

3.123 It will be apparent from the above that I do not accept any of the purported justifications for the decisions taken in relation to the role of Transport Scotland.

Effect/consequences of the changes

3.124 As was noted above, one of the principal functions of the Transport Scotland representative on the TPB was as a conduit of information in both directions. As a result of the changes made, that was lost, as was the chance for Transport Scotland to influence directly decisions taken by the Board. Withdrawal from the TPB restricted the flow of information and Mr Ramsay was of the view that this had an adverse effect on provision of information to Transport Scotland [[PHT00000012](#), page 194]. He was not content with the quality of the information being provided [[ibid](#), pages 179, 194 and 207–215; [PHT00000013](#), page 6] but considered that at least when Mr Reeve was on the TPB, information could be obtained from him [[PHT00000012](#), page 194]. It is significant also that Audit Scotland recommended in its 2011 report that Transport Scotland should reconsider its role and that this hint was taken [Mr McLaughlin [ibid](#), page 2]. Mr Swinney did not accept that the evidence of how well the involvement of Transport Scotland worked after Mar Hall and the contribution that it was able to make was evidence that it might have been preferable had Transport Scotland remained involved throughout [[PHT00000050](#), pages 140–142], but in my view this is clear evidence of that. The Scottish Ministers claim that the project was "in a completely different place in 2011" [[TR100000291_C](#), page 0027, paragraph 48]. That is undoubtedly correct, but it does not mean that it would not have been a benefit in the period from 2007 to 2011 to have had the input that Transport Scotland provided with effect from 2011. The requirement that Transport Scotland be involved later cannot be explained away as having arisen due to a vacuum created by the removal of [tie](#). Turner & Townsend had taken over its role.

3.125 Within CEC there was a negative view of the withdrawal of Transport Scotland. All the Council officials who gave evidence to the Inquiry about this spoke of their disappointment and described adverse consequences for CEC in various ways. It left a gap in expertise and experience that CEC was unable to fill because it was hard to replicate the input of a national organisation [[PHT00000041](#), pages 71–72]; Transport Scotland had brought experience in relation to major projects from the client's perspective, which was not matched elsewhere, and the individuals involved had made significant contributions to the general discussion and debate; CEC had been reliant "to a considerable extent" on Transport Scotland's experience and expertise in delivering major transport infrastructure projects; CEC was not able to fill the gap in experience and expertise left by its withdrawal [[PHT00000042](#), pages 2–4]; Transport Scotland had provided an additional check on [tie](#) but after its withdrawal from the project its role had changed to being simply that of a funder [[ibid](#), pages 135–137; [TR100000060_C](#), page 146]. As noted above, prior to its withdrawal, Transport Scotland, as the major funder of the project, had taken the lead role in scrutinising the capital costs and bids, it had a wide pool of specialists and access to experience that was not available to CEC and its withdrawal greatly increased the challenges on CEC, which did not have the same level of expertise or resources with which to scrutinise the project [Ms Andrew [PHT00000005](#), page 49; [TR100000023_C](#), pages 13 and 20].

3.126 Mr Jeffrey put the matter succinctly as follows:

"Q. The role of Transport Scotland. You have commented in your statement it was unhelpful to have them disengaged from the project. Why did you consider that was unhelpful?

"A. Frankly, I find it a little bizarre that somebody – a body that is putting up 80 per cent of the cost of the project would not be represented on at least one of those Boards." [PHT00000032, page 9.]

3.127 Mr McLaughlin said that he did not consider that a continuing representation on the TPB from Transport Scotland would have substantially improved the delivery of the project [PHT00000012, page 2]. This, however, fails to have regard to the totality of the changed role of Transport Scotland and, in particular, the loss of any oversight or approval of the FBC. While it was claimed that **tie** was happy to have Transport Scotland playing a lesser role, it is of note that Mr Jeffrey was of the view that it could usefully have taken a more interventionist role throughout the contract [PHT00000032, page 13].

3.128 I am satisfied that the evidence discloses that had Transport Scotland retained the role that it had prior to July 2007, it would have considered the terms of the Infracore contract and obtained a legal review of its terms before it was signed [PHT00000015, page 134]. This was the practice of Transport Scotland in other contracts in which it had involvement. This review would have considered whether the terms were consistent with the risk transfer principles and whether key procurement principles had been implemented [*ibid.*, page 135]. Mr Sharp noted that if the FBC had been reviewed by Transport Scotland in the latter half of 2007, it would have been at least as thorough as the earlier reviews, and concerns relating to delays, increases in cost and optimistic assumptions as to programming would have been followed up [*ibid.*, pages 93–94]. This raises the issue of whether, had the contract been subject to such an independent review prior to signature, the problems inherent in it would have been identified. Those problems in the contract were apparent to Mr Nolan when he was instructed by **tie**, to D&W when it was instructed by Transport Scotland in 2009 and to Anderson Strathern when it was instructed by Mr Jeffrey in 2010. There is no reason to suppose that a review in early 2008 would have failed to identify the shortcomings of the contract before its signature. It has to be accepted that each of these firms was instructed at a time when disputes as to the meaning of the contract had already arisen and that they could be expected to have directed particular attention to the problematic issues. On the other hand, the price was clearly a critical issue under the contract and the desire to have a fixed-price contract was well known. Had a review by an experienced independent firm of solicitors been instructed by Transport Scotland in April/May 2008, I consider that the effects of Part 4 of the Schedule to the contract ("SP4") in relation to the issue of whether or not there was a fixed price would have been identified.

3.129 With a view to saying that the terms of the contract were not what determined the outcome, BB, Siemens and DLA Piper Scotland LLP ("DLA") have said that no other deal was available. While it is possible that the issue of who bore the risk and how it was to be priced would have been an insurmountable hurdle and that the situation truly was one of taking things as they were or abandoning the project I do not think that this was the likely outcome. Where there is a desire to conclude a contract, solutions can usually be found. A review of the contract that identified the problems would at least have produced some certainty. Even if Bilfinger Berger and Siemens really would not have departed from the position in SP4 as

drafted, **tie** and CEC would have entered into the contract with awareness of what they were facing. Alternatively, in view of the long-standing concern on the part of CEC that there should be certainty as to the cost of the project, I consider that there is a real possibility that the contract would not have been signed at all. This would have meant that unless an alternative contract could be negotiated, all the expenditure up to May 2008 would be wasted. There was also a possibility, however, that a contract for a shorter section of line 1a than from the Airport to Newhaven would have been concluded on contract terms that were more certain and less disadvantageous to CEC. On any view, had the parties known where they stood, it is likely that less time and money would have been spent in dealing with disputes. The final cost of the disputes – in terms of time spent fighting them, harm caused to the working relationship between **tie** and the consortium, the additional claims for delay and the premium that had to be paid to achieve settlement is apparent in Chapter 19 (Mediation and Settlement), which considers the Mar Hall mediation. It is also apparent from the evidence considered in that chapter that, by that time, the situation had deteriorated to the degree that CEC was in an almost impossible position. That could all have been avoided if there had been awareness on the part of **tie** and CEC of the pitfalls that the contract created for them.

- 3.130** From the standpoint of the Scottish Ministers and Transport Scotland, had they known about the problems in the draft Infraco contract they would have been in a position to take a better-informed decision as to their actions. Had they known that the draft contract exposed **tie**/CEC to additional costs, they would inevitably have reconsidered affordability, viability and the BCR. It is possible that they would still have decided to make the grant available but, in view of what had been said up to this point and the exchanges in the course of the parliamentary debate in June 2007, I think that this is unlikely. If the BCR was less than 1 it is almost certain that the project would not have proceeded at all. That would have achieved the result sought in the SNP's manifesto commitment, as would a decision by CEC not to sign the contract mentioned in the previous paragraph. It is ironic that one consequence of the removal of Transport Scotland from the project was to deprive the Scottish Ministers of an opportunity that would realistically have existed to terminate the project. On any view, however, whatever decision was taken would have been based on a full understanding of the situation and with a better idea of how matters might develop.
- 3.131** By taking Transport Scotland out of the TPB and by removing it from evaluation of the business case, it was inevitable that the decision to make the grant available in January 2008 would be less well informed and therefore more prone to containing errors. The transfer of risk was an important part of the project strategy but the remote role that Transport Scotland was obliged to play as the contracts were negotiated in 2008 meant that it was unable to carry out an assessment of whether risk had in fact been transferred [[PHT00000012](#), page 221]. It would have been useful for it to have been in a position to do so.
- 3.132** Mr Swinney considered that for the Scottish Ministers to have returned to Parliament, even nine months after the vote, and said that they would not advance monies until CEC addressed concerns about affordability, risk and BCR would have been construed by his political opponents as being obstructive [[PHT00000050](#), pages 80–81]. In my view, that is not a reason to abandon the role of ensuring that the money was spent wisely. It is true, as Mr Swinney said, that CEC was bound to ensure that the contractual terms were appropriate and effective and that appropriate arrangements were in place [[ibid](#), pages 82–83]. However, this cannot obscure the fact that, as at 2007, the intention was that CEC would contribute £45 million and the

Scottish Ministers would contribute more than 10 times that amount. In view of the Scottish Ministers' scale of interest it was not appropriate to depend entirely on CEC. Mr Reeve sought to defend the change, saying that Transport Scotland expected that the estimates had been prepared by competent people and would therefore expect that they were established on a competent basis [PHT00000012, page 99]. This does not bear scrutiny. The same expectation would exist prior to the change in conditions and it had not precluded a detailed and independent review by Transport Scotland of the draft FBC submitted in December 2006. There was no objective reason to decide that it was no longer appropriate to have these safeguards in place to protect public money. When Mr Reeve was questioned in relation to this by Counsel to the Inquiry and myself [ibid, pages 101–106], I considered that his evidence was wholly unsatisfactory.

- 3.133** The grant conditions were such there was very little that Transport Scotland could do in practical terms when things were going wrong. It could seek to discuss matters – as it did – or it could resort to Cure Notices or withhold further payments of grant. These latter options were drastic and, as was noted in the evidence, as matters deteriorated, it was not clear that exercising any of them would do any good. **tie** was already engaged in trying to find a cure for what was happening, and withholding grant money would only have placed the whole burden for payment on CEC and could have given rise to default in payments, further worsening the contractual position. However, unless an Event of Default arose and Transport Scotland was willing to invoke the terms of the grant letter, as Mr Reeve accepted, no matter how much bad news was disclosed, there was still a requirement to pay the grant [ibid, page 95]. Mr McLaughlin acknowledged that, by the time that the concern arose within the Government, no effective options were open to it [PHT00000011, page 163]. Mr Swinney agreed that the revised conditions had left Transport Scotland with little by way of levers or control [PHT00000050, page 85]. In relation to the effect of withdrawal from the TPB and what could be done if information about problems came to the attention of Transport Scotland, Mr Stevenson was unable to give a clear and comprehensible answer despite being given ample opportunity [PHT00000055, pages 20–26]. He recognised that with the new grant conditions Transport Scotland might cancel or rescind payments but had no other powers available to it [ibid, pages 26–27]. Mr McLaughlin was reluctant to answer questions put to him as to the desirability of reserving to the Scottish Ministers an ability to intervene in this situation, but ultimately, in response to a question from me, he accepted that this would have been desirable [PHT00000011, page 165]. Mr Ramsay considered that there was a requirement for a more hands-on approach from time to time as situations began to develop.
- 3.134** The fact that by this time no effective action could be taken by Transport Scotland underlines the importance that should have been attached to Scottish Ministers being satisfied regarding the position before committing to pay the grant. At that time, they were in a position to obtain such information and assurances as they wished.
- 3.135** The Scottish Ministers submitted that it would not have been appropriate or even possible for Transport Scotland to have imposed operational control on a sponsored body via grant conditions [TR100000291_C, page 0014, paragraph 26]. I do not agree. The existence of the controls in the "hold points" described above indicates what could have been done to give Transport Scotland a chance to consider the position before a final decision to proceed. I accept that it would not have been appropriate for Transport Scotland to have day-to-day operational control once the Infraco contract had been awarded and work was under way. Even at that time, however,

some degree of oversight as to the processes of management and reporting and of the progress of the project would have provided an opportunity for earlier and more effective intervention. It might be argued that this would undermine the promoter and have the effect that all large projects or those needing funding from Scottish Ministers would be carried out by Transport Scotland. Such an extreme position might be unrealistic, but there is force in the issue raised by Mr McLaughlin in his email of 1 December 2010 [TRS00011413]: is it ever a good idea to have the funder standing in a position that is remote from the works?

Conclusions

3.136 Mr Stevenson said that, after the vote in Parliament and the decision to continue with the project, it was a priority of the Government:

“to protect the Scottish taxpayer and ensure that all major transport projects deliver value for money” [PHT00000055, page 55].

3.137 In response to a question from me, Mr Stevenson said he considered that the Government had still got value for money. Even then, he sought to shift matters to suggest that CEC could have got better value for money. He stated that Transport Scotland oversight was effective “in the sense that the Government did not spend more than GBP500 million” [ibid, page 57]. He also said that the Government “got what we paid for” [ibid, page 58]. This was on the basis that it paid out only against work that had been undertaken. If this is really what he believed, it is astonishingly complacent on his part. Much less was obtained for the £500 million grant money than had been intended. Mr Stevenson was reluctant to face this and preferred to talk about payment for works done and even to focus on the use being made of the tram system once it was completed. I do not accept that he can be as unaware as he claims to be about the key issue that Ministers got much less than they thought that they would get when they provided a grant. To focus only on the Government expenditure and ignore what was obtained for it abandons any notion of getting “value” and is a remarkable approach from someone who was a Government Minister at a relevant time.

3.138 Although Mr Swinney said that he would do nothing differently if doing the project again [PHT00000050, pages 5–6], the conclusion of what I have considered above is that that would be an error. Mr Swinney said that the responsibility of Transport Scotland and the Scottish Ministers was:

“Firstly, to ensure that every reasonable measure was taken to ensure that the project was able to deliver what had been expected of it by the parliamentary vote and, secondly, to protect the Scottish Government purse.” [ibid, page 80.]

3.139 Mr Swinney considered “that every reasonable measure was taken” [ibid]. I do not agree. He said that he would expect matters such as a review of the contract or review of the structures for delivering it to have been undertaken by CEC. Leaving these critical matters to CEC with no checks in place to ensure that such steps were taken is, in my view, wholly inconsistent with having taken every reasonable measure. It amounted to an abdication of responsibility for ensuring that public funds provided by Scottish Ministers for a specific project were spent wisely.

Chapter 4

Legal Advice

- 4.1** Before considering specific issues arising from the evidence to the Inquiry it is useful to consider the legal firms instructed in relation to the project and the roles they played. This considers only the firms instructed to give advice that is material to the Terms of Reference of the Inquiry.
- 4.2** Until 2011, DLA Piper Scotland LLP ("DLA") were the principal solicitors instructed by **tie** Limited ("**tie**"). (See paragraph 4.3 for an explanation of that firm's various changes of name during the period considered in this Report.) The firm McGrigors was instructed by **tie** from 2009 and its involvement developed until it assumed the role of principal solicitors to **tie** in 2011, prior to the mediation at Mar Hall. In addition to these firms, at various times, advice was sought by Mr Jeffrey from Anderson Strathern WS, by Transport Scotland from Dundas & Wilson ("D&W") and by the City of Edinburgh Council ("CEC") from Shepherd & Wedderburn WS. This chapter considers the instructions given to the various firms. The content of the advice that was given is considered in the chapters concerned with the issues to which the advice relates.

DLA

- 4.3** Throughout the period considered in this Report, the limited liability partnership now known as DLA Piper Scotland LLP underwent a number of changes of name. Although various documents provided to the Inquiry refer to the name of the firm at the relevant date (DLA Scotland LLP, DLA Piper Rudnick Gray Carey Scotland LLP and DLA Piper Scotland LLP) it is referred to throughout the Report as "DLA Piper Scotland LLP" or "DLA".
- 4.4** DLA was first appointed by **tie** in November 2002, following a competitive procedure [[CEC00031181](#); [CEC00031180](#) – letter of appointment and letter of acceptance]. The scope of its instructions at that stage was stated to be "to provide legal advice to the extent required by **tie** in relation to overall procurement and strategy options for the delivery of the Edinburgh Tram project". As matters developed, DLA not only provided advice up to the conclusion of the contracts but also advised in relation to the disputes that arose under those contracts.
- 4.5** The partner who led the team at DLA was Mr Fitchie. Mr Fitchie was assisted by his then associate, Dr Fitzgerald. In the stage up to conclusion of the contract, he was also assisted by Mr Hecht. Later, once the disputes had arisen with the consortium, he sought assistance from colleagues who dealt with contentious matters, namely Mr Bentley, Mr Kilburn and Ms Mason.
- 4.6** For some months in 2007, **tie** did not use the services of any external legal advisers. DLA was stood down in April 2007 and reinstated later that year. There is no written record of the decision to discard external legal advice or the detailed reasons that led to it. A "lessons learned" paper prepared by Mr Bissett in June 2008 [[CEC01344688](#), page 0012] records that:

"Tie has enjoyed a close working relationship with principal legal advisors DLA. In 2007, a decision was taken by the project team to substantially replace DLA with internal resource as a means of saving cost. The internal resource was not adequate and exclusion of external advisors probably cost more than it saved."

And

"[i]n a complex legal environment, consistency of advice is essential. Reversion to in-house resource was a mistake, though without lasting consequences, which should have been avoided."

The statement of Mr Gallagher [TR100000037_C, page 0016, paragraph 55] suggests that issues of cost may have influenced the decision to stop using external legal advisers.

- 4.7 The lack of a written record of the decision means that it is not possible to identify with certainty the period during which DLA was stood down. Mr Fitchie suggests that it was from April to September [TR100000102_C, page 0133, paragraph 7.40], and he describes the period as being for "five to six" months. This period does not fit with the correspondence in August 2007 between Mr Fitchie and Ms Lindsay at CEC regarding the duties owed by the firm to CEC (see paragraph 4.24 below). Mr Fitchie says that during the period when DLA was stood down Jonathan More was employed by **tie** as an in-house legal adviser from June 2007 to April 2008, so for the period from April 2007 (when DLA was stood down) to Mr More's appointment in June 2007 **tie** did not have access to any legal advice from either DLA or Mr More.
- 4.8 In his statement Mr Bissett says:
- "Around the time of Financial Close, either just before or just after, there was a feeling within TIE that TIE and the Council's position could be strengthened by having more internal legal support, instead of being solely reliant on external legal advisers. At that time, there was also a concern to assess whether TIE was obtaining value for money from the external legal services. Dundas & Wilson were also acting for TIE and possibly the Council, also in my view in a proper, professional manner." [TR100000025_C, page 0067, paragraph 188.]
- 4.9 There is no other evidence to support the view that having more internal legal support would strengthen the position of CEC and **tie** or that this view was held by anyone at the time. It is clear from other evidence, including Mr Bissett's own "lessons learned" paper noted above, that shortly after contract close his view was that it had been a mistake to attempt to use only in-house resources. The passage quoted above, together with the evidence of Mr Gallagher mentioned in paragraph 4.8, tends to suggest that the reason for the decision to dispense with the services of DLA was based upon a desire to economise. If that was the reason, it was a false economy. As a generality, I agree that strengthening internal legal support should be beneficial to an organisation, provided that no other changes are made to its existing legal advisers. In the absence of a reason such as dissatisfaction with the services being provided (which was not recorded here), replacing existing external legal advisers, who have expertise in procurement and in advising on the terms of commercial contracts, with a newly recruited internal solicitor who has had no prior involvement with the project will weaken the position. That is particularly the case where, as here, that decision resulted in the unavailability of legal advice from either internal or external advisers for a period of about three months. I agree with the conclusion in the "lessons learned" paper that consistency of advice was essential and that the decision to replace DLA with an internal resource was a mistake. The "feeling within tie" referred to in Mr Bissett's evidence quoted above as the reason for the action taken by **tie**, does not justify it and demonstrates a disregard of the interests of **tie** and CEC at a critical stage of the project.

- 4.10** It is also surprising, and a cause of concern, that a decision as important as deciding to cease using external legal advice was taken without any written record being made. At the time, **tie** was in the course of taking steps to award contracts for the infrastructure and the tram vehicles. This was a context in which it should have been clear to its management that access to legal advice with relevant expertise and experience was likely to be more important than ever. It is also noteworthy that none of the members of **tie's** senior management, who gave evidence, admitted taking the decision to stand down DLA or was even able to say who had taken the decision or why. Despite being Executive Chairman, Mr Gallagher claimed to have no recollection of either standing DLA down or re-engaging it. Despite being the Project Director at the relevant time, Mr Crosse said that he was unaware that a decision had been made to stand DLA down.
- 4.11** It is incredible that no one from senior management would have been aware of these decisions at the time. Indeed, I would have expected most of the members of the team – and, in particular, those engaged in the award of the contracts – to have been aware of it. I am led to the conclusion that these witnesses, perhaps realising how ill advised the decision was, were trying to distance themselves from it. As a result of the paucity of documentary or oral evidence available to the Inquiry, it is not possible to say with certainty which witnesses were party to the decision. It is possible, however, to identify those who, on any view, because of their position in the company, ought to have known of it and must bear responsibility for it. On that basis, the responsibility for this decision must lie with Mr Gallagher, Mr Crosse and Mr Gilbert (the Commercial Director at that time).
- 4.12** In the period during which DLA was not instructed, **tie** was undertaking the work to award the infrastructure contract ("Infraco contract") and the tram vehicle supply and maintenance contract (the "Tramco contract"). Although the preferred bidder stage had not been reached, discussions were held with bidders as to the terms of the contracts. While no final agreements were concluded in the period between April and September, Mr Fitchie explained that what had happened placed additional pressure on legal resources when DLA was reinstated. Agreements that were intended to be in the same form for all bidders had been changed by negotiation. This was a departure from the procurement strategy. The reasons for it are not recorded. Mr Fitchie explained that DLA's ability to negotiate the contracts in the period remaining before the intended close was impaired because it had not been engaged for this five-month period. He said that when DLA was re-engaged, it was necessary to revisit parts of the draft contract that had been agreed by **tie** during the period when DLA was not involved. In this regard, I prefer the evidence of Mr Fitchie, who was directly affected by the decision, to the very general statement made by Mr Bissett in the "lessons learned" paper noted above that the decision caused no lasting effects.
- 4.13** I am not, however, able to find that there was a direct causal link between the situation created by the absence of legal advice from DLA for several months and the problems that emerged in December 2007 and are considered in this chapter and in Chapter 10 (Events between October and December 2007). I consider that it is clear, however, that the absence of external legal advice for several months and the departure from the procurement strategy contributed to the situation that existed in December 2007. It meant that **tie** was "on the back foot" in negotiations at the critical period of moving to the preferred bidder stage and negotiating up to financial close.

4.14 I consider that the decision to abandon external legal advice in 2007 was very ill advised. The absence of any documentation recording the decision or the basis for it makes it more unsatisfactory. Any decision to do without legal advice at such a critical stage would require clear and compelling reasons in order to be justifiable and appropriate. The absence of documentation suggests that the matter was not properly considered before the decision was taken. While the inadvisability of the decision was recognised in June 2008 by Mr Bissett, I consider that it should have been apparent at the time that the decision was made. The decision was reckless.

Mr Fitchie's secondment to tie

4.15 When DLA resumed work on the project, Mr Fitchie was described as being "on secondment" to **tie**. It appears from Mr Fitchie's statement that this was in response to Mr Gallagher's desire to have his secondment from DLA to **tie**, failing which **tie** would seek someone from D&W [TR100000102_C, page 0135, paragraphs 7.49–7.50]. There was some ambiguity as to what the secondment meant. Mr Gallagher said that the rationale for it was to make Mr Fitchie "part of the team" [TR100000037_C, page 0016, paragraph 55]. In the same vein, a draft set of proposals for the secondment attached to an email sent on behalf of Mr Fitchie at the time [CEC01656650; CEC01656651] envisaged that he would be the Acting Commercial Director of **tie**, reporting to the Executive Chairman. Despite these proposals, Mr Fitchie was not a director, an employee or an officer of **tie**. It appears that the secondment amounted only to Mr Fitchie committing 90 per cent of his time to work on the project. This meant that it was DLA that was providing legal services to **tie** and bearing responsibility accordingly. It is apparent, however, from emails from Mr C MacKenzie, a solicitor within CEC's Legal Department, dated 23 November [CEC01399996] and 28 November 2007 [CEC01544715], and a meeting of the CEC/**tie** Legal Affairs Group on 26 November 2007 [CEC01500853], that confusion as to his status remained.

Bonus

4.16 After the Infracore contract was signed, **tie** paid a bonus of £50,000 to Mr Fitchie. This was paid to him personally and not to DLA, which fuelled further ambiguity about his status. A bonus paid to him personally from **tie** would not be expected where the firm, DLA, rather than him as an individual, was providing services. That the bonus was paid to him rather than the firm tends to suggest that there was a direct relationship in terms of which Mr Fitchie personally, rather than DLA, was providing the services for legal advice. However, later, when it became aware of the bonus, DLA required that he remitted it to the firm. This, in turn, is consistent with the position, noted above, that the services were provided by DLA and the secondment was merely a commitment that a certain proportion of Mr Fitchie's time would be devoted to the project.

Role of DLA in relation to CEC

4.17 It had been part of the terms of the procurement exercise under which DLA was appointed that whoever was awarded the work would have to acknowledge that, in performing it, a duty of care was owed to CEC. On 23 June 2005, in response to a request for acknowledgement that DLA owed a duty of care to CEC, DLA sent a draft letter to **tie**, confirming that it owed the same contractual duty of care to CEC as it owed to **tie** [DLA00006300]. This was said to be subject to the following conditions, among others:

"1 DLA Piper's primary responsibility has been and is to advise **tie** Limited and DLA Piper may at all times and for all purposes rely upon **tie**'s instructions

given to us under the Appointment as being identical to CEC's instructions as if emanating from CEC itself and as taking into account CEC's objectives and best interests;

- 2 DLA Piper remains expressly authorised to receive and seek all instructions (and any clarifications) under the Appointment solely from **tie** as Project manager and agent for CEC and in the absence of specific written instruction from **tie**, DLA Piper has not been and is not under obligation to advise CEC staff or members directly;
- 3 DLA Piper is entitled for all purposes to rely upon (i) the satisfaction and approval of **tie** Limited with, and of our performance of services, delivery of work product for the Project and discharge of the duties of care in accordance with the Appointment and (ii) the presumption as to such satisfaction and approval to date. Under no circumstances shall the existence of the contractual duty of care acknowledged in this letter give rise to CEC having any separate or different recourse, remedies or claims to those available to **tie** Limited by reason of any default by DLA Piper under the terms of the Appointment ... "

4.18 The last paragraph of this letter stated that in order to put the undertaking into effect, **tie** should arrange for a copy of the letter to be signed by representatives of **tie** and CEC and returned to DLA. This was not done.

4.19 The draft letter was sent under cover of another letter of 23 June 2005 from Mr Fitchie to Mr Macaulay, Projects Director at **tie** [DLA00006301]. It provided an explanation for each of the paragraphs above, as follows:

"Para 1 We are happy to extend to CEC the same duty of care we owe to **tie**. Since we have contracted on the basis of **tie** Limited as client and the party who instructs us, we believe it would not be reasonable to place us in a position where we have to make assumptions about CEC's interests or instructions.

Para 2 We need to continue to advise **tie** (as a sole source of instructions), whose interests (and therefore the fiduciary duty of its Board) may not fully coincide with CEC's objectives and interests; this is a judgement only **tie** can make.

Para 3 Absent a separate appointment providing for direct engagement with CEC, the additional duty of care should not give rise to the possibility that CEC applies a different interpretation of the duty of care we owe or seeks different recourse or remedy for any breach by us."

4.20 Even taken at face value, these explanations raise questions. If a duty owed to CEC was to be effective, it would be necessary that the interests and objectives of CEC were taken into account, and DLA would have to be made aware of them. It is also notable that Mr Fitchie recognised that the interests of **tie** might not fully coincide with the interests and objectives of CEC. This became an issue later and is considered in the paragraphs below. At this stage, however, it is surprising that CEC was willing to accept a duty of care qualified by a statement that DLA was entitled to follow the instructions of **tie** without any regard for whether they were in the interests of CEC. This unsatisfactory position, remained, however, for a further two years while several significant contracts for the project were awarded (the Developing Partnering and Operating Franchise Agreement ("DPOFA"), the Multi-Utilities Diversion Framework Agreement ("MUDFA") and the System Design Services ("SDS") contract).

- 4.21** In 2007, as the work to appoint a contractor for the Infracore contract was under way, an issue arose within CEC as to whether it required external legal advice independent of that available to **tie**. Ms Lindsay, the Council Solicitor within CEC, considered that it was unnecessary, provided that DLA acknowledged CEC as a joint client with **tie**. Other officials at CEC took the opposite view.
- 4.22** In a private internal email within CEC's Legal Department, dated 1 August 2007, from Mr N Smith to Mr C MacKenzie and Mr Squair, Mr Smith expressed the following view:
- "To the extent that the Council is unable to consider/accept that **tie** has fully considered and acted in CEC's interests throughout the negotiations to date, a full external review [of the proposed contracts] would in my opinion be required to protect CEC's interests fully." [CEC01564769]
- 4.23** On 7 August 2007, Mr Bissett of **tie** sent an email to Ms Lindsay and Mr C MacKenzie, among others, in which he said that he would contact DLA about **tie**'s relationship with CEC. On 10 August, Ms Lindsay responded to express her view that what was required was for DLA to accept that CEC was a joint client with **tie** or the ultimate client [CEC00013273]. That is what happened eventually and it raises two issues:
- 1 was any arrangement that was to be put in place sufficient to ensure that CEC obtained the advice that was appropriate to it; and
 - 2 was there an actual or potential conflict of interest between the interests of CEC and those of **tie**?
- 4.24** On 16 August 2007, Mr Fitchie sent an email to Ms Lindsay [CEC01711054] with a draft letter [CEC01711055] that he said he proposed to send to CEC to affirm the duty of care and joint client status. The attached letter reiterated that DLA owed the same contractual duty of care to CEC as it owed to **tie**. In a development upon the correspondence in 2005, the draft letter specifically acknowledged that CEC was a joint client with **tie**. However, that was said to be on the basis of the following conditions:
1. DLA Piper's primary responsibility has been to advise **tie** Limited and DLA Piper may at all times and for all purposes rely upon **tie**'s instructions given to us under the Appointment as being identical to CEC's instructions as if emanating from CEC itself and as taking into account CEC's requirements, objectives and best interests.
 2. DLA Piper remains expressly authorised to receive and seek all instructions (and any clarifications) under the Appointment from **tie** as Project manager and agent for CEC. In the absence of specific written instruction, DLA Piper has not been and is not under obligation to advise CEC officers or members directly, under exception that DLA Piper will brief CEC officers at regular intervals as instructed by **tie** Limited, or as required by CEC.
 3. DLA Piper is entitled for all purposes to rely upon (i) the satisfaction and approval of **tie** Limited with, and of our performance of services, delivery of work product for the Project and discharge of the duties of care in accordance with the Appointment and (ii) the presumption as to such satisfaction and approval to date. Under no circumstances shall the existence of the contractual duty of care acknowledged in this letter give rise to CEC having any separate or different recourse, remedies or claims to those available to **tie** Limited by reason of any default by DLA Piper under the terms of the Appointment ..." [ibid].

- 4.25** The three conditions repeated what had been said in the 2005 letter, with the only change of substance being the addition, at the end of the second condition, of the words after "under exception that". Despite this, the covering email from Mr Fitchie stated:
- "I do not envisage any conflict of interest here; to the contrary – in closing the required supply contracts as part of the procurement process, there needs to be complete commonality of interests and objectives among the Council, **tie** and TEL. That is not to say that there will be and will have been detailed discussions (in which we would have our role as advisers for the Project) on key issues in order to reach that commonality." [\[CEC01711054\]](#)
- 4.26** There is a clear inconsistency between the statement in this email that Mr Fitchie did not envisage a conflict of interest and the contents of the 2005 letter, noted above, which recorded that the interests of **tie** and those of CEC might not fully coincide. This was not commented on at the time.
- 4.27** Once again, both the email and the letter sought that **tie** should sign and return a copy of the letter after it had been signed on behalf of CEC, but this was not done. Although the letter was not signed and returned as requested, DLA continued to provide advice. During the hearings, counsel for DLA accepted that the letter bound the firm.
- 4.28** The decision to proceed on the basis of this draft letter was opposed by a number of council officials. Some of them, including Mr C MacKenzie, Mr N Smith, Mr Squair and Mr Fraser, were members of the project team within CEC who were engaged on the Tram project full-time and who reported to the Director of Finance and the Director of City Developments as the two responsible directors or, in the case of legal issues, to the Council Solicitor. The members of the Tram project team who reported to the two responsible directors or the Council Solicitor referred to themselves as the "B team". They used that term in email correspondence as illustrated by Mr C MacKenzie's email dated 11 March 2008 to various people including the two responsible directors (Mr Holmes and Mr McGougan) and Ms Lindsay, the Council Solicitor [\[CEC01393838\]](#). For ease of reference I have adopted that term when referring to their actions but in doing so I acknowledge that there was only one Tram project team within CEC and I do not intend to minimise their role or their responsibility for their actions as part of that project team. The persons in that group were strongly of the view that CEC should obtain external legal advice from a firm other than DLA. The principal concerns, from Mr C MacKenzie and Mr N Smith in particular, were as follows.
- 1 The attempt by **tie** to involve CEC could have the effect of letting **tie** "off the hook" and was a trap for CEC.
 - 2 If CEC were to become involved in carrying out a review, it would be necessary to have external advice, as the necessary expertise did not exist within CEC.
 - 3 The possibility of a conflict of interest between **tie** and CEC meant that they should not be using the same advisers.
 - 4 Related to the previous point as to conflict of interest, because DLA had been instructed solely by **tie** to date and CEC was not aware of the content of all the instructions, CEC could not be sure that what had been done to date was in its best interests.

- 4.29** On 15 August, Mr C MacKenzie responded to Ms Lindsay's email of 10 August [CEC00013273], referred to in paragraph 4.23 above. He expressed the view that CEC would require detailed advice on all the risks to it in signing the contracts and that its internal solicitors did not have the necessary expertise or manpower to carry out the required review. He did not regard as adequate the proposed solution of DLA accepting CEC as a joint client. He explained that this was because CEC would have no assurance that its interests had been safeguarded in the negotiations that had already taken place and the drafting that had already been done. He was concerned that, by involving CEC at the last minute, **tie** might get off the hook and that it would be a trap for CEC. He also posed the question of what would happen if a conflict emerged between **tie** and CEC prior to the contracts being concluded. In his oral evidence, he reiterated his concern that, by making CEC the joint client, **tie** was transferring some of the responsibility for the contract to CEC [PHT00000026, pages 21–22]. He considered that the commonality that was referred to in Mr Fitchie's email enclosing the draft "duty of care" letter did not exist [*ibid.*, page 26]. Mr C MacKenzie's colleague, Mr N Smith, considered that the proposed letter was wholly inadequate to protect CEC's interests. This was because it was predicated on the assumption that all instructions that had been given from **tie** were identical to the ones that would have come from CEC [PHT00000005, page 148].
- 4.30** Both Mr C MacKenzie and Mr N Smith felt sufficiently strongly about the issue of the requirement for external legal advice that they considered whether they should inform CEC's Monitoring Officer of their concerns. Mr N Smith did not go so far, however, as to consider that the failure to obtain external advice was maladministration. In the event, neither of them took the matter up with the Monitoring Officer.
- 4.31** On 23 August 2007, another member of the "B team", Mr Fraser, of CEC's Development Department, sent an email to Mr Holmes, the Director of City Development, in which he, too, recommended the appointment of external advisers to consider the risks to which CEC was exposed by the contract [CEC01567522].
- 4.32** Ms Lindsay, on the other hand, was equally firm in her view that independent legal advice was not required and that DLA could represent the interests of CEC. In response to the email dated 15 August from Mr C MacKenzie [CEC00013273], referred to in paragraph 4.29 above, on 17 August she sent him a memorandum in which she expressed, in trenchant terms, her dissatisfaction with his approach. Ms Lindsay noted that, as far as she was concerned, the decision to have DLA provide letters acknowledging CEC as a joint client had already been taken, and she forwarded to him draft letters from DLA. She reiterated her request for a report on the contract documents as they then stood [TIE00897231]. Although he was told by Ms Lindsay in that memorandum not to pursue the matter of separate representation, Mr C MacKenzie continued to do so, as he was not satisfied with the justification that Ms Lindsay had given for her decision [PHT00000026, page 28]. In response to the memorandum, Mr C MacKenzie instructed Mr N Smith to undertake a review of the contracts but, on 28 August 2007, he emailed Mr C MacKenzie, indicating that he could not do so [CEC01564795]. In his oral evidence, he explained that this unwillingness to provide the review was on the basis that it would not be a comprehensive review, would not be in CEC's best interests and would amount to his failing in his professional obligations to CEC. It does not appear that Ms Lindsay was made aware of this refusal.

- 4.33** It is striking that, during the correspondence in August 2007 about whether CEC should have independent legal advice or about varying the terms of the appointment of DLA as project solicitors to include CEC as a joint client with **tie**, no one from **tie** or DLA mentioned that **tie** had taken a decision in April 2007 to stand DLA down and that it had had no external legal advice since then. Neither was any mention made of the fact that there was a period of about three months between April and June 2007 when **tie** did not have the benefit of legal advice from either DLA or Jonathan More, the internal solicitor recruited to replace DLA. It is apparent from emails within CEC that it was not aware of this. It is obvious that such information would have been material to consideration of whether independent legal advice was required.
- 4.34** The dispute as to whether to seek external legal advice took place between August and November 2007. At that time, the parts of the contract that were to cause so much difficulty later had not been drafted. If, however, an external adviser had been appointed, or it was clear that DLA was required to be familiar with and protect the interests of CEC, I consider that the terms of the contract as it developed from this time until it was concluded in May 2008 would have been scrutinised to assess their potential effect on CEC. If this had not been done, there would have been little point in having the advice. Had there been legal advice on the evolving contract that considered the interests of CEC, it is likely that the problems that later came to light would have been detected. I reach this view on the basis that those problems were identified in March 2009 when Mr Ramsay of Transport Scotland instructed D&W to carry out a review (see paragraph 4.64 below).
- 4.35** Given that DLA had been instructed on the basis noted above, I consider that it was necessary to instruct external legal advisers to ensure adequate protection for CEC's interests. The failure to take external advice was a missed opportunity to detect and correct the problems. In view of the value of the contract and the obvious potential exposure for CEC, I consider it a clear error of judgement not to have sought independent legal advice and that there was a failure by Ms Lindsay, as the Council Solicitor, to protect her client's interests. I agree with Mr N Smith, however, that, while this was a serious failure, it did not amount to maladministration.
- 4.36** There was a marked lack of clarity as to the obligations to CEC being undertaken by DLA. Despite the misgivings of council officials noted above, the intention was that CEC would be a client of DLA along with **tie**. If CEC were a joint client, it would be expected that DLA would be in a position to advise CEC and protect its interests. That was the understanding of Ms Lindsay. Mr Gallagher was also of the view that DLA was to advise CEC [**PHT00000037**, page 149]. It is striking, however, that in his statement Mr Fitchie expressed the view that "[i]t was not my or DLA Piper's function, as TIE's legal advisor, to provide advice spontaneously to CEC" [**TR100000102_C**, page 0138, paragraph 7.64]. Similar views were expressed in paragraphs 7.65 and 7.275. In his oral evidence, Mr Fitchie initially stated that his role had been to advise **tie** and that he was never involved in advising CEC unless directly requested to do so by **tie** [**PHT00000017**, page 13]. He was of the view that the protection of CEC's interests was handled or dealt with by **tie**.
- 4.37** The lack of clarity may have its roots in the terms of the letter provided in August 2007 [**CEC01711055**]. Although there is a clear statement that DLA "acknowledge CEC as joint client with tie Limited" [**ibid**, page 0001], it is then qualified by the same conditions as contained in the earlier 2005 letter [**DLA00006300**], as is noted in paragraph 4.17 above. These are difficult to reconcile with joint client status. Mr Fitchie was questioned about the apparent inconsistency between the second condition and the position in his statement at paragraph 4.60, on the one hand, and the records

of advice having been given. He said that there was "quite a mixture of instruction going on" [PHT00000017, page 34]; and that there was:

"a general instruction from Richard Jeffrey for me to provide CEC with legal support or ... to provide CEC Legal with what they wished to have in terms of information and advice that **tie** was ... receiving from DLA Piper" [*ibid.*, page 35].

Mr Jeffrey's involvement in the project did not occur until after the signature of the contracts and the later departure of Mr Gallagher.

- 4.38** Mr Fitchie ultimately accepted that DLA was providing advice directly to CEC [*ibid.*, pages 37–47]. He was at pains to point out that this illustrated DLA's support for the project. However, for present purposes what matters is that DLA was undertaking the role of providing advice to CEC. Having considered the evidence I am satisfied that CEC was DLA's client for the purposes of the project from at least 2007. As such, DLA owed duties of care to CEC. These duties would apply in addition to those owed to **tie** and, critically, even if the interests of **tie** and CEC were to diverge.
- 4.39** In considering whether there was such a divergence of interests and what effect the 2007 letter had upon that, it is useful to consider the meaning of the conditions in the draft letter sent in 2007, which are reproduced in paragraph 4.24 above.
- 4.40** The first condition in the letter was concerned with the issue of instructions. It addressed the situation that could occur if **tie** and CEC were to give inconsistent instructions to DLA. That would put DLA in an impossible position as it could not perform its duty to both clients. However, the condition purported to go further than this in that it gave primacy to the obligations owed to **tie**. It also deemed **tie**'s instructions to be the same as any that would be given by CEC. This appeared to put CEC in the position of not being able to give instructions or properly to acquaint DLA with its interest and objectives. The very act of deeming CEC's instructions to be the same as those of **tie** should have raised the very obvious question as to what should have happened if the instructions in fact were *not* the same. How would the interests of CEC be addressed in that situation? This was more than a theoretical possibility, in that while **tie**'s interests were focused on delivery of the project, the interests of CEC as a local authority were much wider. Such questions should have been considered by DLA and, more importantly, CEC. Had CEC done so, it would have been apparent that it required independent external advice to protect its interests, including its obligation to safeguard the public funds that it was providing to **tie** for the project.
- 4.41** The first part of the second condition dealt once again with instructions. It made **tie** the agent of CEC for the purposes of giving instructions. This created all the problems noted in paragraph 4.40. It meant that although a duty was owed to CEC, the views and interests of CEC would not be considered except to the extent that they were articulated by **tie**. The later part of this paragraph dealt with the issue of provision of advice. It sought to remove any obligation to advise CEC directly. It had the same problems as have already been discussed. However, as noted above, DLA did provide advice directly to CEC. In my view, the actions of the parties clearly superseded this part of the qualification.
- 4.42** The conditions did not address the question of what was to happen if DLA were to become aware that the interests of its two clients did not coincide and that a course of action proposed by **tie** was not in the interests of CEC. There appears to have been an assumption that the interests of **tie** and CEC were the same. This rested on the fact that **tie** was wholly owned by CEC. In that regard Mr Fitchie observed that:

"TIE's interests were accepted as derivative of and synonymous with those of CEC. CEC could therefore avoid the strict legal requirement for a formal tender process." [TR100000102_C, pages 0009 and 0047, paragraphs 2.11 and 4.30.]

- 4.43** The import of that evidence was that the parent–subsidiary relationship meant that CEC had been able to appoint **tie** to carry out the works rather than seeking bids in a public procurement exercise. That was correct as a matter of the law of public procurement, but it did not address the issue of whether a conflict of interest could emerge between **tie** and CEC. It did not necessarily mean that the subsidiary would always act in the best interests of the parent. This should have been apparent to the parties at the time. The same assumption as to common interest appears to have arisen out of the Operating Agreement between **tie** and CEC [CEC01351476], which was also relied on by Mr Fitchie [TR100000102_C, pages 0009 and 0047, paragraphs 2.12 and 4.32]. While the intention was that **tie** would act to promote the interests of CEC, it should have been apparent that this might not be the case – whether as a result of inadvertence or intention.
- 4.44** Not only can it be said that it ought to have been apparent that interests could diverge; the evidence indicates that DLA was in fact well aware of that possibility. Even the letter of 23 June 2005 from DLA, which accompanied the draft letter confirming the duty to CEC, noted that the interests of **tie** might not fully coincide with those of CEC [DLA00006301, page 0001, paragraph 2]. The email sending the 2007 "duty of care" letter [CEC01711054] said that there "needs to be complete commonality of interests and objectives among the Council, **tie** and TEL". Mr Fitchie said that the duty was extended to CEC on the basis "that there was complete commonality of interest" [TR100000102_C, page 0049, paragraph 4.41]. This makes no sense. It is clear from the accompanying letter in 2005 that Mr Fitchie was aware that the interests might not converge. It appears that this reliance upon commonality of interest was an attempt to sweep a very difficult and important issue under the carpet. In addition, Mr N Smith pointed out in evidence that he was not aware of such discussions regarding commonality having taken place [PHT00000005, page 157]. The acknowledgement by DLA that discussions would be required, together with the knowledge from DLA and CEC that these had not taken place, ought to have indicated to both CEC and DLA that the necessary commonality might not exist, and should have raised concerns. The possibility that the interests were not aligned should have been the subject of particular care so that, if it did arise, DLA would be able to meet its professional obligation to notify both clients and one or both of them could be advised to seek independent legal advice [Mr Fitchie PHT00000017, pages 29–30].
- 4.45** As noted above, the issue of whether separate advice was required was hotly contested. On this basis, I consider that if it had not been made clear at the outset that the interests of CEC were to be protected, even in 2007 when the issue was first raised, separate advice for CEC would have been appropriate. This is not a comment made only with the benefit of hindsight. I consider that a proper examination of the position in 2007 would have revealed the scope for the interests of **tie** and CEC to diverge. The 2007 letter did not address that adequately. It attempted to hide the problem by sidelining CEC. The interests of CEC were subordinated to those of **tie** and were inadequately protected. In this regard I agree with the views of Mr C MacKenzie and Mr N Smith, noted in paragraph 4.28 above. It also appears to have given DLA the false comfort that it did not need to be on guard for a situation in which the interests of the parties diverged so that it could bring this to its clients' attention.

- 4.46** Mr Fitchie considered that the various CEC officials involved in governance of the project were in a position to judge whether separate legal advice was necessary. While it is fair to say that these people might have been in a position to make such an assessment, that does not relieve Mr Fitchie and DLA of their obligation to notify CEC if they considered that a conflict of interest might arise – not least because DLA would be better informed than CEC was of developments in the project and the instructions given by **tie**. Mr Fitchie accepted that none of the other people whom he said were in a position to form a view on whether independent advice was required was in as good a position as he was to understand the development of the draft contracts and the risk that they presented to CEC.
- 4.47** In fact, as the negotiations on the Infraco contract proceeded and moved towards conclusion, the interests of **tie** and CEC did start to diverge. Mr Fitchie, at least, was aware of this. He considered that the decision by **tie** not to exercise remedies available to it under the Rutland Square Agreement must have sent a message to the consortium that, above all else, **tie** wanted to award the contract [TR100000102_C, page 0220, paragraph 7.467]. Mr Fitchie pointed out that the context for his statement was that CEC was aware of the demand for price increase. Nonetheless, a desire to award the contract “above all else” is indicative that the interests of CEC were no longer being protected by **tie**. That alone should have indicated to him that the interests of **tie** were likely to be in conflict with those of CEC.
- 4.48** As will be considered in more detail in later chapters, **tie** went on to conclude the contract on terms that imposed substantial risks on CEC. When asked whether he was in fact in the best position to advise CEC if the contracts turned out to be adverse to its interests, Mr Fitchie initially claimed that he did not have complete knowledge of CEC’s interests. If that were the case it would strengthen the argument for CEC’s taking separate independent legal advice. On further questioning, however, it was clear that he fully understood that CEC was exposed to overruns on the cost and that he was in the best position to take a view on whether the contract was a fixed-price one [PHT00000017, pages 49–50]. This was an area in which it should have been apparent to him, to officials in CEC and to the personnel at **tie** that **tie** and CEC had different interests. Accordingly it would have been expected that DLA would advise its client, CEC, that its interests were not being protected. That this was not done is a material failing.
- 4.49** Had CEC sought independent legal advice prior to conclusion of the Infraco contract it is likely that the risks would have been disclosed to it. What difference would that have made? I have already rejected any suggestion that it would have made no difference to the outcome of the project even if CEC had been made aware of the true position (see paragraph 3.129). The concern of CEC to avoid exposure to cost overruns was apparent to all. The importance of the contract’s being a fixed-price one had been emphasised time after time. At the very least, had CEC been aware of the situation it could be said that its decisions had been fully informed and taken with full awareness of the possible consequences. If that had been so, the response by **tie** and CEC when problems arose under the contract would probably have been different. I find it inconceivable that matters would have proceeded as they did had there been awareness of the risk. However, had CEC had the necessary awareness I think that it more likely than not that the terms of the draft contract would have been developed further to provide some protection to CEC. Bilfinger Berger asserted that it would not have done anything differently. It is easy to make such a claim after the event. I accept that it is possible that this would have been the outcome, but experience of commercial parties negotiating agreements suggests that it is more

likely that there would have been some element of compromise. Whether there was any compromise or not, CEC would have been aware of a more realistic estimate of the cost of the project. If the estimated cost exceeded the budget of £545 million, CEC could have considered different options, including: refusing to conclude the Infraco contract with the consortium; constructing only part of the route (as ultimately happened); postponing the project; or abandoning it altogether.

- 4.50** I accept the evidence that the consortium would not have accepted all the risk for incomplete designs without adjusting the contract price. It is possible, however, that different parts of the risks would each be handled in their own way, with perhaps some of them being accepted by the consortium in return for the addition of a risk premium to the contract price and other risks remaining with **tie**/CEC. Even if all the risks were left with **tie**/CEC it is likely that they would have been properly valued and, when the risk event arose, there would have been less procrastination, with the resultant delay to the contract and consequent expense. It is also likely that fewer matters would have been referred to the dispute resolution procedure, with its consequential delays, additional costs and deterioration in the working relationships between the parties.
- 4.51** The above discussion considers the issue of advice from DLA as it arose in the evidence; it was instructed for **tie** at the outset, a "duty of care" letter in favour of CEC was sought and, as contract close approached, questions arose as to whether CEC should have independent legal advice. In my view, however, this could be seen as considering the issue of legal advice from the wrong starting point.
- 4.52** The respective interests of CEC and **tie** should have been addressed at the outset, when **tie** first appointed DLA to advise on legal issues relating to procurement and strategy options for the delivery of the project. Although **tie** was charged with taking decisions to implement the project, it was CEC's project. As noted in Chapter 3 (Involvement of the Scottish Ministers), the grant funding was capped. As such, the whole financial responsibility for excess cost would fall on CEC and it was its reputation that would suffer if the project failed to deliver. The interests of **tie** in the project were those of delivery by a single-purpose company that was wholly owned by CEC. CEC's interests were very much broader, in relation to both the trams and its other statutory responsibilities. The interests of CEC were the ones that DLA should have been required to protect. If, at any time, the interests of **tie** differed from CEC's interests, it should have been recognised that they were subordinate to those of CEC and should always have been treated as such. It should have been presumed that **tie**'s interests coincided with those of CEC, but if any doubt or conflict arose the interests of CEC should have prevailed. Therefore, had the proper approach been adopted at the outset, it would have been apparent that the correct question was not whether CEC might require independent advice, because there should have been a clear understanding that its interests were paramount and the advice that was obtained should be to protect CEC's interests. If advice was necessary to consider the interests of **tie** in isolation, that should have been the advice that was sought independently.
- 4.53** Neither **tie** nor CEC should have accepted "duty of care" letters in the form in which they ultimately rested. The second paragraph of Mr Fitchie's letter of 23 June 2005 to Mr Macaulay, mentioned in paragraph 4.19 above, should have served as a clear warning that the priorities were not adequately understood and reflected in the letter [DLA00006301]. It should have been apparent to all concerned at that time that the interests of **tie** were subservient to those of CEC, and the need to be aware of CEC's interests, the clarity of instructions and the duties owed should have been framed

in light of that. This was an issue that should have been identified at the time of the tendering exercise to obtain legal services so that the duties were owed to the most appropriate party from the outset. DLA was correct to say that it should not make assumptions about CEC's interests. DLA should have been required to determine what those interests were. If it considered that the actions of the persons at **tie** from whom it took instructions were in conflict with those interests, it should have been clear to all parties that the matter would be reported to CEC for clarification. CEC was not an "add-on". It is simply not adequate – from the standpoint of either a proper discharge of professional duties or the effective management of CEC's interests – to say that the issue of whether the interests of CEC and **tie** diverge "is a judgement only **tie** can make" [ibid], as Mr Fitchie stated in his letter.

- 4.54 The consequences of not having these priorities accurately established were correctly identified in the email from Mr N Smith to his colleagues dated 1 August 2007, which is mentioned in paragraph 4.22 above [CEC01564769]. CEC's interests should have been fully considered in 2002, when **tie**, as agent for CEC, appointed DLA as solicitors for the project. In 2007, during the run-up to the award of contracts, it was far too late for this critical issue to surface, by which time the only way to ensure that CEC's interests had been adequately protected until then was for CEC to seek independent legal advice. In my view the position in relation to the "duty of care" letter was even worse than Mr N Smith suggested in his evidence (see paragraph 4.29 above); it was couched in such terms that its true function was to protect DLA's interests rather than those of CEC.
- 4.55 Had DLA been instructed in such a way that it had to protect the interests of CEC, in preference to those of **tie**, where there was any misalignment between them, I consider that the failures to identify and advise on the terms of the contract during the negotiation and at contract close would not have happened; see Chapter 11 (Contract Negotiations) and Chapter 12 (Contract Close).
- 4.56 There were a number of points at which critical decisions were taken in relation to legal advice. The first was at the stage of tendering and appointment where the scope of work was limited to advising **tie** with only a duty of care being owed to CEC. The second was in accepting a "duty of care" letter, which, as noted above, was inadequate to protect CEC. The third – which I consider to be very much subsidiary – was the failure to obtain independent legal advice when the limited terms on which DLA would give a "duty of care" letter became apparent. The outcome of these decisions left CEC unprotected. I consider that, taken either individually or collectively, this was one of the key elements in the project where a decision or decisions were taken that would have far-reaching adverse consequences.

McGrigors

- 4.57 The firm known by the name "McGrigors" in the period from 2009 to 2014 has since been merged with another firm: Pinsent Masons. That latter firm was involved in the project as legal advisers to Bilfinger Berger. Therefore, to avoid confusion and to differentiate the two firms as they were in the period of the implementation of the project, the name "McGrigors" is used to denote the firm that existed under that name in the period from 2009 to 2014.
- 4.58 Throughout its involvement McGrigors was instructed by **tie**. As part of its appointment it was required to provide a "duty of care" letter to CEC [CEC00774999]. This was addressed to CEC rather than **tie** and did not contain the qualifications that DLA had sought to impose. It was therefore more likely to provide an appropriate

degree of protection to CEC. However, the work in relation to which McGrigors was instructed was such that, in my view, the same conflict between the interests of **tie** and CEC did not arise. Nevertheless, the same consideration as to which body's interests should have been put first applies.

- 4.59** McGrigors' first involvement in the project post-dates the conclusion of the Infraco contract. The firm was first instructed in July/August 2009 in relation to the disputes under that contract that were accumulating. Mr Jeffrey, **tie**'s Chief Executive between April 2009 and June 2011, instructed it with the specific intention of assisting in the determination of which disputes should be referred to the contractual dispute resolution procedure [TRl0000097_C, page 0020, paragraph 124; presentation to Tram Project Board of 29 July 2009, CEC00376412, page 0022]. Mr Jeffrey stated that he was unhappy by the end of 2009, following the decisions of adjudicators that were adverse to **tie**'s interests, and consequently decided to instruct McGrigors [TRl0000097_C, page 0059, paragraph 363]. In fact, it is apparent that McGrigors had already been instructed to work for **tie** but its role did increase significantly after the end of 2009. In an email from Mr N Smith to Ms Lindsay in February 2010 there is a suggestion that the reason that McGrigors, as opposed to DLA, was tasked with reviewing the contract for **tie** was in case solicitors within DLA were required to be witnesses in any litigation alleging breach of contract [CEC00480029].
- 4.60** In 2010, McGrigors was instructed to provide advice as to the meaning and effect of the Infraco contract, and it became involved in the conduct of an adjudication and the determination of strategy to be adopted by **tie**, as well as Project Pitchfork, which is mentioned later in the Report. In November 2010, McGrigors largely took over from DLA in providing legal advice to **tie**. The only matters retained by DLA concerned ongoing adjudications. There was a formal handover in January 2011. McGrigors provided advice leading up to, during and after the Mar Hall mediation in 2011.
- 4.61** It is apparent from the above that, for some time, both DLA and McGrigors were instructed to act for **tie**. There does not appear to be a clear record of the demarcation for division of work or consideration of the rationale for maintaining instructions to two firms.

Dundas & Wilson

- 4.62** D&W was instructed at a number of different times and in relation to a number of different issues.
- 4.63** Initially, it had been engaged along with Bircham Dyson Bell, solicitors in London, in relation to the promotion of the private Bills necessary for the construction and operation of the tram lines.
- 4.64** Later, in March 2009, Mr Ramsay of Transport Scotland asked D&W to review the Infraco contract. This was in part to ensure that the Scottish Ministers would not be exposed to claims for cost overruns. In addition to producing a formal letter reporting on the contract [TRS00031282], D&W commented to him that the contract was not fit for purpose and would tend to encourage disputes [PHT00000012, pages 222–226]. This is considered in more detail in Chapter 3 (Involvement of the Scottish Ministers).
- 4.65** Later, in February 2010, on the recommendation of Mr Maclean, following his appointment as Head of Legal and Administrative Services, CEC instructed D&W to conduct a review of the Infraco contract and report on options for **tie** leaving the contract [CEC00480029 – email from Mr N Smith to Ms Lindsay]. Mr Jeffrey stated that the reason for the report was that CEC was concerned that the

option of termination was being considered and that wrongful termination would have a substantial downside [TR100000097_C, page 0034, paragraph 20g]. The tenor of the advice is recorded in an email from Mr N Smith dated 12 February 2010 [CEC00450359] and a draft report, also dated 12 February 2010, from D&W [CEC00551307]. The issue of termination of the contract is considered in more detail in Chapter 17 (Adjudications and Beyond).

Anderson Strathern WS

4.66 In November 2010, Mr Jeffrey became concerned at certain issues relating to the contract and the advice received by **tie** and CEC in the run-up to awarding it. He reported his concerns to Mr Maclean, who, in turn, reported them to the CEC Monitoring Officer (Mr Inch) [TR100000055_C, pages 0026–0027, paragraph 71; CEC00013342]. Mr Jeffrey then instructed Anderson Strathern to advise on the following three questions:

"1) were there grounds for TIE to take action against DLA for advice they gave TIE in the run up to the contract signature, 2) was there evidence that TIE misled or misreported the issues on the contract to CEC at the time of the contract signature and 3) was payment of bonuses to TIE staff following conclusion of the contract legal and appropriate" [TR100000097_C, pages 0005–0006, paragraph 24]?

4.67 The letter of advice is WED00000018. On behalf of CEC Recovery Limited (the current name for **tie**), CEC has claimed privilege in relation to this document. It has therefore been redacted to conceal parts to which this privilege attaches.

Shepherd & Wedderburn WS

4.68 Mr Maclean stated that Shepherd & Wedderburn (S&W) was instructed by CEC at around the end of September or early in October 2010 [TR100000055_C, page 0017, paragraph 52]. He said that, until that time, CEC had been relying on **tie** and its advisers. This therefore reflects the first step to obtaining independent legal advice. Mr Maclean records that the reasons for seeking independent advice at this stage were his "serious concerns about the validity of these [Remediable Termination] notices and, further, the strategy that TIE were adopting" as well as his concerns "about the approach of TIE, DLA, in some cases CEC's management team and the Project Team". S&W was then instructed in a number of the issues that were arising at the time:

- 1 In October 2010, S&W was instructed to consider possible termination of the Infraco contract and the validity of the Remediable Termination Notices served under the contract libid, pages 0018–0019, paragraph 55].
- 2 In November 2010, S&W was instructed by CEC to review the commentary on adjudication decisions prepared by DLA for **tie** [CEC00005337]. S&W's report is dated 26 November 2010 [CEC00013525]. It says that it was instructed by CEC, but in his statement Mr Mackay says that he had instructed it to provide an independent report [TR100000113_C, page 0094, paragraph 338]. I prefer the statement in S&W's report and have concluded that Mr Mackay is mistaken in his recollection on this matter.
- 3 In November 2010, S&W was also instructed to advise on what the contractual position would be with Construcciones y Auxiliar de Ferrocarriles SA in relation to supply of tram vehicles if the Infraco contract were to be terminated [TR100000055_C, pages 0021–0022, paragraph 62].

- 4 Also in November 2010, S&W was instructed in relation to seeking the advice of Nicholas Denny QC in relation to the issues with the Infracore contract. This is considered in more detail in Chapter 17 (Adjudications and Beyond); Chapter 18 (CEC: May 2008–2010); and Chapter 19 (Mediation and Settlement).
- 4.69** It is apparent that, later, Mr Maclean sought advice from S&W as to whether CEC, as the parent of **tie**, should become involved in the disputes between **tie** and the consortium. The advice was that it should not.

Chapter 5

Procurement Strategy

Preliminary matter

- 5.1 Before addressing the substantive issues in this chapter, it is necessary for me to make some preliminary comments on the evidence. Mr Kendall worked with **tie** Limited ("**tie**") between September 2003 and May 2006, latterly as its Tram Project Director ("TPD"). He was described by Mr Crosse as the "commercial architect" of the Edinburgh Tram project (the "project") [TR100000031_C, page 0001, paragraph 1]. It is clear from Mr Kendall's own remarks to the Inquiry that he was closely involved in the development of **tie**'s strategy for the procurement of the project [TR100000136].
- 5.2 Mr Kendall attended an interview with a member of the Inquiry team on 19 and 20 May 2016, having been sent in advance a list of topics for discussion prepared by counsel to the Inquiry. A similar approach was taken with other witnesses whose evidence was thought likely to be important to the Inquiry's terms of reference. For those other witnesses, the Inquiry in many cases produced a draft statement based on the interview, which the witness was then given an opportunity to review or revise, as they considered appropriate. Those witnesses were then invited to sign their statements, which had been revised to take account of their responses, to confirm the truth of their contents. Mr Kendall died before this procedure could be followed with him. The Inquiry has a typed transcript of Mr Kendall's interview [ibid], which is the only record of his responses to the matters put to him by the Inquiry.
- 5.3 I have taken the view that it is appropriate for me to have regard to that transcript [ibid]. In doing so, I keep in mind the following points. First, Mr Kendall did not have the same opportunity as other witnesses to see his interview answers presented in a draft statement, or to reflect either on the substance of the statement or on the way in which it was expressed. Second, Mr Kendall did not give evidence in person at the Inquiry's oral hearings, as many other important witnesses did. He did not therefore have the opportunity to clarify points of importance in response to questions from counsel or from me, nor did I have the opportunity to form an impression of him as a witness. There was no opportunity to put to him any of the evidence given by other witnesses. Third, his interview answers were not given under oath or affirmation. That puts his evidence into a different category from that of witnesses who attended the oral hearings, all of whom at that stage, under oath or affirmation, adopted their witness statements as accurate. I kept these considerations in mind when assessing the evidence, and am satisfied that Mr Kendall's remarks in the interview are nonetheless of assistance to me.

Introduction

- 5.4 From an early stage in the project, City of Edinburgh Council ("CEC") and then **tie** sought advice on the best means of procuring the main contracts that would be needed to build and operate the tram scheme. For example, in 2001, CEC commissioned a study by Turner & Townsend, management and construction consultants, on appropriate procurement strategies for what was then the proposed North Edinburgh Transit Project. The report of its strategic project review was issued to CEC in September 2002 [CEC01868789]. Between 2002 and 2004, **tie** ran a procurement group that was tasked with considering how best to procure the tram system. The procurement group included professional advisers from various disciplines, including DLA, Grant Thornton, Mott MacDonald, Faber Maunsell and Partnerships UK [CEC01853491; CEC00630633, pages 0019 and 0058].

Reports by the National Audit Office, Audit Scotland and Lord Fraser of Carmyllie

- 5.5** By 2004, there was recognition of a need for more innovative approaches to the procurement of tram and light rail schemes in the UK. A report by the National Audit Office ("NAO") published that year, which was entitled 'Improving public transport in England through light rail', recommended that the Department for Transport ("DfT") seek to identify more cost-effective procurement methods for such projects [[CEC01708649](#)]. It noted the poor financial performance of several existing schemes, and the tendency of scheme promoters to seek to transfer as many of the project risks as possible to the private sector. Such factors were leading to inflated project costs, as the private sector either avoided light rail projects altogether (removing competition) or sought greater margins for taking the risks. The NAO suggested that better sharing of project risk and alternative contract structures could help to reduce the cost of such projects and encourage private-sector investment. In particular, it noted that the private sector was generally well equipped to carry construction risks, but not the revenue risks of operating schemes, the incidence of which was often influenced by factors beyond the private sector's control. The NAO also noted that the diversion of utilities tended to be an expensive part of tram or light rail schemes, and recommended that the DfT fund projects only where the promoters had adequate proposals for managing the risks associated with such diversions. Mr Kendall told the Inquiry that, following the experience of Carillion Utility Services Limited on the Nottingham project, contractors were not willing to take the risk associated with diverting utilities: in his words, "they lost their shirt and everyone in the market place knew it" [[TR100000136](#), pages 0062 and 0074]. **tie** and its advisers were aware of the NAO report and sought, by their procurement strategy for the Edinburgh project, to address the issues that it had raised [see, e.g., [CEC00115187](#), page 0009; [CEC01875336](#), Part 2, page 0038, paragraph 5.2.1; Dr Fitzgerald [PHT00000039](#), page 140 onwards]. The principal lesson that **tie** took from the NAO report was that risk should be actively managed out of the project. It also noted the need for new procurement structures, with better risk-sharing arrangements than had been used previously. Its objective was to find a cost-effective procurement method "as a means of controlling cost" [[CEC00115187](#), page 0009].
- 5.6** Outside the narrow sphere of light rail projects, 2004 saw the publication of two reports into the cost overruns suffered by the project to build the new Scottish Parliament building at Holyrood – one by Audit Scotland ["Management of the Holyrood building project", June 2004 [ADS00054](#)] and the other by Lord Fraser of Carmyllie following his public inquiry ["The Holyrood Inquiry", September 2004 [WED00000624](#)]. These were perhaps less directly relevant than the NAO report in shaping a procurement strategy for a Tram project [Mr Fitchie [TR100000102_C](#), page 0071, paragraph 4.162; Dr Fitzgerald [TR100000036_C](#), page 0027]. Nonetheless, they made important findings relevant to the procurement by public bodies of major construction projects, and **tie** aimed to take account of their findings [[CEC00630633](#), page 0008; [CEC01875336](#), Parts 1–2, pages 0007, 0009, 0011 and 0038].
- 5.7** One of the key issues identified by Audit Scotland was the need to define the client's requirements before awarding contracts, if price certainty was an objective. On the Holyrood project, contracts had been let before the design was finished to meet a programme that was demanding and, in hindsight, probably unachievable. The consequence was that fixed prices could not be negotiated for many contracts, and price competition at the tender stage was restricted. Further, having awarded contracts with uncertain scope and design, the client was in a weak position to

resist contractors' claims for extra time-related costs. Even where the contractors' performance might not have been satisfactory, there was little opportunity to attribute delays to those contractors because of delays occurring elsewhere in the overall programme [ADS00054, pages 0008–0009 – in particular key findings at paragraphs 8, 13 and 14]. Audit Scotland emphasised in the following comment that, to achieve price certainty, it was important to allow sufficient time for procurement:

"[t]here must always be sufficient time for procurement to allow the client's requirements to be adequately defined so that it may obtain fixed and firm prices for the work in a competition" [ibid, page 0011, paragraph 33].

5.8 tie said that it had learned lessons from Audit Scotland's report. These included:

- the need for realistic programming for design and construction, taking into account all critical project assumptions that could delay the scheme;
- the need to optimise the transfer of design and construction risk to the private sector;
- the need to initiate detailed design at the earliest opportunity to avoid variations; and
- the need to ensure that the decision to award contracts was taken with a clear understanding of the obligations and of any elements yet to be clarified. [CEC01875335, pages 0104–0105; TRS00000053, from page 0020; CEC01705043, from page 0020.]

5.9 On 12 November 2004, **tie** submitted a response to each of the parliamentary committees considering the Edinburgh Tram (Line One) Bill and the Edinburgh Tram (Line Two) Bill (the "Tram Bills") [CEC01705043; TRS00000053 respectively]. The issues raised by the committee for each Bill were similar and the responses quoted below were identical. In its responses to the committees **tie** said:

"[t]he contract structure will prevent any open-ended commitment of funding, as has been a problem on other public projects such as the Holyrood building" [CEC01705043; TRS00000053, page 0002, paragraph 8]

and that

"the risk of capital cost overrun is mitigated by the fact that no commitment will be made to construction until robust contractual arrangements are in place and the affordability of the project is agreed" [CEC01705043, page 0004, paragraph 19; TRS00000053, page 0003, paragraph 16].

Tram operator

5.10 The first element of **tie**'s procurement strategy to be put into place was its early appointment, in May 2004, of a tram operator, Transdev Edinburgh Tram Limited ("Transdev"), under a Development Partnering and Operating Franchise Agreement ("DPOFA"). In spring 2003, **tie** had determined that this was an "innovative and critical element of project risk management" [CEC00630633, page 0060], for the principal reasons summarised below.

- Constructing the tram system, on the one hand, and operating it, on the other, involved different risks; by separating those risks into different contracts, **tie** would allow bidders to focus on those risks that they were suited to bear. That was in turn thought likely to reduce risk premiums, and thus the price that each bidder would demand.

- Early involvement of the operator in production of the design would ensure that the design met the operator's needs. That would remove the risk of redesign being required at a later stage, as might occur if the operator was appointed only after the design had been produced.
- **tie** could draw upon the operator's knowledge and experience to assist during negotiation of the construction contracts, with a view to keeping construction prices down.
- The operator could assist in planning, from an early stage, the integration of the tram network, especially with bus operations.

5.11 **tie** considered that the NAO report pointed strongly to the early involvement of the operator of the light rail system "as a means of improving ... procurement and achieving a stable and affordable system" [[libid](#), page 0060]. **tie**'s approach was a rejection of the simple private funding model used for other public transport infrastructure projects, under which a concession company would design, build, finance and operate the infrastructure in return for the revenue streams it generated [[libid](#), page 0058]. By separating the construction risks and operating risks into different contracts, and seeking to allocate them to the parties best able to bear them, **tie** was following the advice of the NAO. Furthermore, **tie** noted the financial underperformance of UK tram and light rail schemes procured under full private finance initiative ("PFI") or public-private partnership ("PPP") structures, in which all of the revenue ("fare box") risk had been transferred to the private sector. In such schemes potential concessionaires lacked confidence in patronage modelling, leading them to discount revenue streams heavily when negotiating contract prices and to seek significant risk premiums [[libid](#), page 0064]. To avoid these problems, under the DPOFA, **tie** proposed to leave much of the revenue risk with the public sector. A degree of control over the public-sector exposure to that risk would be introduced via a "pain/gain sharing mechanism" [[CEC01875335](#), page 0062].

5.12 **tie**'s Pre-Qualification Guide for the proposed competitive procurement of the DPOFA contract identified further objectives in the early appointment of an operator:

- to help to support **tie**'s economic and technical case in the parliamentary process for approval of the Tram Bills;
- to support **tie** in the procurement of tram infrastructure, vehicles and equipment;
- to identify the "Edinburgh tram network as an attractive, innovative and deliverable scheme with strong, committed private sector involvement" [[DLA00004903](#), page 0013].

5.13 **tie** considered that awarding separate contracts for operating the tram system and for constructing it would:

"offer a fundamentally more attractive commercial package to bidders for the respective contracts and should, as a consequence, deliver a better value for money solution to **tie** and the Council" [[CEC00630633](#), page 0048].

5.14 **tie** reported an "enthusiastic" response to its market consultation on the DPOFA contract. Pre-qualification submissions were received from six candidates, the majority of whom were described by **tie** as "market leading operators" [[CEC01875336](#), Part 3, page 0053, paragraph 5.6.3]. They included Transdev SA, a public transport operator headquartered in France, and on 14 May 2004 **tie** appointed Transdev under the DPOFA [[CEC01862694](#)].

Vehicles and infrastructure

- 5.15** Having decided on the separate appointment of the operator under the DPOFA, **tie** next had to consider how best to procure the tram system infrastructure and vehicles. In its updated Preliminary Financial Case of September 2004, **tie** reported on work done in this regard by its procurement group [CEC00630633, page 0066, paragraph 6.4 et seq.]. The procurement group considered six different options in detail, with varying degrees of risk transfer to the private sector. The least risk transfer would be achieved with a "Traditional Procurement Option", under which **tie** would separately procure contracts for each of the design, infrastructure, vehicles and system integration elements. The greatest risk transfer would be achieved with a "Full Consortium Option", under which **tie** would conduct a single procurement for one consortium to provide all those elements [ibid, pages 0069–0072, paragraphs 6.4.2–6.4.3]. It favoured one of the options with an intermediate amount of risk transfer: the "Infrastructure and Integrator Consortium Option". This involved two separate procurements: one for the tram vehicles, and another for the design, infrastructure works and systems integration. The tram vehicle supply contract would ultimately be novated to the infrastructure contract (the "Infraco contract"), with the result that while there were two procurements, novation would establish a single consortium with responsibility for all the design, infrastructure, vehicles and systems integration elements.
- 5.16** **tie** anticipated that its procurement model would transfer substantially all the construction and integration risk to the private sector, with the revenue risk (under the DPOFA) being substantially retained by the public sector [ibid, page 0011]. The procurement group did not consider it appropriate for **tie** to retain much of the construction and integration risk, given the scale and complexity of the project and its lack of resource for, or experience of, major project management, as **tie** was essentially a procuring body [ibid, page 0068].
- 5.17** There were, however, certain matters over which the procurement group thought that **tie** should retain control, even at the potential cost of lessening the risk transfer, for the benefits that that would bring. The first of these was the choice of tram vehicle. There were relatively few tram vehicle suppliers, and requiring infrastructure bids to include the supply of vehicles risked severely reducing the number of bidders. It could also compromise choice if, for example, the preferred vehicle supplier was tied to a sub-optimal infrastructure bidder, and vice versa.
- 5.18** The second matter was design. Design was known to be a sensitive issue, since parts of the line would pass through Edinburgh's World Heritage Site. As the planning authority, CEC was known to have concerns about the design of the tram network. The procurement group therefore thought that there was merit in considering a preliminary package of targeted design work ahead of letting a main infrastructure contract. The aim of this would be to develop designs that were likely to satisfy planning requirements, reducing risk and wasted design work, and speeding up the overall timetable.
- 5.19** The third matter was diversion of utilities, which was recognised as being a time-consuming and high-risk element of the project. If **tie** were able to gain greater certainty on the requirements for utility diversions, that could help to achieve the timetable and reduce risk for the main infrastructure contractor [ibid, page 0068].
- 5.20** The procurement group noted that, under its preferred approach, there was the potential for maximum risk transfer if the vehicle contract and advanced designs were novated to the infrastructure contractor. There was also scope for cost

certainty. This would come, in particular, from advance design and utilities work reducing uncertainty, and thus risk, for the infrastructure bidders. The procurement group considered that advance design and utility diversion work should increase market appeal, but noted that market consultation was needed to confirm that [ibid](#), page 0071]. **tie** did, however, understand that there would be considerable demand from the construction industry to undertake delivery of the scheme and that its proposed strategy would be well received [CEC00115187, page 0023].

5.21 It is therefore clear that:

- in its conception, the procurement strategy for infrastructure and vehicles aimed to transfer most of the construction risks to the private sector because **tie** was unsuited to manage them;
- **tie** continued to take seriously the recommendation of the NAO that light rail procurement should seek better allocations of risk to achieve value for money;
- design and utilities were identified as potential sources of risk, in relation to which advance work by **tie** might reduce risk and therefore cost; and
- **tie** would conduct market consultation on its strategy while developing it and before implementing it.

Draft Interim Outline Business Case (May 2005)

5.22 By the time of issue of its draft Interim Outline Business Case (May 2005), **tie** had analysed the procurement options in detail and devised a strategy that it considered was suitable for market testing [[CEC01875336](#), Part 1, page 0009]. It acknowledged that its strategy was "a unique approach" that differed from market norms. While there was not a fixed template for light rail projects, **tie**'s strategy differed from previous approaches in the following respects:

- early introduction of the operator, under the DPOFA;
- separate contracts for operation and construction of infrastructure;
- sharing of revenue risk between the operator and the public sector;
- early involvement of a designer;
- utility diversions undertaken in advance of infrastructure works; and
- separate selection of infrastructure and vehicle providers.

[ibid](#), Part 2, pages 0041–0042, paragraphs 5.3–5.3.6.]

5.23 **tie** considered that, through its strategy, it would take more control during the development phase (that is, prior to commencement of construction) than the public sector had done on previous projects. Design work and utility diversions would be carried out, under contract to **tie**, prior to the procurement of the Infraco contract. The aim was to give the infrastructure bidders a better-defined basis for their bid. That greater certainty would reduce risk and thus the cost of the project [[ibid](#), Part 2, page 0040, paragraph 5.2.3].

5.24 In the draft Interim Outline Business Case **tie** identified affordability constraints for the project:

- the limited support of £375 million without indexation confirmed by the Scottish Ministers;
- the lack of significant support from CEC to fund capital expenditure; and
- uncertainty about CEC sources of income to fund the project.

5.25 In light of these constraints it had become:

"all the more important to achieve as much certainty as possible on the likely price for the different elements of the network before entering into commitments" [libid](#), Part 6, page 0130, paragraph 8.5.2].

5.26 **tie**'s aim was "to achieve as close to fixed prices as possible" [libid](#), Part 6, page 0131, paragraph 8.5.4]. The extent to which fixed prices could be achieved would depend on the extent of detailed design that **tie** was able to provide as part of the tender documentation for the Infraco contract. However, **tie**'s intention in relation to that contract was to be

"in a position to proceed to detailed negotiation of contracts with a large measure of certainty on price and therefore affordability" [libid](#), Part 6, page 0132, paragraph 8.5.4].

5.27 This approach – of developing a more certain basis for pricing, with a view to fixing prices – was consistent with the themes emphasised by Audit Scotland in its report on the Holyrood project.

5.28 The draft Interim Outline Business Case was the final iteration of the business case before **tie** concluded a contract with Parsons Brinckerhoff ("PB") for design and technical services in relation to both lines 1 and 2 on 19 September 2005, known as the contract for System Design Services (the "SDS contract"), as mentioned in Chapter 6 (Design (to May 2008)) [CEC00839054](#)]. Apart from design, the technical services to be provided by the System Design Services ("SDS") contractors included the majority of the "extensive advance survey work" that **tie** planned to carry out: the information derived from such survey work would aid detailed design [CEC01875336](#), Part 3, page 0058, paragraph 5.7.5]. In the draft Interim Outline Business Case, **tie** explained the proposed interaction between the advance design works, the utility diversions and the Infraco contract. It also explained that early designs would facilitate advanced utility diversions, which would in turn reduce programme and cost risks for the infrastructure bidders and, therefore, their prices. This strategy would thus reduce uncertainty, risk and cost in two respects: by removing uncertainty about the design itself, and thus the cost and time of building to it; and, through facilitating advance utility diversions, by removing uncertainty about the time impact that these diversions would have on the programme for constructing the infrastructure. The designer's initial focus was to be the on-street section between Ocean Terminal and Haymarket (via Princes Street) [libid](#), Part 1, page 0010, paragraph 4].

5.29 The procurement of the Infraco contract was to take place in parallel with the production of the design. Tenderers for that contract were initially to be given the preliminary design and, later (as it became available), the detailed design for those parts of the scheme that were perceived to be critical for cost and programme. Two shortlisted bidders for the Infraco contract would receive a significant design update as a basis for refining their proposals during the Best and Final Offers stage [libid](#), Part 4, pages 0069–0070, paragraphs 5.12.3–5.12.4]. The SDS contract's overall objectives would include:

- tackling critical design elements as early as possible;
- reducing project risk for the Infraco bidders; and
- generating design solutions that an Infraco bidder could competitively price. [libid](#), Part 3, page 0054, paragraph 5.7.]

- 5.30** **tie** anticipated that the overall design process would take between two and two-and-a-half years. That estimate was based on the experience of Mr Kendall and **tie**'s professional advisers [TR100000136, page 0089]. **tie** expected that, by the time that the Infraco contract was signed, the design of utility diversions would be complete; planning permissions for the most critical sections (that is, between Haymarket and St Andrew Square) would have been granted; and the design would be "60–70% complete" [CEC01875336, Part 3, page 0054, paragraph 5.7.1]. Mr Kendall explained his view that this meant that the scope of the project would be designed and that, insofar as design was incomplete, it would be in matters of "detailed engineering" [TR100000136, page 0089]. Mr Kendall explained that the decision to produce design in parallel with procurement of the Infraco contract was taken to save time [ibid, page 0075]. **tie** expected that it would reduce the procurement timetable by at least a year and acknowledged that it was keen to adhere to an ambitious procurement timetable, but emphasised that this would not come "at the expense of increased cost or risk" [CEC01875336, Part 3, page 0054, paragraph 5.7]. In September 2005, in a progress report to the parliamentary committee considering the Tram Bills, **tie** noted that the programme for the appointment of both the Infraco contractors and those for the tram vehicle supply and maintenance contract (the "Tramco contract") was of a "compressed duration", to minimise construction cost inflation [CEC00380894, page 0014, paragraph 8.2].
- 5.31** One can readily understand the desire for timely progress to avoid, so far as possible, increased cost attributable to inflation. However, as Audit Scotland had noted in relation to the Holyrood project, the pressure of a programme brought with it a risk that the design might not be as complete as one would ideally want when the time came to award contracts. Further, incomplete design was itself a source of increased risk and cost, as **tie**'s strategy recognised. Despite **tie**'s assertion that its "ambitious timetable" would not come at the expense of increased cost or risk, it inevitably introduced a tension with the objective of managing risk out of the project before the Infraco contract was awarded. The design contract was to be novated to the infrastructure contractor when the Infraco contract was signed, and the infrastructure contractor would be required to adopt the design contractor's design. Variations to the design could be introduced, but **tie** considered that this would be done only with its agreement and at the risk of the infrastructure contractor. **tie** explained that, in this way, all design risks would be transferred to the private sector, without the risk premiums that would be charged due to uncertainty if the design were to be carried out after contract signature [CEC01875336, Part 3, page 0056, paragraph 5.7.1.3].
- 5.32** In relation to utility diversions, **tie** proposed to retain and manage the significant risks itself. It would appoint a single contractor, approved by all the affected utility companies, to implement the major utility diversions. It would do this in advance of procuring the infrastructure contractor, with the objective of completing "significant" utility diversion works before the infrastructure works began [ibid, Part 3, page 0059, paragraph 5.8]. By appointing a single contractor to divert utilities for all the utility companies, **tie** would avoid the risks that would otherwise arise from dealing separately with each utility company (a risk that **tie** said would typically arise if diversions were left to the infrastructure contractor). Further, diverting all utilities at a single site at one time under a single contract would help to minimise cost and disruption to the public [ibid, Part 3, page 0059]. **tie** explained that utility companies, whose engagement was needed for accurate scoping, programming and pricing of utility diversion works, were generally unwilling to engage with prospective contractors who were still at the stage of competing with other bidders for a contract. This meant that, if utility diversions were handled as part of the main Infraco contract,

the work necessary to scope, programme and implement utility diversions generally came only after the Infraco contract had been awarded. This tended to delay the infrastructure works but, further, meant that infrastructure contractors' bids would carry risk premiums because of the uncertainty about the scope and timing of utility diversion works [ibid, Part 3, page 0059]. The diversion of utilities under **tie**'s management, in advance of the Infraco contract being awarded, would therefore save programme time (and related cost) and reduce risk pricing by the infrastructure contractors [ibid, Part 3, page 0060]. To determine the scope of the utility diversions, **tie** would be dependent on advice from the design contractor and from the utility companies. The design contractor would determine the area of the track bed, under which utilities would have to be diverted or protected [ibid, Part 3, page 0059]. Some utility diversions would remain the responsibility of the infrastructure contractor. That would be the case where the diversion depended on that contractor's design – for example, the re-siting of utilities necessary to accommodate overhead line supports [ibid, Part 3, page 0059, paragraph 5.8.1].

- 5.33** **tie** recognised that its strategy left it with important risks to manage during the period up to award of the Infraco contract. These included risks associated with development of the detailed design, the obtaining of planning consents, the diversion of utilities, and management of the programme [ibid, Part 5, page 0093, paragraph 6.5.1]. There were also risks associated with the planned novation of the design and vehicle supply contracts to the infrastructure contractor. These included that, due to supervening events, the parties would become reluctant to implement novation [ibid, Part 2, page 0043, paragraph 5.4.1 and Part 3, pages 0046–0047, paragraphs 5.4.5–5.4.5.2 inclusive]. The procurement strategy thus placed an important responsibility on **tie** to identify and manage the risks retained by the public sector. **tie** acknowledged that responsibility in the following passages in the Interim Outline Business Case:

"[T]he public sector is exposed to significant but manageable risks during the period of scheme development. The introduction of the SDS Contractor and USFA [utilities] Contractor in the proposed procurement strategy reduces risk to an extent, but, as in all projects of this type, the major responsibility for identifying and managing potential risks during this period will remain with the project team and their advisers. **tie** has assembled a team with significant experience in the tram industry and, together with the TSS Contractor, the Operator [Transdev], and its other advisers, believes that it has the necessary skills to manage risk during this period." [ibid, Part 5, page 0095, paragraph 6.5.1.]

"The theme of the overall strategy is to ensure that risks are aggressively managed and in particular that **tie**'s stakeholders are not asked to commit to either contractual or financial obligations until each stage has been thoroughly analysed and approved." [ibid, Part 1, page 0017.]

- 5.34** The success of the procurement strategy was therefore dependent upon **tie**'s ability to manage the risks inherent in the procurement process. One important aspect of this was for **tie** to manage the design and utilities contracts to reduce, so far as possible, uncertainties (and thus risk and cost) affecting the Infraco contract. Another was to ensure that any remaining risk was properly understood, analysed and presented to CEC, so that their decision whether to undertake the contractual and financial obligations of the Infraco contract was properly informed about the nature and scale of the risk involved in doing so. **tie** held itself out as having the experience needed to deal with these issues. To the extent that design and utility diversions remained incomplete when the Infraco contract was awarded, risk would remain

with the public sector. It was **tie's** responsibility to analyse that risk, and accurately report on it to CEC, before CEC was called upon to decide whether to enter into the Infraco contract. Critical in this management of risk was the timing of the award of the Infraco contract. In his evidence to the Inquiry, Mr Kendall noted that, before the Infraco contract could be awarded, the design and utility diversions would have to be sufficiently advanced to reduce the risk of delay to the Infraco works. **tie** had, he said, a complete understanding that it would "cause a huge financial problem if Infraco was awarded too soon" [TR100000136, page 0084]. He noted that the decision on when to award the Infraco contract was entirely under **tie's** control. The significance in the overall strategy of delivering the utilities diversion programme before awarding the Infraco contract was emphasised in the following two passages of his evidence. In the first he said that, if he had been managing the procurement process, he would not have awarded the Infraco contract

"no matter what it meant, until such time as I was confident that I could deliver the utilities diversion programme, or have modified the Infraco to reflect the fact that I couldn't divert those and come to a different answer"

even although he acknowledged that delay in the procurement would mean an increase in project costs due to inflation [ibid, page 0122]. The second passage related to the possibility that the planned strategy of removing a significant element of risk premiums from the tenders would fail because of delays in design and the diversion of utilities. In that situation he observed:

"The first thing that you knew that you had to do to manage that risk was to award the MUDFA [Multi-Utilities Diversion Framework Agreement] as fast as possible and to get it underway [sic] and I don't believe that was done ... I would not have awarded the Infraco until I was dead certain, based on everything I knew at the time, not what I knew in theory, but what I knew at the time, to award that Infraco, until it was clear that I had got headroom, space, time, to be able to finish it." [ibid, page 0123.]

Market consultation on the procurement strategy, and the Draft Outline Business Case (March 2006)

- 5.35** As mentioned in Chapter 9 on procurement up to preferred bidder, on 6 October 2005 **tie** published a Prior Information Notice, inviting experienced tramway infrastructure contractors to participate in a consultation on its proposed procurement strategy for the tram infrastructure works. An information memorandum [CECo1866826] sent to consultees set out **tie's** proposed strategy consistently with the way in which it had been described in the draft Interim Outline Business Case. The memorandum noted that, to achieve its procurement objectives, **tie** had harnessed experience, by recruiting to the project team individuals who had a breadth and depth of experience of other light rail projects, by engaging Transdev (which had experience of procuring and operating such schemes) and by selecting advisers with direct relevant experience. At the time, members of **tie's** project team who had experience of light rail projects included Mr Kendall, the TPD, who had worked on the Croydon Tram project [TR100000136, page 0082]. Although Transdev and other advisers had direct relevant experience of other light rail projects, it is not apparent which individuals, other than Mr Kendall, within the project team had the necessary breadth and depth of experience mentioned in the memorandum.
- 5.36** Following responses from eleven interested parties, **tie** invited six potential Infraco bidders and five potential Tramco bidders to have discussions on 2 and 3 November

2005 in Edinburgh, at sessions chaired by Mr Kendall, supported by members of the **tie** team and **tie**'s advisers. In advance of the discussions, the invited parties were sent a Project Information Memorandum, setting out the background to the project and **tie**'s current thinking on the procurement strategy, together with a list of specific questions. Separate lists were prepared for potential vehicle suppliers and Infraco bidders. The questions were compiled by the project team and advisers, in consultation with officials in the Scottish Executive. As the TPD, Mr Kendall reported on the consultation to the meeting of the Tram Project Board ("TPB") on 22 November 2005 [[TIE00090571](#) page 0003; [TRS00002067](#), page 0002, item 3.2]. He reported that all the infrastructure consultees were concerned over whether funding would be available for the Tram project, and he advised the board that:

"committed funding is critical to having a successful tendering process. TPD's position is that there will be no tender release unless and until he is satisfied that funding is committed, subject to contract" [[TIE00090571](#), page 0003].

5.37 In his evidence to the Inquiry, Mr Kendall noted the positive market response to the procurement strategy, but added that:

"there was still really a quite small degree of interest in the Infraco market place for this project because there was a high degree of scepticism as to whether it would ever happen and whether it would ever actually be funded." [[TR100000136](#), page 0084, see also page 0126.]

5.38 Mr Harper (Mr Kendall's immediate successor as TPD) gave evidence to similar effect [[TR100000043_C](#), page 0023, paragraph 78].

5.39 In its draft Outline Business Case of March 2006, **tie** also discussed the market consultation [[CEC00380898](#), page 0043, paragraph 6.2.2]. The consultees were reported as having generally welcomed the overall approach that **tie** had taken in developing the procurement strategy, and as having recognised the rationale for it. The Infraco consultees considered the separation of tram operations and revenue risk from the Infraco contract to be attractive and an important driver for good, value-for-money bids. They generally understood and supported the rationale for early utility diversions. All saw the benefit of seeking early planning consents relating to the core network. Those consultees with major in-house design capability were said to have been "slightly disappointed" that significant elements of design would be undertaken prior to the award of the Infraco contract. The consultees did not consider the proposed novation of the design contract to be problematic: such arrangements were common practice and PB was well known and respected. The general rationale for separate procurement of infrastructure and tram vehicles was widely accepted, although two infrastructure contractors were reluctant to accept the risks associated with vehicles and vehicle integration. Respondents noted that running bid processes in parallel for the vehicles and Infraco contracts had the potential to be complex and expensive; generally, infrastructure contractors were likely to prefer to know the identity of the preferred vehicle supplier at an earlier stage, to help to remove uncertainty on integration risks. All Infraco bidders were said to have been interested in the availability and commitment of public-sector funds for the project (in light of recent experience in England – presumably a reference to the losses suffered by private-sector companies in running tram operations). Bidders were said to have been concerned about prolonged uncertainty on the point, but comforted by the assurance from **tie** that clarification would be provided prior to procurement in 2006. This assurance was fulfilled on 26 January 2006, when CEC approved in principle a contribution of £45 million for the project, subject to a satisfactory business case, and noted the willingness of the Scottish Executive to consider indexation

of its "in principle" commitment of £375 million to take account of construction price inflation [CEC02083547, pages 0004 and 0008, paragraphs 3.14 and 6.1]. As indicated in the introduction in Chapter 1 (Introduction and Overview), in February 2006, the Scottish Ministers announced that their proposed grant would be increased to approximately £500 million in line with indexation, subject to a satisfactory business case. The Tramco bidders were said to have welcomed the opportunity to concentrate on tram vehicle delivery outside the complications and risks of a consortium structure, and were content with the proposed novation of the vehicle contract to Infraco [CEC00380898, page 0046]. It is therefore clear that **tie's** procurement strategy was generally well received by the market. The only area in which there was arguably a poor response was in relation to the Infraco contract; on the evidence, that did not appear to relate to the procurement strategy itself but to the perceived uncertainty about the extent to which the project would be publicly funded.

- 5.40** **tie** continued to report the objective of achieving a fixed-price contract for the infrastructure **libid**, page 0072, paragraphs 7.3.4–7.3.5]. Its description of anticipated design progress by the date of award of the Infraco contract was broadly consistent with what it had said in its draft Interim Outline Business Case in May 2005 [CEC01875336, Part 3, page 0054, paragraph 5.7.1]. By the time of contract award, detailed design would not be complete but would be significantly advanced: the majority of consents would have been obtained; and outstanding design work might include non-critical areas, amendments required by consenting authorities but yet to be completed, and value engineering by the infrastructure contractor [CEC00380898, page 0058, paragraph 6.7.1.1].
- 5.41** Both CEC and the Scottish Ministers had said that they would not approve the start of physical utility diversion works until a draft of the Final Business Case ("FBC") had given sufficient comfort that the capital cost estimates for the project overall were robust and that the project was affordable **libid**, page 0004]. This was consistent with the strategy of not committing to expenditure until there was greater certainty about costs, but it perhaps introduced a tension: early completion of utility diversions was an important factor in achieving price certainty, but CEC and the Scottish Ministers were seeking reassurance about cost certainty before allowing those diversions to proceed. Assessments about affordability made before utility diversions had begun would inevitably have to rest on assumptions about the scope of those diversions and the time needed to carry them out. At this stage **tie** acknowledged potential overlap in the programmes for utility diversions and the infrastructure works. However, the majority of utility diversion work was scheduled to commence in early 2007 and end in summer 2008, resulting in significant diversion works being completed prior to the commencement of Infraco works. Accordingly, potential conflicts between the utility diversions and infrastructure works would be minimised, and any remaining time overlap could be managed to avoid conflicts on the ground. The scope and time risks of overlap remained with **tie**, so its ability to manage them was critical **libid**, page 0061]. This acknowledgement of overlap in the programmes for the utility diversion works and the infrastructure works is reflected in **tie's** Memorandum of Information for the Infraco procurement (6 March 2006), which noted that MUDFA works would be carried out

"in advance of *and in conjunction with* the implementation of the Infraco Contract. ... The successful Infraco will be required by the Infraco Contract to liaise with the MUDFA contractor and *co-ordinate the works stipulated under the Infraco Contract with the utilities diversion works* being carried out under the MUDFA" [CEC01781572, page 0009, paragraph 2.9] (emphasis added).

- 5.42** While there was a recognition that work on utilities diversion would be carried out in conjunction with the Infraco works and that there would be a need for liaison between the two contractors to co-ordinate the Infraco and MUDFA works, that did not mean that any overlap in the respective programmes of the two contractors would result in any conflict at any particular site or that access to Infraco sites would be delayed. It simply meant that there would be a need for co-operation in the programming and management of the Infraco and MUDFA works to ensure that no such conflicts or delays occurred. In my view, the procurement strategy, at least up to the stage of the draft Outline Business Case of March 2006, was not explicit about the extent to which utilities would be diverted, and design completed, by the time of the Infraco contract being awarded. However, it was implicit in the procurement strategy's objective of negotiating a fixed price for that contract that the degree of completion would be sufficient for the infrastructure bidders to fix their prices to a substantial extent. The MUDFA award was scheduled for early June 2006. On appointment, the MUDFA contractor was to undertake a series of pre-construction activities including working with the SDS contractors to optimise the design of the utilities, minimise disruption to the City of Edinburgh and maximise construction productivity [CEC00380898, page 0010]. **tie** noted that four contractors pre-qualified for MUDFA and would be invited to submit tenders [ibid, page 0062, paragraph 6.8.3].
- 5.43** **tie** continued to acknowledge a risk that either the preferred infrastructure contractor or PB would be reluctant to implement the novation of the design contract. That might lead to **tie** deciding not to insist upon novation. In terms of the SDS contract **tie** was entitled, but not obliged, to require that contract to be novated to Infraco. The refusal of either party to agree to **tie**'s request for novation might also lead to the termination of the design contract or to the cessation of negotiations with the preferred infrastructure bidder in favour of the reserve bidder. However, **tie**'s view appears to have been that a failure of novation was unlikely, and that Infraco would benefit from novation – something that **tie** expected to be reflected in their bids [ibid, page 0051]. The risk of failed novation was one that **tie** believed that it could manage [ibid, page 0059].
- 5.44** In response to the market feedback, **tie** modified its strategy by deciding to identify the preferred vehicle supplier at an earlier stage of the procurement process. This meant that infrastructure bidders would know the identity of the preferred vehicle supplier, and could therefore tailor their bids accordingly. In this way, the risk of the tram contracts not being novated to the infrastructure contractor would be mitigated. **tie** continued to acknowledge a risk that novation of the tram vehicle contract might fail, with the possibility that either the Infraco contract or the Tramco contract or both would have to be re-tendered, but it considered that to be unlikely [ibid, page 0052]. Seven tram vehicle suppliers submitted returns to a pre-qualification questionnaire, of which four were selected for the invitation to tender process. **tie** aimed to identify a preferred bidder before the end of December 2006 [ibid, pages 0010 and 0067].
- 5.45** Following a comparison exercise, **tie** concluded that its procurement strategy could deliver similar contractual risk transfer to that of a PPP structure as well as potentially better value for money. This better value would be achieved through **tie** managing down the pre-construction risks instead of paying a private-sector contractor to take them on. **tie**'s strategy was similar to the PPP option in terms of the proposed risk transfer and risk management approaches.

"Both options would be based on a planned series of advanced contracts which directly reflect the lessons learned from previous (largely PFI) light rail projects, with the aim ultimately of facilitating a fixed price contract for the infrastructure, under

which the private sector Infraco was responsible for the key risks associated with that infrastructure (construction, system integration, maintenance and continuing system availability) but which mitigated wholly or substantially the pre-construction risks which often carry large price premiums under PPP structures e.g. design, planning, land purchase/access and utilities diversions." [libid](#), page 0072, paragraph 7.3.4.]

- 5.46** **tie** acknowledged that the management of these interlocking contracts, to establish the best possible "platform" for a fixed-price Infraco contract, would be a challenge (albeit one that would apply equally under a PPP structure) [libid](#), page 0072, paragraph 7.3.5]. **tie**'s case for its "enhanced" conventional procurement strategy included its assertions that it had

"assembled the means to carry out its own 'due diligence' on all aspects of the project ahead of the Infraco contract, in effect, simulating the rigorous analysis of contractual and management arrangements that would normally be undertaken by the senior lenders under a PPP approach" [libid](#), page 0072, paragraph 7.3.6].

- 5.47** **tie** also acknowledged that success would be dependent on the quality of **tie**'s team and its ability to implement the procurement strategy and actively manage the risks inherent in that strategy. **tie** was confident that, as a direct response to that challenge, it had assembled the necessary level of expertise and experience

"within the tram project team and the group of specialist advisors who form part of that team (including Transdev as the future operator) is a direct response to this challenge" [libid](#), page 0072, paragraph 7.3.5].

- 5.48** While **tie** recognised the importance of its team being appropriately qualified for the task, it also considered that an in-house management team with the necessary expertise, supported by specialist advisers, was the required solution. That is apparent from the above quotation and the following passage in the Outline Business Case.

"The formation of a highly competent and experienced team is a necessary prerequisite for the successful execution of the advanced conventional procurement strategy being followed by **tie** and the active management of risk that entails ... The conclusion in management terms is that an in-house management team is the correct way to resource this complex project offering the advantages of knowledge retention, flexibility and control. This facet is reinforced by Ian Kendall's ability to source experienced and skilled managers with expertise which is specifically relevant to the project." [libid](#), page 0093, paragraph 9.2.1.]

- 5.49** **tie**'s specialist advisers included Scott Wilson Railways Limited, appointed by **tie** as the provider of Technical Support Services for the Tram project on 25 July 2005, as a result of which **tie** could obtain key resources in areas including utilities and planning approvals [[CEC01651410](#); [CEC01580826](#), Parts 1–2]. **tie**'s emphasis on the advantages of knowledge retention, flexibility and control arising from an in-house management team should be viewed in the context that most of the management team, including Mr Kendall, were retained on a consultancy basis.

- 5.50** As part of its procurement strategy **tie** claimed to have

"[d]eveloped a series of value for money risk transfer mechanisms to be implemented for the Vehicle and Infrastructure contracts which will, in **tie**'s view, be effective in incentivising the private sector in a manner similar to PFI whilst minimising the funding costs and risk premia which might be borne by the public sector" [[CEC00380898](#), page 0071, paragraph 7.1].

2006: Removal of Mr Kendall and delays in procurement

- 5.51** In May 2006, Mr Kendall was removed summarily as **tie**'s TPD and replaced, on an interim basis, by Mr Harper. According to Mr Kendall, Mr Harper had no prior experience of a Tram project [[TR100000136](#), pages 0207–0208]. He did, however, have experience of project management. On a visit to Edinburgh prior to his appointment, Mr Harper met the principal members of the project team and formed the impression that they had "lost direction and focus, and were extremely demotivated". Mr Bissett appeared to him to be the only person who understood how the structure and project worked [[TR10000043_C](#), pages 0002–0003, paragraphs 6 and 8]. He considered that **tie** lacked commercial and procurement expertise and on that basis brought in Mr Gilbert, whom he described as "the key project team member on procurement" [*ibid*, page 0008, paragraph 23]. From this time on, those primarily responsible for implementing the procurement strategy were different from those who had devised it. Mr Harper thought the strategy too complicated and that it was overly optimistic to consider that it would all work as planned. He did not consider it practicable to revisit the strategy at that stage, although he did ask Mr Gilbert to lead a review of it [*ibid*, pages 0003–0005 and 0014, paragraphs 9, 15, 46 and 49].
- 5.52** Around this time, delays had begun to affect the implementation of **tie**'s procurement strategy. A readiness review undertaken in May 2006 recommended re-phasing the procurement programme in response to delays [[CEC01881455](#); [CEC01793454](#), page 0008]. A paper by Mr Gilbert to the TPB dated 18 September 2006 noted that slippage in the design programme presented problems for implementing the procurement strategy. Since endorsement of the procurement strategy through acceptance of the Outline Business Case, the following had occurred:
- delivery by the SDS contractors of the assured preliminary design had slipped by three months;
 - issue of the Tramco tender had slipped by three months;
 - award of the MUDFA contract had been delayed by four months; and
 - the Infraco tender period had been reduced by one month to enable the FBC to be informed by returned tenders.
- 5.53** The paper also noted that, since utilities diversions could not start before the draft FBC had been approved, the risk of delay to the Infraco works had increased [[CEC01688881](#), page 0045; [TR100000038_C](#), pages 0080–0081, paragraph 214]. Mr Gilbert explained to the Inquiry that **tie**'s objective was to find an approach under which the principles of the procurement strategy could still be met, but on an accelerated timescale [*ibid*]. The mitigations proposed in his paper included:
- agreeing with the Infraco bidders the price-critical information that they needed in relation to critical design, performance and consents;
 - agreeing a priority design programme with the SDS provider to deliver that price-critical information;
 - developing a plan for the phased delivery of consents;
 - conducting the bid process as an ongoing negotiation;
 - undertaking advanced works prior to award of the Infraco contract, to take pressure off the critical path in the early stages of the Infraco works; and
 - seeking CEC's agreement to a limited mobilisation of Infraco in advance of full approval to award the contract [[CEC01688881](#), page 0046].

- 5.54** Mr Harper's recollection was that **tie** "generally addressed the key issues [mentioned above] by reprogramming and by getting the SDS to commit to doing things differently". He was dissatisfied with the SDS provider, but stated that it was difficult to take steps to enforce their obligations without bringing all the risk back to **tie** [[TRl0000043_C](#), pages 0015–0016, paragraphs 51–52].
- 5.55** A further readiness review in September 2006 described the timescales in **tie**'s procurement plan as "tight but deliverable" [[CEC01629382](#), page 0008, paragraph 10]. The review team noted that **tie** intended to issue the Infraco invitation to negotiate ("ITN") documentation to pre-qualified bidders on 3 October 2006, with the principal sections being issued initially and further design information issued at the end of October. The review team noted a number of risks that would arise if the documentation was issued either too early or too late. Those arising from the documentation being issued too early included the documentation not being of a high enough quality to achieve robust pricing, due to ill-defined requirements, and an extended negotiating period. Those of the documentation being issued too late included withdrawal of bidders, or at least additional costs, due to uncertainty. The review team concluded that the impact of risks due to a late release outweighed those of an early release, and that the Infraco ITN documentation should not be delayed. The risks of an early release could be mitigated by, among other things, the early adoption of the recommendation that **tie** listen to the Infraco bidders' concerns and address them in later information releases. The review team reported again on 22 November 2006, after a follow-up review. Among other things, it noted that Mr Harper, the TPD who had replaced Mr Kendall on an interim basis, was to leave towards the end of the year. Although it noted that the search for a replacement was under way, the review team was "concerned at the loss of continuity and possible loss of momentum" and advised that his prompt replacement was essential at this critical stage. The review team considered that there should be a review of the levels of experienced negotiating resource within **tie** to maximise the chances of delivering the integrated contract structure within the planned timetable at best value [[CEC01791014](#), page 0006].
- 5.56** As mentioned in Chapter 8 (Utilities), **tie** appointed Alfred McAlpine Infrastructure Services Limited as the MUDFA contractor in October 2006, with the first stage pre-construction works to be carried out between October and December 2006, and the second stage between 2 March 2007 and 27 June 2008 [[CAR00005833](#)].

Draft Final Business Case – November 2006

- 5.57** By the time that **tie** produced its draft FBC in November 2006, it was part-way through the implementation of its procurement strategy: MUDFA had been let and tenders for the Tramco contract were under evaluation. The SDS contractor had submitted preliminary designs in July 2006, from which cost estimates had been built up [[CEC01821403](#), page 0155, paragraph 10.40]. **tie** and its advisers had completed a detailed review of the cost estimate of £592 million for line 1, subdivided into £500 million for phase 1a and £92 million for phase 1b. **tie** reported a "relatively high" degree of confidence in these cost estimates [[libid](#), pages 0013–0014, paragraphs 1.56–1.57]. As will be noted in Chapter 9 on procurement up to preferred bidder, the unexpected outcome of the publication of the Official Journal of the European Union notices was the receipt by **tie** of only three responses to its pre-qualification questionnaire for the Infraco contract tender. Amec subsequently withdrew but Mr Harper considered that two bidders were sufficient to provide good competition between bidders [[TRl0000043_C](#), page 0026, paragraph 90]. Tenders for the

Infraco contract were due to be returned by 9 January 2007 and would thereafter be the subject of negotiation [CEC01794929; CEC02083466, pages 0005 and 0007, paragraphs 3.22 and 4.2].

5.58 As was noted in paragraph 5.30 above, in the draft Interim Outline Business Case in May 2005, **tie** had anticipated that the detailed design would be 60–70 per cent complete when the Infraco contract was signed. It made broadly consistent remarks in March 2006, in the draft Outline Business Case. Departing from that, **tie** now said that the detailed design was expected to be 100 per cent complete by the date of signature of the Infraco contract [CEC01821403, page 0085, paragraph 7.53]. This change is surprising, given the delays affecting completion of the design by that stage. It is not clear why the change was made. In this regard the draft FBC said that

"[t]he creation of the Infraco contract as a lump sum contract transfers the pricing risk to the private sector. Finalisation of the Infraco contract price on the basis of SDS Detailed Design *significantly reduces* their scope and performance risk pricing premium that would otherwise be necessary under conventional design and construct or PFI approaches" (*ibid*, page 0098, paragraph 7.125(b)) (emphasis added).

5.59 A layperson might infer that a 100 per cent complete design would eradicate all design-related risk pricing from contractors' prices. However, Mr Crosse (Mr Harper's replacement as TPD) told the Inquiry that it would not [PHT00000021, page 37–46]. The basis for his assertion that no design is ever 100 per cent complete seemed to be that changes will be required to suit the contractor's requirements and construction methods. However, where changes to design were "tailored to suit contractors' technologies and approach" it appears to me that they would be at the risk of the contractor and would not have cost implications for the client who had provided a design that was described as 100 per cent complete and did not require changes at the insistence of the client. In any event, Mr Crosse said that **tie's** management did not actually believe that the design would be 100 per cent complete (*ibid*, page 40). He was unaware whether that view was shared with CEC. In these circumstances it is difficult to understand the change in the business case to say that design would be 100 per cent complete by the date of award of the Infraco contract. That is particularly so where it appears in a document that might be used to support the case for public funding. Such a statement would affect the assessment of risk retained by the public sector, which, in turn, could undoubtedly influence CEC in its decision on whether to proceed with the project. Having said that, the version of the final business case in October 2007 ("FBCv1") specifically acknowledged that design would not be 100 per cent complete. As will be mentioned in later chapters, CEC had approved the FBC before deciding to proceed with the Infraco contract.

5.60 The procurement timetable was still under pressure. **tie** noted that its programme for delivery of phase 1 of the Tram project was "based on the assumption of 'right first time and on-time' delivery of activities with very little float within the programme". This required close attention by **tie**:

"[t]he criticality of much of the design activities mean [sic] the need for on-time delivery is particularly true for SDS design work and the project team are currently actively pursuing improved performance in this area and critically reviewing these elements of the programme. Key risks are delivery of design for construction for the Utility Diversion works, traffic modelling and junction designs which form the basis of the Traffic Regulation Order process. Also essential is the timely delivery of Detailed Design for structures to ensure these key risk items in the Infraco contract can be de-risked and priced competitively." [CEC01821403, page 0164, paragraphs 11.3–11.4.]

- 5.61** Concerns were expressed about how realistic the programme was. In its comments on the draft FBC in March 2007, officials in Transport Scotland observed, in relation to there being only little float in the programme, that
- “[i]t appears that the programme provided describes only a ‘Best Case’ scenario with no real feasible mitigation of delay or additional time for any secondary works required” [TRS00004145, page 0009].
- 5.62** The programme durations for design, procurement, approvals and commissioning, in the view of officials in Transport Scotland, looked “very compressed. The lack of float or mitigation opportunities and ‘right first time’ planning would appear optimistic.” [ibid, page 0010.]
- In response to these comments **tie** stated that it was in the process of reviewing its programme [TRS00004274].
- 5.63** On 21 December 2006, CEC approved **tie**'s draft FBC, and the continued negotiation of the Infraco contract and the Tramco contract [CEC02083464]. The report on which its approval was based noted that to maintain control over the capital cost of the project, enabling works, including utility diversions, should be authorised to proceed on a timetable that would not disrupt the main infrastructure programme, and that negotiations with the “bidders should continue with a focus on achieving a high proportion of fixed cost” [CEC02083466, page 0012, paragraph 4.32].

Final Business Case – October and December 2007

- 5.64** In October 2007, **tie** produced a first version of its FBC (“FBCv1”) [CEC01649235, Parts 1–11]. On 25 October 2007, CEC approved FBCv1 and endorsed **tie**'s procurement process. In doing so, CEC noted that the Auditor General for Scotland had reported that procedures were in place actively to manage risks associated with the Tram project, and that **tie** had “implemented a clear procurement strategy aimed at minimising risk and delivering successful project outcomes” [CEC02083538; CEC02083535, pages 0005–0007]. It also noted that the procurement strategy had previously been endorsed by the Office of Government Commerce (“OGC”) reviews.
- 5.65** FBCv1 contained a forecast of the capital cost of the project, said to have been based on firm rates and prices from the Infraco and Tramco bidders [CEC01649235, Part 1, page 0007, paragraph 1.4]. **tie** forecast the cost of phase 1a (Airport to Newhaven) at £498 million and phase 1b (Roseburn to Granton) at £87 million, reducing to £82 million if both phases were built concurrently [ibid, Part 1, page 0016, paragraph 1.65]. **tie** expressed a high level of confidence in these estimates, and said that approximately 99.9 per cent of the costs included in them were based on the rates and prices for firm bids received for the main contracts (Infraco, Tramco, MUDFA and SDS) [ibid, Part 1, page 0016, paragraph 1.66]. **tie** also noted that it had a high level of confidence in its risk allowance, which it assessed statistically at 90 per cent, meaning that there was a 90 per cent chance that the actual cost would be below the risk-adjusted level. This assessment reflected:
- “the evolution of design and the increasing level of certainty and confidence in the costs of Phase 1a as procurement has progressed through 2006/2007 and fixed price bids for the Infraco and Tramco contracts have been received” [ibid, Part 1, page 0017, paragraph 1.68].

5.66 In summary, **tie** noted that:

"the cost estimate reflects substantial external validation from the procurement process for the major contracts and contains a sensible level of risk contingency" **libid**, Part 1, page 0017, paragraph 1.72].

5.67 Throughout FBCv1 there were various references to the Infraco contract price being "fixed" – for example:

- mention in paragraph 1.68 of the receipt of fixed-price bids for the Infraco contract and the Tramco contract;
- the claim that one of the principal attributes of the procurement strategy was the "[l]ump sum price for delivery into service of the tram system" **libid**, Part 6, page 0112, paragraph 7.99];
- the reference to "the award of a single turnkey fixed price contract" as one of the key benefits of the procurement strategy **libid**, Part 6, page 0114, paragraph 7.110];
- the assertion that the "creation of the Infraco contract as a lump sum contract transfers the pricing risk to the private sector" **libid**, Part 6, page 0117, paragraph 7.126(b)]; and
- the statement that fixed prices had been agreed for phase 1a **libid**, Part 8, page 0166, paragraph 10.53].

5.68 Although negotiations on the Infraco contract were not complete, in the following passage **tie** claimed that its procurement strategy had achieved reductions in risk and cost:

"**tie**'s Procurement Strategy has resulted in it taking a greater degree of control over the process during the early 'development' phase, compared to what the public sector has done on other projects. This has resulted in **tie** progressing the overall project sufficiently in advance of seeking bids from Infraco bidders such that it was able to offer the private sector Infraco and Tramco bidders a better defined basis on which to bid and a less onerous risk allocation (and in particular reducing the extent of design and approval uncertainty at bid stage). Therefore the private sector were able to price their bids with a greater degree of accuracy and certainty than has been achieved on other projects. In this way, **tie** believes it has significantly reduced the cost of the overall project, having considerably de-risked certain of the elements of the project that fall to the private sector to deliver. This is shown by the minimal risk allowance included in the Infraco and Tramco bids." **libid**, Part 5, page 0096, paragraph 7.7.]

5.69 **tie**'s claims about the benefits delivered by its procurement strategy included the following.

- "Delivery of preliminary design and key elements of the detailed design has resulted in a reduction in risk pricing in the Infraco tenders."
- "Shorter period from letting Infraco contract to completion of the system – this also reduces the overheads incurred by the Infraco."
- "Early design of utilities has enabled commencement and completion before commencement of Infraco works, which again reduces overall programme duration."

- "Reduction in risks associated with utilities diversion – early completion of utilities diversions will result in a reduced likelihood that utilities works will disrupt progress of the main infrastructure works." [\[ibid\]](#), Part 5, page 0106, paragraph 7.60.]

5.70 In view of slower than expected delivery of designs, **tie** acknowledged the necessity of its close management of design activities and of giving priority to those designs required to ensure that progress on site was maintained "to meet the execution programmes" [\[ibid\]](#), Part 9, page 0188, paragraph 12.4]. In the following passage, **tie** recognised the consequences associated with the failure to deliver designs on time.

"Key risks are delivery of design for construction for the utility diversion works and traffic modelling and junction designs, which form the basis of the TRO process. Also essential is the timely delivery of Detailed Design for structures to allow these key items in the Infraco contract can [sic] be de-risked and priced competitively ..." [\[ibid\]](#), Part 9, page 0188, paragraph 12.5.]

5.71 **tie** acknowledged that the detailed design would not be 100 per cent complete by the time that the Infraco contract was signed. Its response to this was as follows:

"by identifying key risk areas and prioritising SDS activities, **tie** is completing several key elements of the Detailed Design in time to inform the Infraco bids on price-critical items. This has enabled the Infraco bidders to firm up their bids based on the emerging Detailed Design and thereby reduce the provisional scope allowances and design risk allowances that they would otherwise have included." [\[ibid\]](#), Part 5, page 0104, paragraph 7.53.]

5.72 The key benefits claimed by **tie** for the MUDFA strategy included increased confidence in the overall programme (by taking the design, negotiation and implementation of utility diversions out of the project's critical path). It would also significantly reduce price uncertainty for the Infraco contract: **tie**'s approach avoided the need for Infraco to apply to its tender price risk premiums normally associated with contracts where contractors had responsibility for undertaking the above tasks. Although, under **tie**'s strategy, the public sector retained the risks associated with these tasks and had to manage them, **tie** observed that:

"the cost of the risk to **tie** under this approach is considerably lower than would be the case had Infraco managed the utility diversions directly ... because Infraco would have found it difficult to quantify the risks in advance of bidding, and the knock-on effects of those unquantifiable risks to Infraco's programme would be considerable" [\[ibid\]](#), Part 5, page 0109, paragraphs 7.80–7.81].

5.73 In FBCv1, **tie** summarised the public sector's risk exposure, which it considered involved "significant, but diminishing and manageable, risks during the remaining period of scheme development" [\[ibid\]](#), Part 9, page 0180, paragraph 11.58]. While the strategy of engaging SDS and MUDFA contractors directly had reduced risk, **tie** acknowledged that "the major responsibility for identifying and managing potential risks during this period remained with the project team and their advisors" [\[ibid\]](#).

5.74 In December 2007, **tie** produced the second version of the FBC ("FBCv2"), in largely identical terms to FBCv1 [\[CEC01395434, Parts 111\]](#).

Discussion

- 5.75** When **tie** had to devise a procurement strategy for the Tram project, it did not have the option of using a tried-and-tested procurement strategy. There was no generally accepted procurement method for tram or light rail projects, and the approaches taken on previous schemes had failed to produce a satisfactory outcome [Mr Fitchie [TRl00000102_C](#), page 0053, paragraph 4.69]. Accordingly, the only realistic option for **tie** was to devise its own procurement strategy afresh. This was a challenge that **tie** took seriously. It engaged professional advisers, looked in detail at different procurement strategy options, and selected the one that it considered to be most suitable for the Edinburgh project. **tie**'s objective was to procure the project in a cost-effective way, through the appropriate management of risk: allocating risks to the parties best able to manage them; and, where possible, managing risks down prior to the award of contracts, to minimise the premiums charged by the contractors for bearing the risks to be transferred to them.
- 5.76** In my view, **tie**'s strategy was coherent and logical, at least theoretically. Uncertainty and the associated risk inherent in any project have a direct effect on the prices charged by contractors for building it because of the addition of risk premiums. Accordingly, a strategy of reducing uncertainty and its associated risk should result in a tender price that is exclusive of any additional premiums for the element of uncertainty that has been removed. Various features of **tie**'s procurement strategy were intended to reduce elements of uncertainty and their associated risk. These included:
- producing a consented design in advance of procuring the Infraco contract, so that the consented design was available as a basis for fully informed pricing by the infrastructure bidders.
 - diverting utilities in advance of the infrastructure works, to remove the uncertainty that undiverted utilities would otherwise cause for the infrastructure contractor in negotiating with the various utility companies whose apparatus had to be diverted and in programming their works. This approach also provided potential infrastructure contractors with an informed basis for pricing their bids and reduced the need for risk premiums.
 - separating operational activities from the Infraco contract, so that the infrastructure contractor could focus on construction costs and risks with which it was familiar and removing any need for high risk premiums to protect them against unfamiliar risks.
- 5.77** **tie** took the prudent step of consulting the market about its proposed procurement strategy, and received essentially positive feedback. Where there was criticism, **tie** modified its strategy to address it (eg in deciding to identify the preferred tram vehicle supplier at an earlier stage, so that the Infraco contract bidders could assess any risks relating to the particular vehicle supplier). There was no evidence before the Inquiry that indicated that there was any significant criticism of, far less opposition to, **tie**'s overall procurement strategy at the time that it was proposed. Officials in the Scottish Executive and officials in Transport Scotland, as the case may be, endorsed it [[TRS00004145](#), page 0005].
- 5.78** While aspects of the strategy were not in themselves uncommon (such as the advanced diversion of utilities or the novation of design contracts to construction contractors [Dr Enenkel [TRl00000161_C](#), page 0009]), the overall strategy was new, at least in the context of UK light rail schemes. It was untested in that context. There was no experience of how it would actually work in practice and it was in the practical

implementation of the strategy that problems emerged. Mr Kendall, who devised much of the strategy but was removed from **tie** before it was fully implemented, emphasised that its implementation required appropriate experience and expertise. He said, colourfully,

"[t]o deliver it required intimate knowledge and expertise. You couldn't be a mug punter and never done this before, come along and expect this to be done optimally, you couldn't and I don't know that expertise was there after I left."
[TR100000136, page 0144.]

5.79 **tie** made much of the expertise that it had built up in its project management team. The expertise was needed because, as **tie** was plainly aware, the strategy left it managing the design contract prior to its novation and the utility diversion contract, as well as the risks associated with them. **tie** acknowledged that the management of the various contracts would be "a challenge" [CEC00380898, page 0072, paragraph 7.3.5].

5.80 Perhaps unsurprisingly, those who came after Mr Kendall, and who therefore inherited the strategy, tended to be more critical of the strategy itself than of the expertise of those who implemented it. Mr Harper, who succeeded Mr Kendall as TPD at **tie**, said that

"[i]n a perfect world it was probably an effective and sophisticated strategy for procurement, but we live in the real world. It was always based on everything working to the plan but people do things differently and forget the plan."
[TR100000043_C, page 0006, paragraph 18.]

5.81 He considered that it was "overly optimistic that it would all work in line with the strategy on what is a complex tram scheme. It was too complicated an approach for me" **libid**, page 0013, paragraph 45]. His own preference was for a procurement model in which the same entity was responsible for design, construction and utility diversions, but he recognised that this approach would come with a large risk premium [PHT00000021, page 0046]. That preference is all very well, but it must be kept in mind that the main objective of the strategy was to reduce such risk premiums to make the project affordable. Mr Gilbert, who was recruited by Mr Crosse to run the procurement, and who most directly faced the challenge of implementing the procurement strategy, said

"[t]he core of the strategy was to avoid or ameliorate risk by managing and designing it out by driving certainty at each phase of the pre-construction phase. That meant that to be successful the strategy was contingent upon certain things happening in complete form in a specific order and schedule. This is perhaps its flaw and area of weakness in that it is inflexible to changing circumstances and external events. Such inflexibility creates problems in delivering projects with a high degree of complexity. Projects of this degree of complexity require flexibility to enable the emerging issues to be managed effectively ... The inflexibility in the strategy also meant that the programme was very sensitive to design progress and associated project and external design approvals." [TR100000038_C, page 0140, paragraph 346.]

5.82 He concluded:

"I would not pursue this strategy on future projects. In theory, it was a great strategy but it did not take much cognisance of the real complexity of the project."
libid, page 0142, paragraph 351, see also page 0009, paragraph 21.]

- 5.83** I accept the description of the strategy as having been "idealised". (See also paragraphs 6.59 and 10.8 below, where I discuss this description in different contexts). To put it another way, it was good in theory. In my view, the "idealism" of the strategy is best demonstrated by the aspiration (reported in the draft FBC of November 2006 [CECo1821403]) that the detailed design would be 100 per cent complete by the time that the Infraco contract was signed; and that the utilities would be diverted sufficiently in advance that conflict with the Infraco works could be avoided. These were laudable aspirations, but it could not be assumed that they would be achieved. That is particularly so given the competing, perceived time pressures to award the Infraco contract and proceed with its works to avoid either an increase in costs due to inflation or loss of interest in the project from the Infraco bidders. So far as the aspirations were not achieved, it was obvious that the risk that **tie** had aimed to manage out of the project would still exist. That was risk that **tie** would either have to carry itself or persuade its contractors to accept (almost certainly in return for an additional risk premium in the contract price).
- 5.84** To the extent that **tie** retained the risk, it would require accurately to identify and quantify that if it were to give CEC a properly informed basis for their decision on whether to proceed with the project. It is my view, explained in Chapter 21 (Risk and Optimism Bias), that **tie** failed to do so, and consequently failed to give CEC such a basis for their decision. Witnesses acknowledged this. For example, Mr Bissett acknowledged that the delay in production of design, and the overlapping of design and utility works with the construction period, created difficulties for the project [TRl0000025_C, page 0007, paragraph 19]. That resulted in
- "a lot of effort put into designing an additional process to complete the design that would protect the public sector from the difficulties that the overlap could otherwise create" **ibid.**, page 0058, paragraph 160].
- 5.85** He noted that the overlap of design work and utilities work with the construction period "proved to be difficult in practice", and expressed the opinion that "[t]he implications and risks of failure to avoid an overlap were probably under-estimated, in terms of cost and programme delay". Nonetheless, Mr Bissett was still of the view that "the right strategy was in place" **ibid.**, page 0086, paragraph 248]. In contrast, Mr Gilbert considered the procurement strategy to have been flawed, because it did not take into account "the complexity of the scheme", particularly as it involved carrying out major construction work on busy roads in a congested city centre and "the number of stakeholders that needed to be consulted and whose approval was required" [TRl0000038_C, page 0004, paragraph 9].
- 5.86** I prefer the evidence of Mr Bissett to that of Mr Gilbert in this regard. I do not consider that there was any inherent logical flaw in the strategy that **tie** developed. Nor do I consider that **tie** should be criticised for choosing it, particularly given the exhortations of the NAO that new approaches to procurement were needed. The strategy that **tie** developed was creative and had the potential to save considerable cost, allowing the project to be delivered within the constraints of the budget. The difficulty did not lie in the strategy but was caused by the failure to implement it. In my view, **tie** was much too optimistic about the prospects of its procurement strategy achieving its objectives on the timescales that it had to meet, and therefore about the extent to which risk would be either managed out of the project or transferred to the private sector. That over-optimism continued in the face of delays in production of the design and utility diversions, and influenced **tie**'s view that it was capable of managing the challenges arising from those delays.

- 5.87** Mr Gilbert referred to tools, including the Procurement Route map, developed by Infrastructure UK (now the Infrastructure and Projects Authority) for understanding project complexity. He said that these
- “allow a better assessment of the capabilities of both the team and supply chain, identify gaps and then adjust the strategy to deal with them. These tools allow you, in general, to work out the best approach and strategy to align market and project objectives. They also allow you to clearly understand the strengths and weaknesses of both the market and the delivery team, enabling you to address those aspects and refine your strategy from the outset.” [libid](#), page 0004, paragraph 10.]
- 5.88** This is no doubt good advice that will be relevant to projects being planned following the development of such tools. It reflects my own view that any project using a new procurement strategy, untested in the context in which it is being used, must guard against over-optimism that it will work as intended. In all projects it would be prudent to use any available tools that test assumptions and they should be used to devise and refine the procurement strategy.

Conclusions

- 5.89** **tie** devised and implemented a procurement strategy that was novel for a tram or light rail scheme in the UK. In doing so, it followed the recommendations of the NAO and sought to avoid problems that had been encountered on previous UK light rail schemes.
- 5.90** **tie** took appropriate professional advice in developing the procurement strategy and consulted the contractor market before implementing it. The market reacted positively to the proposed strategy. To the extent that there were criticisms, these were minor and **tie** refined its strategy to address them.
- 5.91** The strategy sought to keep costs down so far as possible by managing risk out of the project and transferring remaining risks to those parties best suited to bear them. Risks of very great significance to the cost of the project were those relating to design and to the presence of utilities that would interfere with construction of the tram system. Through the early appointment of a design contractor and a utility diversion contractor, **tie** sought to remove, or at least substantially mitigate, those risks prior to the award of the main Infraco contract, and thereby to reduce the premiums that bidders for that contract would otherwise have included in their bid prices. The inevitable consequence of delay in completion of the design and utility diversions was that there was greater uncertainty in relation to pricing of the Infraco contract because of the re-introduction of risk, which it had been the objective of the procurement strategy to remove.
- 5.92** **tie**'s objective was to mitigate the risks sufficiently that the main infrastructure contractor would undertake the infrastructure works, and accept all design and construction risks associated with them, for a largely fixed price that would allow the project to be completed within the approved budget. That strategy required **tie** to manage the design and utility diversion contracts so that sufficient progress was made both to mitigate the relevant risks prior to the award of the Infraco contract and accurately to assess, quantify and report upon any remaining risk so that CEC understood the likely costs before committing to construction. It also aimed to avoid open-ended commitments of funding by ensuring that robust contractual arrangements were in place, and the affordability of the project agreed, before any

commitment was made to construct the scheme. **tie** recognised that this placed significant responsibility on it, but considered that it had sufficient experience and expertise to discharge it.

- 5.93** **tie** was over-optimistic in its assessment that it would be able to manage the difficulties affecting the design and utility diversions. As a consequence, it failed properly to identify or quantify the risks that those difficulties created and, in turn, failed to provide CEC with a properly informed basis for their decision on whether to proceed with the project. It was also over-optimistic about its programme, which was based upon being right first time with very little float. In particular, its assumption that its planning proposals would be right first time failed to recognise the iterative process of planning and the sensitivity of the World Heritage Site.
- 5.94** I do not consider that it is appropriate for me to be prescriptive about the procurement strategies to be used for future tram or light rail projects in Scotland. Each project should be considered on its own merits, and there are many factors that will influence the appropriate choice. In any given project such a choice will be a matter for those engaged on it, taking account of the particular circumstances of that project and with the benefit of appropriate professional expertise and an understanding of the risk appetite of those promoting and funding the project. It would not be sensible to inhibit commercial creativity by scheme promoters in the way in which they go about this.
- 5.95** Having said that, I can appropriately offer the following guidance.
- There is much to be said for the strategy that **tie** developed – in particular, its objectives of managing risk down prior to the award of contracts and transferring risks to the parties best able to manage them, with a view to keeping costs down.
 - Project promoters should be alive to the fact that implementing a new, untested strategy is itself a risk, and should not assume in advance of its conclusion that its objectives will be achieved. Rather, it should be assumed that unexpected problems will arise.
 - Project promoters should be alive to the tension between achieving the risk management objectives of a procurement strategy, and awarding contracts on a particular timescale: while there will usually be cost consequences of delay in awarding a contract, there are also likely to be cost consequences of awarding it before the risk transfer objectives have been achieved in full.
 - Project promoters should be alive to the risk that, because of supervening events, they will fail fully to achieve the risk management objectives of their procurement strategy and, in that event, should be scrupulous in re-assessing accurately the risks that are present as a result.
- 5.96** It is essential that in any strategy that requires risks to be managed down prior to the award of major contracts, those managing the risks have the appropriate expertise and experience either to ensure that the risks are managed down to the predetermined level, or to recognise, accurately quantify and report upon any remaining risk.

Chapter 6

Design (to May 2008)

Introduction

- 6.1** The procurement strategy was intended to limit the allowance for risk related to design included by the infrastructure contractor ("Infraco") in the Infraco contract price. The method for achieving this was that, prior to the award of the Infraco contract, **tie** Limited ("**tie**") would enter into a contract for System Design Services ("SDS contract") with a provider of such services (the "SDS" provider), who would develop the design to a certain level and obtain consents and technical approvals from CEC. The successful bidder for the Infraco contract would complete the design and carry out the construction, installation, commissioning and maintenance planning in respect of the Edinburgh Tram Network ("ETN"). The completion of the design would include the incorporation into the design of the detail of the equipment, components and services to be installed as an integral part of the ETN. The Infraco contract would require Infraco to accept responsibility for design and other work carried out by the SDS provider under the SDS contract. As part of the strategy the SDS provider had to enter into a Novation Agreement (if **tie** required it to do so), as a result of which Infraco assumed the rights and liabilities of the client (**tie**) under the SDS contract.
- 6.2** From the investigations undertaken by the Inquiry it became apparent that issues relating to design arose throughout the Edinburgh Tram project (the "project"), which adversely affected its progress. This chapter and Chapter 7 (Design Following Novation and Contract Close) deal with such issues. For ease of reference they subdivide consideration of design into two separate periods, namely: the period ending with the award of the Infraco contract in May 2008; and the period thereafter.

SDS contract

- 6.3** Before looking at the various difficulties and delays that were experienced on the design programme during the period prior to the signature of the Infraco contract and the effect of these difficulties on the procurement strategy for the project it is appropriate to consider the SDS contract that was entered into between **tie** and Parsons Brinckerhoff ("PB") on 19 September 2005, as a result of which PB became the SDS provider [CEC00839054]. With **tie**'s prior written approval PB could appoint other specialists to perform part of the SDS services, and did so. Despite any such appointment, PB remained responsible for the services provided under the SDS contract, including those performed by any such appointee **libid**, page 0039, clause 9). Accordingly, throughout this chapter references to the "SDS provider" refer to PB.

Design services

- 6.4** Design services were to be provided over three phases in relation to both lines 1 and 2, namely:
- requirements definition;
 - preliminary design; and
 - detailed design [**libid**, page 0083, Schedule 1, paragraph 2.2].
- 6.5** The intention was that each phase would be completed (or, at least, largely completed), and the design for each phase agreed, before moving on to the next [**libid**, pages 0032–0036, paragraph 7.3].

- 6.6** The design services to be provided by PB were set out in Schedule 1 to the SDS contract. In short, PB was to produce the design for the tram network up to the detailed design stage. In relation to some elements, however (such as the electrics and communications), PB was to develop the design up to a certain point, with the detailed version being completed by Infraco, depending on the particular components and systems that formed part of its bid. In relation to other items of design (such as track form and tram shelters), PB produced generic designs that could then be populated with specific components – again, depending on the particular components chosen by the successful bidder for the Infraco contract.
- 6.7** As well as producing the design for the tram network, PB was required, during the requirements definition phase, to undertake sufficient surveys and investigations, necessary to inform the design of the ETN. Although the SDS contract listed the type of surveys to be undertaken and included ground-penetrating radar, ground investigation and geotechnical surveys as well as a study of Network Rail assets to prepare accurate engineering drawings to be included in Network Rail agreements, the list was not exhaustive [*ibid*, page 0084, Schedule 1, paragraph 2.3.3]. In Chapter 8 (Utilities) I refer to evidence concerning inadequate ground investigation and the late provision of survey information. Mr Reynolds, Director of Infrastructure for PB between 2004 and 2007 and thereafter Director responsible for Light Rail Major Projects including the ETN, and Mr Chandler, Project Manager of PB for the design of the ETN, also accepted that there had been issues with inadequate ground investigation and the late provision of survey information on the part of PB, although they attributed such difficulties to access problems in respect of sections of the route in Princes Street and along parts of the Network Rail corridor (see paragraph 6.133 below).
- 6.8** PB was responsible (at its own expense) for obtaining all approvals and consents required for the construction, installation, commissioning, completion and opening of the ETN [*ibid*, page 0029, paragraph 5.1]. While this obligation included approvals required from City of Edinburgh Council (“CEC”) (acting as both planning authority and roads authority), it was of much wider application and included approvals and consents from affected landowners as well as Network Rail mentioned in paragraph 6.7 above. If the design deliverables produced by PB did not fulfil the needs of any approval body PB was required, at its own expense, to amend the design in order to meet the needs of the approval body [*ibid*, page 0028, clause 4.8].
- 6.9** Mr Reynolds gave evidence to the effect that normally there is “a heavy responsibility on the designer for securing approvals and consents” and that it was not unusual, at the time of the SDS contract, for designers to obtain approvals and consents. However, over time, there had been more recognition that that was a joint responsibility (i.e. between the client and the designer) [*PHT00000019*, pages 1–2]. One can see why that would be so. Regardless of any contractual obligation on a designer to obtain consents and approvals, that would work in practice only if there were a collaborative approach by all parties to ensure that the designer was able to modify the design to satisfy the requirements of the approval body. That is particularly the case where in the course of a project the requirements of an approval body change. In that event a designer, who had sole responsibility for obtaining the necessary consents or approvals, would require to amend the design to satisfy the approval body. Without the support of the client for such modification, the designer might be unable to obtain the necessary consents or approvals. Where, as in this case, it was necessary to obtain the approval and consent of adjacent landowners such as Forth Ports, Network Rail, Royal Bank of Scotland and Edinburgh Airport, the support of **tie** and CEC and their intervention with these third parties was essential to obtaining such approval and consent within a reasonable timescale.

- 6.10** Even if that support were forthcoming, the burden of the cost of such design change would fall on the designer where, as in this case, the designer was contractually bound to amend the design at its own expense. Where the amendment was occasioned by a change in the needs of the approval body from its requirements when the design was prepared initially one can understand the sense of grievance that the designer might experience. This is not an academic matter because Mr Reynolds explained that this had occurred in this case and for that reason at novation PB had succeeded in changing its obligation to fund design changes in that situation [ibid, page 2].
- 6.11** In the case of the project the required collaboration appears to have been lacking or, at least, ineffective. For example, Mr Chandler gave evidence that:
- “TIE interpreted this [PB’s responsibility for obtaining all approvals and consents at its own expense] as an open ended obligation to continue to deliver design iterations until all those third parties were content and SDS had secured their approval.” [TR10000027_C, page 0025, paragraph 87.]
- 6.12** This resulted in delay, which PB reported to **tie**. Without **tie**’s direction and collaboration with PB and its intervention with third-party stakeholders, PB was powerless to resolve the issues that had been raised by third parties. Mr Chandler explained PB’s difficulty in this respect as follows:
- “The difficulty was that although SDS had the obligation through the contract to secure their approval, we could not really force a decision to effect that approval. So SDS were just left in a loop of providing iterations of proposals for design without having the power to force agreement with the third parties.” [ibid, page 0031, paragraph 114.]
- 6.13** In any project the consequence of delay is additional expense, and it is in everyone’s interests to seek to avoid that. Even where the obligation to obtain the approval of third parties rests solely with the designer, the client has a clear interest to assist the designer in obtaining that consent but it appears that **tie** did not appreciate that or, if it did, failed to act collaboratively with PB to achieve an early resolution of third-party objections to the design.
- 6.14** In relation to the design for the utilities diversions along the tram route, the SDS contract stated that PB was to “provide assistance to **tie** with the management of an advanced utilities diversion programme”, which was to include “assessing the need for and acquiring relevant data relating to the presence and location of all buried and above ground utilities” and “undertaking critical design and developing a strategy for all utilities diversions to minimise diversion requirements and out-turn costs” [CEC00839054, page 0091, Schedule 1, paragraph 3.2]. Although “critical design” was not defined, it clearly had a different meaning from design generally. In Chapter 8 (Utilities), indeed, this difference was recognised in practice to some extent because the reference to PB’s undertaking “critical” utilities design resulted in its undertaking the more complex utilities design, while standard, or routine, utilities design was to be undertaken by the utilities companies themselves, in relation to their own apparatus and connections. I will consider the issue of problems associated with the diversion of utilities in Chapter 8 (Utilities).

Programme

- 6.15** The programme included in the SDS contract was already a number of months out of date by the time that the SDS contract was signed [libid](#), pages 0248–0261, Schedule 4]. For example, in relation to line 2 (from Newbridge to St Andrew Square), the programme indicated that work on outline design would start on 27 April 2005 and finish on 28 February 2007 [libid](#), page 0253, Schedule 4]. Such a start date was clearly already impossible by the date of signature of the contract on 19 September 2005.
- 6.16** In addition, the contract included a programme phasing structure that indicated that preliminary design was to be approved for certain sections by 30 November 2005, and that detailed design was to be approved for those sections by 30 March 2006 [libid](#), page 0112, Schedule 1, appendix 2] or by 30 May 2006 [libid](#), page 0111]. Again, those timescales were out of date, and so were clearly unlikely to be achieved, by the time that the SDS contract was signed. Indeed, the programme phasing structure indicated that detailed design for all of phase 1a of the tram line was to be approved by 30 September 2006 (with the exception of the detailed design for Leith Depot, which was to be approved by 30 November 2006), which, again, was no longer realistic or achievable at the date of signature of the SDS contract.
- 6.17** The reason for the programme being out of date when the SDS contract was signed appears to have been a delay in entering into that contract and a failure to update the design programme to reflect that delay. No explanation was provided to the Inquiry as to why the design programme in the SDS contract was not updated to reflect the delay in its award. I consider that it is obvious that the design programme ought to have been updated before the SDS contract was entered into, so that all parties had an up-to-date and realistic programme that they could work to, and against which any delays could be tracked and reported.
- 6.18** After the SDS contract was signed it appears that **tie** and PB agreed that the deliverables for the requirements definition phase would be produced by the end of December 2005, and that those for the preliminary design phase would be produced by the end of June 2006.
- 6.19** The SDS contract further provided that PB would update and amend the design programme within 30 days of the signature of the contract and thereafter maintain, update and amend it in accordance with specified requirements. Any updates or amendments had to be approved by **tie** [libid](#), page 0030, paragraph 7.1.2]. While revised design programmes were regularly produced by PB and sent to **tie**, it appears that these revised or amended programmes (which all showed slippage and delay) were neither approved nor rejected by **tie**. This was confirmed by Ailsa McGregor, who explained that when she joined **tie** in August 2006 as Project Manager for the SDS contract the original programme had slipped by three months due to delays in the procurement process. Although she had been advised that the programme had been re-baselined in April 2006 her understanding was that this had not been formally agreed with **tie** and the status of the programme was unclear [TR100000250](#), page 0043]. The failure of **tie** to respond formally to the proposed revised design programmes is an illustration of **tie**'s failure to manage the SDS contract.
- 6.20** The SDS contract also required PB to adhere to the master project programme prepared by **tie** and to ensure that any updates or amendments to the design programme were coincident to, and aligned with, **tie**'s master project programme [CEC00839054](#), page 0030, paragraph 7.1.1 and page 0095, Schedule 1, paragraph

4.1.2]. It appears, however, that **tie** failed regularly to produce, update and distribute a master project programme. For example, PB's claims document dated 31 May 2007 stated:

"**tie** is obliged to issue the Master Project Programme which shows the programming interfaces for all Tram Network contracts. PB has only been issued with one version of the Master Programme, (dated 19 February 2007), and this has impacted resource planning through the resulting lack of clarity on project overall requirements." [CEC02085580, pages 0007–0008.]

6.21 Ms Clark, **tie**'s Programme Director, gave evidence that she was not able to dispute the evidence from PB witnesses that PB did not receive copies of the master project programme to enable it to plan its works, and that she did not recall that programme being sent to PB [PHT00000025, page 113]. This is another indication of **tie**'s management failure in the context of the SDS contract.

Payment

6.22 PB was entitled to payment under the SDS contract once milestones, or sub-milestones, were reached [CEC00839054, page 0041, paragraph 11]. The anticipated total contract value was £23,547,079 *ibid*, page 0115, Schedule 3]. The SDS contract did not, however, provide for financial incentives if the design was delivered early, nor did it provide for financial penalties if it was delivered late.

SDS novation

6.23 As was noted in paragraph 6.1 above, PB was obliged to enter into a novation agreement with Infracore if, and at the time, requested by **tie**. The form of the novation agreement was set out in schedule 8 to the SDS contract *ibid*, page 0070, paragraph 29.1 and page 281].

Client representative

6.24 The SDS contract provided for **tie** to appoint a client representative, who was to be PB's primary point of contact with **tie** and responsible for the day-to-day supervision of the services to be provided by PB *ibid*, pages 0039–0040, paragraph 10.1]. In terms of clause 10.8 PB had an equivalent obligation to appoint a "SDS Provider's Representative" to be the principal point of contact with the client representative. These arrangements were conducive to the effective and efficient management of the SDS contract. Nevertheless, clause 10.4 recognised that there may be periods when nobody was performing the functions of the client representative, such as before any appointment was made or during the illness or incapacity of the client representative. In that event **tie** would perform the duties of the client representative. On the other hand, PB was obliged to nominate a deputy to its representative to act when the representative was unable to exercise his functions *ibid*, page 0041, paragraph 10.10].

6.25 I am of the view that when considered as a whole, the provisions relating to the appointment of representatives recognised the obvious advantage of such appointments for the efficient management of the SDS contract. Although provision was made for **tie** assuming the responsibilities of the client representative prior to an appointment being made, it seems unlikely that parties anticipated that no appointment would be made for approximately a year after the signature of the contract. Despite this, it does not appear that **tie** had appointed a client representative before the appointment of Ms McGregor in August 2006 or, that if one had been appointed, who that individual was or what, if any, supervision they exercised over the services provided by PB. That is also consistent with PB's progress reports for May

and August 2006, which noted the need for **tie** to inform PB of the name of **tie**'s client representative (described as **tie**'s contract representative in the progress reports) [[CEC01684827](#); [CEC01359145](#)].

- 6.26** Furthermore, there was little evidence before the Inquiry of **tie**'s having exercised supervision or oversight of the SDS contract or the services being provided by PB before Ms McGregor's appointment. That was recognised in, for example, **tie**'s progress report dated 6 October to the Tram Project Board ("TPB") on 23 October 2006, which noted: "[w]e recognise that we have to control and manage the contract more effectively" [[CEC01355258](#), page 0009]. Mr Crosse, **tie**'s Tram Project Director ("TPD") between January 2007 and March 2008, concluded from discussions with his predecessor, Mr Harper, and with work stream leaders, that SDS leadership was not very strong. More significantly he concluded that **tie** was not managing SDS and the contractual relationship between **tie** and SDS particularly well. There was nobody qualified within **tie** to perform the role of Chief Engineer and **tie** was often late in delivering information to SDS that it required to complete designs. In short, technical leadership was poor on both sides and collaboration was non-existent [[PHT00000021](#), pages 34–36].
- 6.27** That is also consistent with the evidence to the Inquiry that **tie** initially appears to have thought that it would have a minimal role in the design process, simply relying on the obligation on the SDS provider to produce design and obtain approvals in accordance with the programme, with minimal involvement by **tie**. Ms Craggs considered that **tie** did not have the experience of managing such a contract and failed to anticipate the level of management that was required to ensure that SDS was fulfilling its obligations [[PHT00000016](#), pages 100–101]. I accept that evidence.

Requirements definition phase

- 6.28** During the requirements definition phase, PB was required to produce a set of functional requirements specifications (i.e. the functional and operational requirements for the tram scheme), which would provide a baseline from which the preliminary design could be developed. A number of surveys were also to be undertaken by PB during that phase, to inform the design and technical specifications [[CEC00839054](#), page 0084, Schedule 1, paragraph 2.3.3].
- 6.29** While PB delivered the requirements definition documents on time on 19 December 2005, within the agreed 13-week period for their production, there were issues concerning the quality and level of detail of some of the deliverables, which required to be addressed during the preliminary design phase (i.e. between January and June 2006). Mr Chandler, who replaced PB's existing Project Manager for the project in February 2006, considered that the delay in the signature of the SDS contract reduced the time available for the requirements definition phase and that there had been a rush to complete PB's submission within the restricted timescale. The division of the responsibilities around the PB team for the project was not very clear, and the programme produced by PB was overly complicated [[PHT00000020](#), page 5].
- 6.30** In an internal PB "lessons learned" document produced in August 2007, Mr Reynolds commented:
- "The client enforced an unreasonably short period of time for the requirements definition phase and this was signed up to by PB. There was insufficient time for orderly mobilisation and quality and timeliness of deliverables suffered. As a consequence PB's reputation suffered and the client's perception of PB's poor performance carried through into preliminary and detailed design." [[PBH00028567](#); [PBH00028568](#), pages 0001–0002.]

- 6.31** That document also recognised failings on the part of PB. The person in charge of the project for PB was ineffective. He “failed to educate the client as to how the scheme would be engineered and was unable to work with the client to agree a workable delivery plan”. This was the first contract in which PB had used “multi-office design delivery” but more significantly PB had failed to undertake a proper risk assessment for the project. Had it done so it would have foreseen “CEC modus operandii (sic)”. CEC’s approach and **tie**’s inability to control CEC’s aspirations were considered to be the primary cause of design slippage.
- 6.32** While there was evidence that the shortcomings in the requirements definition deliverables were addressed during the preliminary design phase, the evidence to the Inquiry was that, in general, it would have been better to have stopped, and reached agreement, at the end of each stage of design before moving on to the next stage. By proceeding in that manner there would have been an agreed, and fixed, baseline from which to develop the next phase of design, thereby reducing the risk of previous design being re-visited and changed. In that regard Mr Harries, of Transdev Edinburgh Tram Limited (“Transdev”), gave evidence that
- “normally the design process is that you develop an initial design and then you develop into a preliminary design and then it’s developed into a detailed design, and then you go out and build it. At each of the stages it is reviewed by those people who need to review it, so that you have a series of agreed stages in the development of the design, and that process reduces the risk of having to do a lot of rework.” [PHT00000016, pages 20–21.]
- 6.33** One of the difficulties with the production of a design that was acceptable to CEC as the planning and roads approvals authority and as the ultimate client was the lack of engagement of CEC with the designer at an early stage. While there was before the Inquiry evidence of some engagement by PB with CEC during the requirements definition phase, in short, the weight of evidence was that greater engagement with CEC at an earlier stage would have been helpful in clarifying its wishes and requirements before the design was developed further.
- 6.34** By way of example, one of the difficulties for the SDS provider was to ensure that the design of the project reflected the city’s status as a World Heritage Site. That was dependent on subjective judgements and appears to have led to uncertainty as to what, exactly, was required by CEC in its dual role as client and approvals authority. The problem is, perhaps, illustrated by the requirement in the SDS contract that design for the on-street section between Haymarket and Ocean Terminal via Princes Street should:
- “provide a look and feel that is at one with its surroundings whilst not detracting from the design elsewhere on the Edinburgh Tram Network” [CEC00839054, page 0088, Schedule 1, paragraph 2.7.1.1].
- 6.35** While there is nothing wrong with such a goal or aspiration in itself and such an aspirational statement is not uncommon in construction or design contracts, it was of doubtful value in this case. In a situation in which timing was important and the requirement for consent from CEC sat alongside a number of contracts and considerations, it would have been of assistance to have a statement of what CEC sought in more practical detail.
- 6.36** Although, around December 2005, CEC did produce a Tram Design Manual, which gave some guidance on design principles, that guidance was of a very general nature [CEC00069887]. It was not until April 2008 that CEC produced a draft Tram

Public Realm Design Workbook [[PBH00018590](#); [CEC02086917](#); [CEC02086918](#); [CEC02086920–CEC02086934](#)],¹³ which gave more detailed guidance on matters such as surfacing, materials and construction details. A letter dated 10 April 2008 from Mr Henderson, Head of Planning and Strategy, CEC, to Mr Bell, **tie**'s TPD, enclosed a copy of the draft Workbook. The purpose of the letter was "to suggest a way of ensuring that the designs for the Tram project fit with the Council's wider aspirations for public realm". Although the Workbook was a work in progress position document, Mr Henderson expected that it would "assist in developing the details of the Prior Approval Designs and Technical Approvals that are now coming forward for the City Centre" [[PBH00018590](#)]. This guidance was intended to supplement the guidance in the Tram Design Manual [[CEC00069887](#)] and the Edinburgh Standards for Streets [[CEC00669586](#)].

- 6.37** Mr Glazebrook, Engineering Services Director of **tie** between 2007 and 2011, gave evidence that he had not seen the draft Tram Public Realm Design Workbook [[PBH00018590](#); [CEC02086917](#); [CEC02086918](#); [CEC02086920–CEC02086934](#)]* although it had been sent to Mr Bell. Although Mr Glazebrook considered that its production was too late and ought to have included guidance on other matters of detail required by CEC, it is surprising that he was not included in its circulation and reflects adversely on the management culture within **tie**. He considered that had that more detailed guidance been issued earlier, it would have assisted the designers in producing design that met CEC's requirements, which, in turn, would have enabled design, approvals and consents to have progressed more quickly. Moreover this guidance should have been available to the designers at the outset of the SDS contract, not in 2008 [[PHT00000014](#), pages 142–144].
- 6.38** I consider that it was particularly important that such guidance should have been given at an early stage in the project, in view of its unique features: the facts that a substantial portion of the tram line would run through a UNESCO World Heritage Site and that it would be the first such line to be built in Edinburgh in recent memory, with the result that its design principles would require to be developed "from scratch", there being no existing scheme to look to for guidance. On any view, CEC ought to have produced sufficient detailed design guidelines before the SDS contract between **tie** and PB was signed to enable PB to take them into account when designing the tram network. Had that occurred it is likely that PB would have received the necessary consents and approvals from CEC sooner than actually occurred. CEC's failure to do so contributed to the delays in the design of the project.

Preliminary design phase

January–June 2006

- 6.39** PB worked on the preliminary design between January and June 2006, with the preliminary design deliverables being sent to **tie** at the end of June 2006, within the agreed time period. In producing the preliminary design deliverables, PB took account of comments on, and sought to address deficiencies in, the requirements definition deliverables.

¹³ *CEC were unable to provide the Inquiry with the "Tram Public Realm Design Workbook" as a single document [[CEC02087292](#)].

- 6.40** In late 2005, after design work had started following the signature of the SDS contract, various changes had been made to the design requirements for the tram scheme as a result of the parliamentary process leading to the enactment of the Tram Acts in April and May 2006. PB had no involvement in the parliamentary process and was unaware of these changes before it commenced work on design. Ms Craggs, a solicitor with Dundas & Wilson, advised CEC and **tie** during the parliamentary phase of the project and between March 2006 and March 2007 she was seconded to **tie** on a full-time basis, as Director of Design, Consents and Approvals. She gave evidence that, in the summer and autumn of 2005, the Scottish Parliament was considering various proposed amendments to the alignment of the route and did not conclude its consideration of that issue until Christmas 2005. Significant changes were made to the original plans and sections submitted to the Scottish Parliament, particularly those for Haymarket Yards, Newhaven and the Gyle. At Haymarket Yards the route changed completely. The changes also included changes to the horizontal and vertical limits of deviation. Thus the baseline from which PB had to prepare designs changed significantly without **tie** advising it of the changes. Ms Craggs doubted the prudence of starting the preliminary design phase until there was certainty about the route and the limits of deviation [[PHT00000016](#), pages 130–134].
- 6.41** The failure to notify PB of the changes in December 2005 meant that PB was preparing the preliminary design on the basis of the original drawings submitted to the Scottish Parliament, which were no longer the correct baseline from which to develop that design. In March or April 2006 when Ms Craggs was discussing the “virtual route” at a meeting with PB shortly after her secondment to **tie** in March 2006 she noted that **tie** had failed to advise PB of the changes to the baseline. Mr Dolan, of PB, explained the effect of the late notification of these changes to PB as follows:
- “We were two thirds of the way through our PD [preliminary design]. There were changes ... We took it on board for the last two months of our preliminary design stage as best we could.” [[PHT00000019](#), page 207.]
- 6.42** Any changes from the parliamentary process that were not reflected in the preliminary design were to be taken forward into the detailed design [[ibid](#); see also Mr Chandler [PHT00000020](#), pages 22–23].
- 6.43** The changes to the baseline from which PB had to prepare designs and the failure of **tie** to keep PB informed of such changes meant that PB had to carry forward elements of preliminary design into the detailed design phase. This prevented the orderly progression of design mentioned by Mr Harries in paragraph 6.32 above, and introduced the risk of **tie** or CEC insisting upon changes to the preliminary design during the detailed design phase. **tie**'s failure to inform PB of the changes when they arose also reflects upon its poor management of the project. Although Ms Craggs doubted the prudence of starting the preliminary design phase until there was certainty about the route and the limits of deviation, she thought that PB could have undertaken the requirements definition phase before such certainty existed. I disagree with that approach. It is not uncommon for changes to be made to a scheme during the passage of private legislation to accommodate objections to the scheme. In these circumstances it would have been prudent to await the necessary certainty about the route that was to be designed before the signature of the SDS contract. This would not have prevented the terms of that contract being negotiated and agreed subject to finalisation of the baseline drawings and would have allowed PB to discuss with CEC its design requirements before signature of the contract to reduce the scope for the disagreement that ultimately arose.

July 2006 onwards

- 6.44** Following PB's delivery to **tie** of the preliminary design at the end of June 2006 **tie** had 20 working days within which to review and accept or reject it [CEC00839054, page 0027, paragraph 4.1 and pages 0290–0294, Schedule 9]. **tie** did not respond to the preliminary design within that timescale. Instead it participated in the protracted process mentioned below.
- 6.45** At the same time, CEC received a copy of the preliminary design for review. CEC had had little previous involvement in the design process and saw this as its opportunity to have an input into design. In particular, a number of design workshops (or "design charrettes") took place, which resulted in further, and alternative, design options being explored. Mr Fraser, CEC's Tram Co-ordinator between June 2007 and September 2009 with the primary role of processing roads and planning consents and approvals, gave evidence that the charrette process
- "was the first significant opportunity for CEC to directly influence the quality of the interaction of the tram within the urban landscape" [TRl0000096_C, page 0011, answer 7(1)].
- 6.46** Charrettes were held in respect of various on-street locations (Haymarket, Shandwick Place, Princes Street, St Andrew Square, Picardy Place, Leith Walk, and the Foot of the Walk) and in respect of various structures on the off-street section (Edinburgh Park viaduct, Carrick Knowe bridge, Coltbridge viaduct and Craighleith Drive bridge).
- 6.47** In addition to the charrettes, a design approval panel was set up, with representation from CEC. Planning summits were held and CEC staff were co-located to **tie**'s offices, all with a view to ascertaining and agreeing CEC's design requirements. It is clear from the evidence that CEC staff ought to have been involved in design issues from the start of the project and throughout the different phases including the initial phase of design deliverables; if that had occurred it might have avoided many of the problems with design approval that subsequently occurred. CEC's involvement in design issues, including staff co-location in **tie**'s offices, came too late in the process [Mr Chandler, of PB PHT00000020, pages 21–22; Mr Harper, **tie**'s TPD at that time TRl00000043_C, pages 0021–0022, paragraph 72].
- 6.48** The late involvement of CEC officials in design issues, including the introduction of the charrettes and the design panel, resulted in options being reconsidered that had already been rejected and in issues being raised that ought to have been addressed and resolved before the award of the SDS contract, or during the design requirements phase at the very latest. The SDS contract did not address the need for the early involvement of CEC officials in the design process. It ought to have been apparent to **tie** that CEC, as the ultimate client and the planning and roads authority, had a significant interest in the design of the project. Its input into the design process was essential and **tie** and PB ought to have engaged with CEC much earlier than they did and, in any event, at least prior to the commencement of work on the preliminary design. I agree with the evidence of Ms Craggs when she stated:
- "I think that tie had not really thought about how the various inputs from organisations/stakeholders would be co-ordinated ... tie had not properly thought through how CEC's input would work, nor had SDS. I think that was the biggest problem ... I think naively everyone thought that preliminary design would be signed off with very little discussion or additional work requiring to be done on it." [TRl00000029, pages 0040–0041, paragraph 98.]

6.49 Mr Reynolds considered that **tie** lacked the necessary experience of a major construction project to manage the programme and, in particular, to challenge the stakeholder requests for change as a result of requirements that were made after the preliminary design had been submitted to it [TR100000124_C, pages 0041–0042, paragraphs 137–138]. **tie**'s mismanagement of the SDS contract is also illustrated by PB's receiving requests to prioritise different items of design, at different times, from different teams within **tie** in a manner that lacked co-ordination, resulting in an inefficient process for the production of design. For example, in November 2006, without consulting PB, **tie**'s Infraco procurement team re-prioritised the SDS programme to accommodate the appointment process without apparently appreciating the adverse effect that would have on the delivery of the SDS programme overall [Ms McGregor TR100000250, page 0084]. This practice was still evident in February 2007 when Ms Craggs commented upon it in an email to Mr Crosse in the context of SDS programme/priorities and work to award the Infraco contract. As was observed by Ms Craggs, such an approach could prejudice the overall programme and affect other work streams [CEC01826622].

6.50 The extent of the problems occasioned by the late involvement of CEC and the introduction of charrettes and the design panel at this stage in the process is illustrated by the evidence of Mr Chandler to the following effect.

"Decisions that SDS thought had already been made were open for discussion. SDS thought we were producing a preliminary design developing the outline design that had been through a lengthy parliamentary process. What we had not anticipated at the end of the preliminary design was the level of potential change that was to follow. Even very basic decisions about how many tram-stops there were going to be were questioned and the route of the tram itself. Even the option of relocating the depot to Leith was considered. That optioneering had been done several years before and discounted. The impact on SDS was catastrophic ... There were very lengthy delays and ... progress ... suddenly stalled ... After submitting the preliminary design, for it all to unravel and to go back almost to optioneering around the route and what the route should look like and how the tram should progress is very unusual." [TR100000027_C, pages 0044 and 0066, paragraphs 168–171 and 259.]

6.51 The consideration given to further design options in the second half of 2006 meant that PB was unable to progress the detailed design stage meaningfully. Clearly, that stage could be developed only once **tie** and CEC confirmed their preferred design options. In addition, detailed design for roads and junctions could commence only once traffic modelling had been undertaken – and that could be done only once the preliminary design for roads and junctions had been agreed. In her September report **tie**'s SDS Project Manager, Ms McGregor, noted that the decision to adopt a review process that was inconsistent with the SDS contract had had a seriously adverse effect on the critical programme dates and prevented PB from proceeding to detailed design. She identified the key issues that were affecting progress as:

- "Charette [sic] Changes and changes TEL/CEC approval required; quantum agreed in principle
- Programme and reporting
- Deliverables (not clearly defined)
- PD review process" [TIE00073020].

- 6.52 Delays in finalising design also arose due to the need to take account of the wishes and requirements of a number of third parties at various locations along the route – in particular at: Leith (Forth Ports); Picardy Place (in relation to a proposed hotel development at the Picardy Place roundabout); Haymarket; the Scottish Rugby Union (“SRU”) (Murrayfield); the Royal Bank of Scotland tram stop; and Edinburgh Airport. The wishes and requirements of Network Rail also required to be taken into account in respect of the sections of the tram line that would run alongside the railway line.
- 6.53 Until the wishes and requirements of CEC and third parties were resolved, the design of the network could not be finalised. For example, CEC’s wishes in respect of the junction at Picardy Place were influenced by the proposed development at St James Centre and included the possible location of a hotel on the site of the roundabout at that junction. Until the land uses at that location were finalised it was not possible to have a concluded design for that junction. In passing I note that CEC undertook a further consultation exercise about that junction in connection with the tram extension from York Place to Newhaven following the conclusion of the evidence at the Inquiry and after work on the redevelopment of St James Centre had commenced. Had a similar exercise been undertaken and a decision reached about land uses in that location before the SDS contract was signed, changes in design there and the consequent delay and expense would have been avoided.
- 6.54 Moreover, as explained by Mr Chandler, the introduction of a tram system into the city of Edinburgh was extremely complex. The alignment of the track was a critical element of the design as it affected the amount of disruption due to associated highway works. There were extremely tight tolerances for the alignment of the track in relation to adjacent structures or even the tram stops themselves. What appeared to be a relatively minor change to the design (for example, by changing a kerb alignment or by moving a tram stop by a few metres) could have a significant impact upon other parts of the tram infrastructure and on the existing infrastructure around Edinburgh. Such interdependencies meant that the design team had to consider the implications of any change for the design as a whole and had to make changes to other design details that then required further approval.
- 6.55 By late 2006, it was clear that the design programme had become considerably delayed. A “dashboard” report for December 2006 noted that 28.3 per cent of the detailed design had been undertaken, against the 71.9 per cent that had been programmed for that stage using the baseline figures for April 2006 [[TIE00040946](#); [TIE00040947](#)].
- 6.56 In December 2006, Scott Wilson Railways (which was **tie**’s Technical Support Services (“TSS”) Provider) produced a Preliminary Design Review Report [[PBH00026782](#)]. It noted that, by the middle of October 2006, it had become clear that the overall review process “was in somewhat disarray [sic] and required to be closed out with SDS” [*ibid.*, page 0007]. The review noted that the engineering aspects of the project seemed generally to be on course, with the notable exception of the structures. Decisions were outstanding on certain design aspects, for which PB could not be held wholly responsible. The overall conclusion in the report was that “the bulk of the Preliminary Design submission is now either acceptable or acceptable given the responses from SDS” [*ibid.*, page 0005]. Various ongoing, outstanding and unresolved issues would be addressed during the detailed design phase.
- 6.57 It can be seen, therefore, that, again, rather than agreeing one stage of design (i.e. preliminary design) before moving on to the next (i.e. detailed design), it was agreed that unresolved design issues would be carried forward to, and addressed in, the

next design phase. However, on this occasion the preliminary design had been based upon the designer's reasonable assumption that CEC and **tie** were happy with the concept design, the route, the number of tram stops and the outline layout of the traffic junctions that had been resolved during the parliamentary process. Many of the unresolved preliminary design issues arose because of the proposed changes to that baseline. It would have been prudent for PB to insist upon resolution of these proposed changes to enable it to complete the preliminary design before proceeding to detailed design. Mr Chandler explained that PB ideally would have "liked to have a very clear set of guidance notes almost on how the design should be completed" [PHT0000020, page 35]. That guidance was not provided at that time and PB succumbed to pressure to adhere to the programme despite the outstanding critical decisions.

6.58 The draft Final Business Case ("FBC") for the project was presented for approval to members of CEC on 21 December 2006 [CEC01821403]. In discussing the FBC here, I may appear to repeat observations made in Chapter 5 (Procurement Strategy). While acknowledging that such repetition may occur, I consider making these observations to be worthwhile in the different contexts under examination. It set out the intention that the novation of the SDS Contract to Infraco would transfer responsibility for the design and its associated risks to the Infraco without incurring the risk premium normally associated with bidders having to undertake all the design work after contract award. Moreover, it not only anticipated that design to detailed design would be 100 per cent complete when the Infraco contract was signed but also noted that **tie** was seeking to complete the key elements of the detailed design prior to the selection of the successful Infraco bidder in summer 2007 to enable Infraco bidders to firm up their bids based on the emerging detailed design. This would reduce the scope and design risk allowances that bidders would otherwise include [*ibid.*, page 0085, paragraphs 7.50 and 7.53]. The draft FBC included a programme summary, showing that detailed design for phase 1a was due to be completed and all approvals and consents to be obtained by 4 September 2007, with the Infraco contract being awarded in October 2007 [*ibid.*, pages 0166–0167]. The programme had very little float and was based upon "the assumption of 'right first time and on-time' delivery of activities", particularly SDS design work [*ibid.*, page 0164, paragraph 11.3]. As will be mentioned in paragraph 13.12 of Chapter 13 (CEC: Events during 2006 and 2007), the draft FBC, and the report to CEC on 21 December 2006, contained no reference to the serious difficulties and delays that had arisen on the design programme.

6.59 Mr Crosse, of **tie**, considered that the reference in the draft FBC to design being 100 per cent complete was an "idealised concept", which:

"possibly led people to expect, possibly out of ignorance, that it would be a pile of drawings and specifications tied up in a bow, perfect. You don't need to do any more. It was never going to be that." [PHT0000021, page 45.]

Here, I may appear to repeat observations made in paragraph 5.83 above and 10.8 below. While acknowledging such repetition, I consider making these observations to be worthwhile in the different contexts under examination.

6.60 He gave evidence that design would always require to change after the award of the Infraco contract, that it was not possible for design to be 100 per cent complete when the contract was awarded and that it is not possible to eradicate the premium charged by the infrastructure contractor for accepting design risk. Although both he and the management team in **tie** were aware that design would not be 100 per cent complete when the Infraco contract was awarded, he was unaware whether that had been communicated to officials or councillors in CEC.

- 6.61** While I accept that the statement that the design would be 100 per cent complete when the Infraco contract was awarded may be misinterpreted in the manner suggested by Mr Crosse in paragraphs 6.59 and 6.60 above, there can be no doubt that a fundamental part of **tie**'s procurement strategy was to develop the detailed design to the stage of obtaining the necessary consents and approvals prior to the award of the Infraco contract. The purpose of that part of the strategy was to minimise the risk premium that the successful Infraco bidder would include for design risk. That does not mean that anyone anticipated there "would be a pile of drawings and specifications tied up in a bow" which required no further work prior to construction. As I have indicated in paragraph 6.1 above, Infraco would require to complete the detailed design by incorporating the components and systems that had formed part of its bid. When the draft FBC is considered as a whole it is clear that, in accordance with the procurement strategy, the intention was to develop the design to such an extent that the successful Infraco bidder would have a detailed design that had the approval of the relevant statutory bodies and interested third parties and that it could adjust as necessary at its own risk prior to constructing the tram network. The programme mentioned in paragraph 6.58 above was intended to achieve that objective. Further, **tie** aspired to the completion of key elements of the detailed design prior to the selection of the successful Infraco bidder in summer 2007 to enable Infraco bidders to firm up their bids based on the emerging detailed design.
- 6.62** Having regard to the nature and extent of the changes to the preliminary design mentioned above, I have concluded that in late 2006 it was overly optimistic for **tie** to report that design would be completed by September 2007 or that when the Infraco contract was awarded detailed design would be 100 per cent complete in the sense mentioned in paragraph 6.61. Support for that conclusion can be found in the evidence of Ms McGregor, of **tie**, and Mr Reynolds, of PB. Ms McGregor considered that the statements about design in the draft FBC were "very optimistic", given "the high number of critical design and charrettes issues affecting large parts of the route at that time and the programme delays" [[TR100000250](#), page 0082]. Mr Reynolds gave evidence that when he became PB's Project Director in February 2007 "it was already clear that there was a very high risk that that September date for completion of detailed design wouldn't be met" [[PHT00000019](#), page 19]. As will be seen, these concerns were justified, although I suspect that neither of these witnesses anticipated the extent of the delay that would ensue. Design was still incomplete and consents and approvals for significant parts of the design had not been obtained when the Infraco contract was signed in May 2008.

Detailed design phase

- 6.63** By the beginning of 2007, a large number of critical design issues had arisen that prevented detailed design from being progressed meaningfully. In an email dated 18 January 2007, Ms McGregor expressed her concern that "we do not deal with the issues and just pretend they do not exist and are 'somebody else's responsibility'" [[CEC01811518](#)].
- 6.64** In January 2007, Mr Crosse was appointed **tie**'s TPD. The minutes of a meeting of the Design, Procurement and Delivery ("DPD") Sub-Committee held on 16 January 2007 noted:
- "SDS progress – Concerns were raised about the practicalities of expectations and the changing priorities by different stakeholders on the delivery of SDS milestones. Late inputs from **tie** and CEC into the design process further aggravated the situation." [[CEC01766256](#), page 0003, paragraph 2.4.3.]

- 6.65 Mr Crosse was to provide a "get well" plan for design, taking account of the concerns discussed at the meeting.
- 6.66 In January 2007, **tie** also instructed Mr Crawley, an engineering consultant with experience of tram and light railway systems, to carry out a high-level review of the design review process. Mr Crawley was told that the project was in trouble and that it was hoped that a review might help to identify both the issues that were causing the difficulties and also possible solutions to them. He interviewed a number of individuals and produced a report [CEC01811257], which noted a number of serious concerns on the part of interviewees, including that the programme would not be met if the current design review arrangements continued as well as the need to improve change control.
- 6.67 Mr Crawley gave evidence that while his review concerned the design review process rather than the project overall, it was impossible to ignore wider issues that had emerged that were not specifically confined to the design review process.
- "The phrases which kept on emerging were poor leadership, not feeling like one team and everybody knowing that in their opinion the project was too late to be delivered in anything like the original programme and to budget." [PHT00000014, page 16.]
- 6.68 For his part, Mr Crosse gave evidence that when he joined the project he formed the view that PB leadership was not very strong. He also considered that **tie** was not managing PB or the SDS contract very well and that there was a need for it to appoint a chief engineer to take overall responsibility for the design process and make decisions on technical issues. It was also clear to him that **tie** and CEC needed to work more closely together in the design development. He also considered that collaboration between **tie** and PB was non-existent and that a collaborative approach required to be introduced [PHT00000021, pages 34–36]. He was of the view that the problems with design required to be addressed because design was on the critical path for the whole programme for the project. He agreed with the suggestion put to him by counsel to the Inquiry that design remained on the critical path and was a cause of concern, throughout 2007 [*ibid.*, page 32].
- 6.69 As part of the remedial measures taken by **tie**, in February 2007 Mr Crawley was appointed as its Director of Engineering, Assurance and Approvals, with a view to providing leadership in engineering and design and trying to resolve the critical issues that were preventing design from being progressed. Mr Crawley shared his post with Mr Glazebrook, who was also appointed around that time (both worked for **tie** as consultants rather than employees). The extent of the design problems is illustrated by the evidence of Mr Crawley that within an hour of commencing his role at **tie** he learned that there were 79 major issues upon which PB required instructions from **tie**. An impasse had been reached. PB did not wish to assume the risk of proceeding with detailed design without receiving instructions from **tie** on the outstanding critical issues and suspended work pending receipt of instructions. The suspension of work on design extended between February and July 2007. Mr Crawley's role included providing PB with instructions on the outstanding critical issues to resolve the impasse and he succeeded in reducing the number of issues to single digits by July 2007 [PHT00000014, page 19]. This is discussed in more detail in paragraphs 6.74–6.80 below.
- 6.70 PB also made changes to the leadership of its team at that time. In particular, in February 2007, Mr Reynolds, who was a senior executive of PB, sitting on its board, was appointed as its Project Director for the project. Mr Reynolds gave evidence that

he was appointed to that role with a view to improving PB's financial position and improving relations with **tie**. As regards PB's financial position, Mr Reynolds explained that

"towards the end of 2006 ... the project was ... a problem as far as Parsons Brinckerhoff were concerned, because the monthly reporting on the financial performance was showing that the results were going in the wrong direction. The margins that were being delivered were reducing. We were looking at a seriously loss-making project.

"Certainly early 2007, it was number 2 on PB's global list of problem projects. So it needed senior involvement to address that problem and come in and work with all concerned to recover the commercial position from PB's point of view." [PHT00000018, page 186.]

6.71 Shortly after their respective appointments Mr Crosse and Mr Reynolds gave a joint presentation to the DPD Sub-Committee on 13 February 2007 on Improving Design and Engineering [PBH00021285]. The slides for the presentation noted that the underlying issues arose from the following factors:

- Project structure means tie doesn't always face up to asset ownership responsibilities
- Project prone to gridlocks through indecision and poor co-operation of stakeholders
- Some tie resource weaknesses and with a lack of engineering leadership
- Overly ambitious [sic] programme, with a disconnect to outputs
- Variable quality and processes + inconsistent follow through
- Design programme inflexible – unable to satisfy everyone." [ibid, page 0003.]

6.72 Moreover, on 22 February 2007, Mr Crawley chaired a meeting with a view to identifying an achievable and aligned programme for the project. As a result of that meeting, Mr Crosse proposed a five-month delay to the programmed date of financial close of the Infracore contract [PBH00021529, page 0001, paragraph 3].

6.73 Mr Reynolds was asked why the project was becoming a loss-making one for PB, and for his initial impressions about the project more generally, and he replied:

"The headline impression was that change control hadn't been managed effectively, that the team here was bending over backwards trying to accommodate repeated change, but in trying to deliver the Parsons Brinckerhoff services had lost sight of the need to enforce rigorous commercial control on that change control process.

"So one of the first things I did very quickly was put in a proper change control regime which achieved two things. It highlighted to all parties the volume of change that we were experiencing, and it made sure there was better commercial assessment of the consequences of change." [PHT00000018, page 187.]

6.74 Following his appointment, Mr Crawley, in conjunction with Mr Reynolds, introduced changes to the design process with a view to addressing the difficulties and delays that had occurred to date. In particular, a "critical issues" initiative was implemented, with a view to resolving approximately 80 critical issues that had built up and were preventing detailed design aspects from being progressed. Such issues were

largely items of design on which confirmation was required from CEC and other stakeholders on which options they wished. Critical issues meetings were held weekly and were attended by representatives from **tie**, SDS, CEC and Transport Edinburgh Limited. In an email dated 23 March 2007, Mr Crawley explained:

"The consensus of view is that a decision, even if sub-optimal in the first instance, will allow for faster progress to be made through subsequent change control than delay for a 'better' decision." [CEC01628233, page 0001.]

- 6.75** The scale of the problem concerning critical issues was highlighted in a claim for additional management and supervision services submitted by PB to **tie** in February 2008 that was settled by **tie**. The details of that claim are discussed in paragraph 6.125 below and it is sufficient to note at this stage that the settlement included £450,000 for additional management and supervision services provided by PB to **tie** after July 2007 which included additional costs incurred by PB relating to the resolution of a number of critical issues. Although there were about 80 critical issues to be resolved, the critical issues listed in Table 6.1 were the most significant. In addition, the claim relied upon revisions to the design of the project following the abandonment of the Edinburgh Airport Rail Link ("EARL") which were not resolved until 16 October 2007 and the final solution at Balgreen Road that remained unresolved at the date of the claim because of lack of agreement about the height of the bridge there.

Table 6.1: Periods during which most significant critical issues affecting SDS contract remained unresolved

Section	Critical Issue	20-Aug	27-Aug	03-Sep	10-Sep	17-Sep	24-Sep	01-Oct	08-Oct	15-Oct	22-Oct	29-Oct	05-Nov	12-Nov	19-Nov	26-Nov	03-Dec	10-Dec	17-Dec
1A	Forth Ports /Lindsay Road																		
	Ocean Terminal																		
	Section 1 Bridges																		
1B	Leith Walk Footway																		
1C	Picardy Place																		
	St Andrew Square																		
	Casino Square																		
2A	Haymarket Station Steps																		
5A	SRU																		
S-wide	Drainage																		

Source: SDS Contract Valuation dated 19 February 2008 by Parsons Brinckerhoff Limited [CEC00186740, page 0005]

- 6.76** A further change initiated by Mr Crawley and Mr Reynolds was that once the critical issues were resolved, and detailed design could progress, design was to be produced in self-assured design packages. Instead of **tie** instructing its technical advisers, TSS, to review and assure the design, PB would self-certify that the design complied with all relevant standards and requirements. In an email dated 26 April 2007 to Mr Reynolds, Mr Crawley explained:

"The overall concept is that you will deliver design 'packages' containing logically grouped design (in order to address interdependencies) and will add a covering statement which provides competent assurance that the design is fit for purpose." [PBH00010843, page 0002.]

- 6.77** Between February and June 2007, almost all the critical issues were addressed, mainly by **tie**'s providing instructions to PB on how to proceed with design on those issues [see letter dated 26 June 2007 from Mr Glazebrook to Mr Reynolds, attaching

a schedule of critical issues with instructions to enable design to be progressed, [CECoo186740](#), page 0082, appendix 4]. In an email dated 29 June 2007 to Mr Crawley, which was copied to Mr Glazebrook and others, Mr Reynolds confirmed that PB was remobilising its design team in response to **tie**'s instructions to proceed. In a table attached to his letter dated 11 July 2007, Mr Reynolds set out PB's response to **tie**'s instructions in relation to each of the critical issues [[PBH00003595](#)]. The table noted that while the instructions were sufficient to enable design to be developed in relation to many (but not all) of the issues, further information, discussion and agreement would be required before the design for some of the items could be completed.

- 6.78** Although, in summer 2007, **tie** issued instructions to PB in relation to most of the outstanding critical issues that enabled PB to recommence work on the detailed design of the project, it is clear from Mr Reynolds' response mentioned in paragraph 6.77 and from PB's claim mentioned in paragraph 6.75 that the critical issues were not completely resolved by that time. There is a distinction between **tie** issuing instructions on how to proceed and the resolution of a critical issue. As Mr Chandler explained, from July 2007 **tie** gave PB direction on how to proceed with the critical issues that had been frustrating progress with the design but that did not finally resolve these issues. As part of the design approvals and consents process it was still necessary for PB to work with various different stakeholders to obtain their approval of a design based upon **tie**'s instructions. As an example of continued issues after the summer of 2007 he explained that uncertainty around finalisation of the design for the junction at Picardy Place affected traffic modelling and the finalisation of other road junctions. Picardy Place was a central node which had the potential to impact on traffic flows across the city. He also referred to delays in finalising the design for Forth Ports, the Airport, and the Haymarket junction as further examples [[PHT00000020](#), pages 29–31].
- 6.79** "Critical issues" that were the subject of instructions from **tie** in the summer of 2007 resurfaced to cause further delay. For example, an email dated 18 January 2008 from Mr Hickman, Programme Manager at **tie**, noted that Mr Crawley had advised him that there were various additional issues resulting from that morning's critical issues meeting that would require to be incorporated in any design programme update [[TIE00038271](#), page 0002]. In an internal PB email dated 21 January 2008 Mr Reynolds noted: "tie is completely disorganised and a number of very key issues are just being allowed to float." He referred to the "fiasco" of the critical issues meeting on 18 January and his dismay that "so many of the matters discussed were the same as the issues that were on the table 6 months ago." [[PBH00015934](#)].
- 6.80** In summary, the evidence before me was to the effect that detailed design was unable to be progressed meaningfully for a period of approximately one year, between July 2006 and July 2007, as a result of the consideration given to further design options, the failure to resolve various critical issues and the failure to give PB clear guidance and instructions on what **tie**, CEC and various third parties required. Moreover, it is apparent that critical issues remained outstanding in 2008 that compounded the delay of almost a year mentioned above and had an adverse effect upon the progress of detailed design. I accepted that evidence. It is self-evident that if such delay had not occurred the detailed design of the project would have been far more advanced at the date of the signature of the Infraco contract. In that situation it is probable that the design would have been sufficiently advanced to enable **tie** to achieve its procurement strategy of transferring design risk to Infraco on the date of signature of the Infraco contract.

6.81 While better progress was made with detailed design in the second half of 2007, there continued to be difficulties and delays associated with the design programme and the proposed new procedure for producing self-assured, interdependent and complete packages of design for approval mentioned in paragraph 6.76 above. These are considered below.

Concerns in relation to achieving the design programme

- 6.82** Throughout 2007 and 2008, concerns were expressed about whether the design programme was realistic and could be met. In its comments dated 30 March 2007 on the draft FBC for the project, Transport Scotland queried whether the intention to complete design by October 2007 was realistic. The assumption of "right first time and on-time delivery" upon which the programme was based also appeared to it to be optimistic, particularly in the context of a unique project in Scotland [TRS00004145, page 0009]. That assumption failed to take into account the iterative nature of design, the complexity of designing and constructing a tram network through any city centre, far less a UNESCO World Heritage Site and the interdependence of various aspects of design.
- 6.83** A paper presented to the DPD Sub-Committee on 10 May 2007 gave an update on the progress made in resolving outstanding critical design issues [TIE00064787]. A "dashboard" indicated that there were 5,373 design deliverables, relating to 40 design assured packages. An accompanying graph showed that all the design deliverables would be delivered by April 2008. The paper stated:
- "There is an important conclusion from this dashboard – the rate of delivery from 'Now' must effectively double if the programme is to be met." *ibid.*, page 0003.]
- 6.84** Mr Crawley considered that it was clear that would not be achieved [TR100000030_C, page 0023, paragraph 38]. Having regard to the history of the slippage of the design programme I consider that it ought to have been apparent to any experienced project manager that such an achievement was practically impossible.
- 6.85** The minutes of the DPD Sub-Committee on 2 August 2007 noted the concept of "just in time" delivery and the fact there was no margin for error [CEC01530449, page 0007, paragraph 3.2]. Version 17 of the design programme was available and was the first one that it had been possible to prepare since the resolution of virtually all the long-standing critical issues. Design for construction was to be issued between February and June 2008 for different sections. Although the availability of the new version of the programme reflected the ability of PB to recommence work on detailed design and to arrest the delay that had resulted from the lack of instructions from **tie** on many of the outstanding critical issues, on 9 August 2007 Mr Crawley advised the TPB that PB was unable to recover lost time and the delivery of the programme would be "just in time". The lack of float in the programme made it vulnerable to the effects of any additional delay [CEC01565001, page 0035].
- 6.86** By the summer of 2007 it was apparent that it would be impossible to complete the design in accordance with the programme [Mr Bell TR100000109_C, page 0039; Mr Reynolds TR100000124_C, pages 0033–0034 and 0085, paragraphs 110 and 250 respectively]. Mr Harries, who was involved in the project between November 2004 and February 2008, never thought that the programme could be met while he was there [TR100000128, page 0012, answer 16(c)]. Similarly, Mr Glazebrook gave evidence that, in the summer of 2007, he considered that it would be impossible to produce design in accordance with the programme, due to the working and

organisational environment. He also said that, throughout his involvement with the project, there was never a time at which he considered that design would be delivered to programme [PHT00000014, pages 161–163].

Procedure for self-assured packages of design

- 6.87** As was explained in paragraph 6.76 above, a significant change introduced to improve the rate of delivery of detailed design for approval by CEC was the production of design packages that PB certified as complying with all relevant standards and requirements. This procedure avoided any time required by TSS to review and assure the design on behalf of **tie**.
- 6.88** In the event, it did not prove possible to produce complete packages of design that were acceptable to CEC as planning and roads authority. From the email exchange dated 19 and 20 July 2007 between Mr Chandler, of PB, and Mr Conway, of CEC, it appears that there was a tension between what CEC expected from this process and what SDS could deliver within a timescale driven by procurement dates while allowing for subsequent changes to the design once modelling work was completed [CEC01675827]. From that exchange it appears that CEC considered that the self-assurance of designs would not “resolve as many issues as people first thought, particularly with regard to obtaining the technical approvals from CEC”. That was undoubtedly true because approvals and consents from CEC would depend upon final traffic modelling and interdisciplinary checks. Traffic modelling could not be completed before there had been agreement on, and finalisation of, the final design of junctions such as Forth Ports, Picardy Place, St Andrew Square, the Mound, and Haymarket. In fairness, Mr Chandler accepted that the self-assured design packages might be subject to change after the completion of traffic modelling. While he also accepted that this was not ideal, it appears to me that it was a compromise to advance the detailed design that would be available before the signature of the Infraco contract.
- 6.89** CEC’s concerns about the design packages are reflected in the report to CEC’s Internal Planning Group (“IPG”) on 15 November 2007 that review of the individual disciplines of the detailed design was continuing. The report further noted, however, that
- “[t]he packages have yet to be coordinated by the designers therefore the value of these reviews is limited and all packages will require resubmission when complete and fully coordinated by the designers and *tie*.”
- [CEC01398241, page 0004.]
- 6.90** Mr Fraser explained that co-ordination of the packages was very important because the design reviews had limited value if the various design elements could not be considered as a whole [TR100000096_C, page 0028, answer 32].
- 6.91** Mr Sharp was initially employed by Transport Scotland with responsibilities for the project but joined **tie** in October 2007 as its Design and Consents Manager. His responsibilities included addressing the design delay and ensuring that there was in place a plan to remove the obstacles to securing approvals and consents. The strategy had been that “the detailed design would be approved and finished at about the time we were ready to let the infrastructure contract”. The only approvals to be obtained subsequent to the award of the contract would relate to temporary works or changes that Infraco wished to enable it to build the project more economically. This would have enabled about 90 per cent of the Infraco contract price to be fixed. However, when he started as Design and Consents Manager it was apparent that the design would not be completed on time to implement that strategy. The strategy

then changed "to get the design as far as possible towards completion to reduce the risk as far as possible" [TR100000085_C, page 0084, paragraphs 193–194]. I would simply observe at this point that it does not appear that councillors were ever advised prior to the signature of the Infraco contract of that significant change in strategy that would have an obvious impact on the cost of the project.

- 6.92** Although the SDS contract made PB responsible for obtaining consents and approvals, Mr Sharp gave evidence that there was a realisation within **tie** that it was not sufficient to rely on PB's contractual obligation to obtain all the consents that were required, and that he was brought in to tackle the issues in a different way. In short, his responsibility was to make novation happen, but in order to do that he
- "had to address the design delay and seek to reduce the design delay and resolve obstacles to the design progressing and to ensure that there was a plan in place to get all of the consents and to help resolve any difficulty – any obstacles to securing these consents" [PHT00000015, page 139].
- 6.93** The need for a different approach to the consideration of applications for planning consents and technical approvals was also reflected in Mr Chandler's evidence that for technical approvals CEC required very detailed design that was not achievable in the timescales within which **tie** wished to award the Infraco contract. He said: "it was almost a mutually exclusive set of requirements or wishes". He considered that it would have required a "step change" in order for the design programme to be met. Such a step change was required on the part of both CEC, when reviewing and approving design, approvals and consents, and **tie**, in its engagement with CEC and in showing leadership to resolve issues. What was required was a change from simply listing numerous comments or objections to a more collaborative, or problem-solving, approach whereby CEC would indicate what design would be acceptable [PHT00000020, pages 42–45].
- 6.94** Mr Sharp also identified poor management within **tie** that had contributed to the design delay, including a lack of continuity in **tie** management and an inability to identify a single person within **tie** who was responsible for managing the SDS contract. While different departments within **tie**, notably the engineering section, the section concerned with Multi-Utilities Diversion Framework Agreement ("MUDFA") design, those involved in procurement and those concerned with programme, had a legitimate interest in communicating with PB about design, that should have been confined to a flow of information or exchange of views and should not have included giving instructions to PB. **tie**'s failure to have a management structure that controlled the issue of instructions by channelling them through one individual meant that PB often received conflicting instructions about the priority to be given to particular aspects of design [PHT00000015, pages 149–151]. Mr Sharp's evidence in this respect supported the evidence of Mr Reynolds mentioned in paragraph 6.49 above. **tie**'s failure to control the issue of instructions to PB was a clear defect in its management of the SDS contract and had an adverse impact on the progress of design in accordance with the programme. Mr Sharp addressed this defect in management by requiring that all instructions had to be channelled through him.
- 6.95** The state of the design at the end of 2007 is best illustrated by an email dated 6 December 2007 from Mr Sharp to Mr Bell and by the report to the IPG on 11 December 2007. The email noted that while the design deliverables due in the current period had generally been delivered, there had been significant slippage on items due in the first and second quarters of 2008 and a significant extension of final delivery date. The reasons given by him for the slippage were the resolution of the Forth Ports and SRU issues, the underestimation of the changes due to

the cancellation of EARL, more openness from PB about problems, conservative assumptions in respect of some elements of the programme and attempting to manage an intensive period of design and Infraco due diligence simultaneously [CEC01482817]. The report to the IPG on 11 December 2007 noted that further delays to the design programme were becoming apparent, with all technical reviews programmed to complete after financial close and that CEC required this to be addressed as a matter of urgency [CEC01398245].

- 6.96 The difficulties and delays with completing detailed design and in obtaining approvals and consents continued until the award of the Infraco contract in the middle of May 2008. The extent of the problem at that time is illustrated by the report to CEC's IPG on 16 April 2008 [CEC01246992]. At that date, of 63 batched submissions for planning prior approval, only 1 planning permission and 18 prior approvals had been granted: 40 batches had still to be submitted for prior approval (with 26 out of these 40 batches being under informal consideration). No roads technical approvals had been obtained. Roads technical approvals, for different sections, were anticipated to be obtained by various dates between April and October 2008. Prior approvals that had already been granted might require to be revisited if there were substantial changes in design as a result of interdisciplinary co-ordination, technical approvals or value engineering.
- 6.97 The significance of these delays was recognised in the following comment:
- “There is potential for the approvals to cause a delay to the construction programme”** (emphasis in original). [ibid, page 0004.]
- 6.98 Later in the report it was recognised that CEC would be exposed to claims exceeding £2 million if construction work at Russell Road bridge, Haymarket tram stop and the depot at Gogar, three locations on the critical path for the tram delivery, were delayed pending receipt of the appropriate planning prior approvals. The proposed mitigation was for CEC to allow the work to commence without the necessary approval but that would affect the rights of people wishing to object to the prior approvals during the consultation period and could expose CEC to a legal challenge of the decision to allow the work to proceed. This proposed approach reflects emails and discussions involving members of the “B team” at CEC and their concerns about delays in obtaining prior approvals, and tie's proposed unauthorised commencement of piling discussed in Chapter 14 (CEC: January–May 2008) [paragraphs 14.67–14.71]. Although the Tram Acts authorised the construction of structures along the route of the network, including Russell Road bridge, such authorisation was equivalent to outline planning permission and tie had to obtain detailed planning permission for the structure that it intended to build. Prior to the grant of detailed planning permission tie would require to comply with planning legislation and procedures including giving interested members of the public the right to object to the design of the proposed structure. The final form of the structure would affect the nature and design of the piling required.
- 6.99 Concerns about the incomplete design were not confined to reports to the IPG or to the witnesses mentioned above. BBS prepared a Design Due Diligence report dated 18 February 2008 based upon the design made available to it as at 14 December 2007 and submitted it to tie [DLA00006338]. The report noted that design was incomplete and would require significant further development. More than 40 per cent of detailed design had not been provided to BBS and, where it was available, the programme for certain sections was undergoing redesign and was subject to change. No statutory approvals had been obtained and no Issued for Construction (“IFC”) design was available.

6.100 **tie** dismissed these concerns as opportunism. Mr Crosse, **tie**'s TPD, gave evidence that:

"When this report came to us we were surprised. It was another example of [BBS] seeking opportunities to put the price up again ... We did not agree with most of the conclusions and the tone of the BBS' report." [TR100000031_C, page 0046, paragraph 137.]

6.101 However, it appears that he did not share the report with Mr Crawley or Mr Glazebrook, who were jointly responsible within **tie** for the design and engineering issues relating to the Tram project. When shown the report by the Inquiry they both agreed broadly with its main conclusions and Mr Glazebrook agreed with the suggestion put to him that those in **tie**'s commercial/procurement team were not in a position to know whether the conclusions in the report were correct without checking with either himself or Mr Crawley [PHT00000014, pages 96–106 (Crawley); *ibid*, pages 191–196 (Glazebrook)]. The failure to seek their views on the report is another indication of the poor management of the contract by **tie**.

6.102 Similarly, when Mr Leslie, CEC's Development Management Manager, Planning, wrote to Mr Gallagher on 28 March 2008 expressing his concern in relation to the programme of submissions of prior approvals and the quality of the submissions the response from Mr Gallagher suggested a lack of understanding on his part of the extent of the problem and the nature of the solution required. In relation to the programme, Mr Leslie stated:

"It is extremely disappointing that TIE, as the Council's agent, have been unable to ensure that SDS have completed all the prior approvals prior to the bidding process, and there still seems to be no effective control over the constantly slipping timetable for [prior approval] submissions. This could create difficulties in the coming months where BBS have been forced to make assumptions in their bid which do not correlate with our own expectations." [CEC01493318, page 0001.]

6.103 By letter dated 3 April 2008, Mr Fraser wrote to Mr Gallagher, setting out similar concerns in relation to technical approvals, including that issues previously raised by CEC had still not been addressed [CEC01493639].

6.104 Mr Gallagher's reply to Mr Leslie on 10 April 2008 referred to both letters and suggested that the way forward was to have a collaborative approach with all interested parties and attached a schedule, entitled 'Designs & Approvals – Successful Delivery in Compressed Timescales', which noted:

"Given where we are with design & approvals, all parties (tie, SDS, CEC, BBS) need to get it right first time to meet the construction programme."
[CEC01494162, page 0002.]

6.105 Bearing in mind the extent of the delay in obtaining the necessary approvals, the past failures to catch up with existing delays and the imminence of concluding the Infraco contract it seems to me that this proposed solution was totally unrealistic. The concept of getting design right first time fails to appreciate the iterative nature of design and suggests that neither **tie** nor Mr Gallagher had any real appreciation of what was required to achieve a solution that would result in the design's approval by CEC and interested third parties. This is a reflection of the lack of appreciation of **tie** and its senior management of the complexities of delivering a project such as the Tram project within a city that was a UNESCO World Heritage site. That is

hardly surprising in view of **tie**'s lack of experience and is an indication of CEC's error in entrusting the procurement and management of the project to a newly formed company, most of whose senior management had no experience of the planning and construction of a tram network through a city centre in the United Kingdom.

Misalignment of the SDS design, Employer's Requirements and civils proposals

- 6.106** In addition to the difficulties with, and delays on, design noted above, from early 2007 it was known that there was a misalignment between **tie**'s Employer's Requirements and the design produced by SDS. That misalignment had arisen as a result of **tie**'s procurement team's having developed the Employer's Requirements to take account of its discussions with Infraco bidders, but without reference to the SDS contractors, who continued to develop the design for the tram network unaware of the changes made to the Employer's Requirements. That, in turn, gave rise to a further problem, in that the proposals received from the Infraco bidders to meet the Employer's Requirements were also likely to be misaligned with the SDS design.
- 6.107** In his weekly report dated 23 February 2007, Mr Reynolds referred to a meeting the previous day at which Mr Crosse had proposed a delay of five months to the programmed date for financial close of the Infraco contract. In the context of the misalignment of the Employer's Requirements and the SDS design he observed:
- "TIE were also reminded of the urgent need for realignment of the Employer's Requirements provided to the Infraco bidders and the system requirements on which the PB detailed design is being prepared. PB's commitment to provide TIE with a detailed analysis of the differences between the two had been met and the action is now with TIE to review and decide upon the actions required to resolve the discrepancies." [PBH00021529, page 0002.]
- 6.108** The matter remained unresolved throughout 2007, despite being raised on a number of occasions [see, e.g., **tie**'s SDS Project Manager's monthly report for May 2007, which noted the need to "[r]evise Employer's Requirements into [a] coherent form, reflecting actual needs" (CEC01530907); and an email from Mr Reynolds to Mr Crosse dated 13 June 2007 (PBH00025580)]. In an extract from the SDS Novation Plan, as drafted by **tie** based on discussions with BBS, attached to an email dated 12 March 2007 from Mr Gilbert to Mr Steel and others it was acknowledged that it was a "practical impossibility" that the Infraco Employer's Requirements, Infraco proposals, Tramco proposals, Tram Vehicle Employer's Requirements, and the SDS design would not conflict with each other when the Infraco contract and the tram vehicle supply and maintenance contract ("Tramco contract") were awarded and the SDS contract was novated. The best that could be achieved was alignment between the Employer's Requirements and the Infraco proposals [CEC01480075].
- 6.109** Similar concerns were noted by Mr Harries in an email dated 24 December 2007, in which he stated that, without proper direction from **tie** on how to realign these items, there was the risk of wasting time for SDS, **tie**, TSS, CEC and Transdev, wasting CEC's money "[g]enerating confusion and the consequential potential for future 'Changes' with both SDS and BBS" and procuring a system that did not work properly [TIE00039586, page 0001].

- 6.110** In light of the above concerns and the potential financial consequences for CEC associated with future changes it is astonishing that **tie** failed to resolve the issue of misalignment. At the Inquiry, Mr Harries was asked why there continued to be a misalignment between the Employer's Requirements and the SDS design at the end of 2007, given that the difficulty had been known about for at least a year. He replied:
- "To have a strategic review and work out an appropriate contractual management process to resolve this matter would have been a large task and it would probably have involved stopping the procurement process for a while until that could be resolved.
- "I suspect the pressure on tie was to carry on regardless and the consequences of that decision would be addressed later." [PHT00000016, page 20.]
- 6.111** SDS continued to have concerns about the misalignment in 2008. One of the steps that Mr Reynolds suggested was that PB should undertake a review of the Employer's Requirements. In his internal PB weekly report dated 15 February 2008, Mr Reynolds noted that PB had completed a review of a revised set of Employer's Requirements produced by **tie** (version 3.1), and had discussed that at a meeting with Mr Crosse. Mr Reynolds went on:
- "It is worth noting that tie is now working on version 3.3 of the Requirements with the intent that a final version will be produced by Friday next week. The truth is that tie has lost control over the development of the Employer's Requirements ... I have expressed (to Steven Bell) serious concern that there is likely to be a significant disconnect between the scope of the BBS Offer and the current status of the SDS Design." [PBH00034982, page 0002, paragraph 2.1.1.]
- 6.112** BBS sent its revised civils proposals to **tie** on 26 February 2008 [CEC01450025; CEC01450027]. The proposals were not comprehensive and contained the words "[d]esign to be completed and all consents and approvals obtained", throughout the document, indicating that a considerable amount of design and approvals work would require to be undertaken after the award of the Infracore contract. They did not reflect the SDS design and did not give a clear indication of the scope of the work to be undertaken by BBS [PHT00000019, pages 54, 66–67]. At about this time **tie** acknowledged that it would need to reimburse PB for any changes necessary to achieve alignment between the SDS design and the BBS offer, whether the changes were made pre- or post-novation [PBH00035854, page 0001, paragraph 2.1.1]. In my view such additional expenditure would not have occurred had **tie** insisted that the BBS offer should comply with the Employer's Requirements upon which the SDS design had been based rather than take the unusual course of adapting the Employer's Requirements to suit the wishes of the preferred bidder.
- 6.113** Moreover, in March 2008 Mr Reynolds considered that it would not be possible or prudent to agree what design changes should be made to achieve alignment without **tie** requiring clarification of BBS's civil engineering proposals, notably in relation to roads and the integration of the Trackform. Furthermore, alignment could have significant time requirements whether it was achieved by SDS changing its design or BBS changing its offer [CEC01488279].
- 6.114** Mr Reynolds also considered that it would not be prudent to achieve alignment by altering the SDS design before **tie** was aware of the reaction of CEC to BBS's proposals. The roads proposals (including the extent of reinstatement) in the BBS offer were "radically different" to SDS's designs, which had already been through informal consultation with CEC and, in some cases, had been formally submitted for

technical approval. In an internal PB weekly report dated 7 March 2008, he explained that to embark upon the exercise of alignment before having CEC's endorsement of BBS's proposals

"would incur unnecessary cost and would simply move the real problem – the likely refusal of CEC to approve the revised design – some weeks beyond novation. That would introduce all sorts of contractual and commercial problems." [PBH00017343, page 0003.]

6.115 In the event, PB reviewed the Infraco proposals and Employer's Requirements and produced reports on each on, respectively, 27 March and 18 April 2008 [CEC01370880, Part 2, page 0176, Appendix Part 7, Part B and page 0195, Appendix Part 7, Part C]. The reports identified a number of inconsistencies and misalignments between the SDS design, the Employer's Requirements and BBS's civils proposals. In his evidence Mr Reynolds explained that these inconsistencies resulted in significant changes which affected the programme and had cost implications. In particular, post novation PB had to alter the SDS design to accommodate BBS's proposals [TR100000124_C, pages 0148–0149, paragraphs 394–395].

6.116 In an internal weekly report dated 18 April 2008, Mr Reynolds noted that on 27 March PB had issued two reports on the misalignment between the BBS Civils and Systems proposals and the SDS design but there had been no response from **tie** until 16 April when an inadequate draft response had been received. PB had requested a more structured and detailed response but that was still awaited. The significance of the lack of adequate response from **tie** is explained in the following passage.

"The lack of response from tie has meant that uncertainty remains over construction scope of work. The proposed compromise to deal with the current circumstances was that a detailed design workshop be convened to define the scope to the level of detail required prior to construction ... With an early May target for contract award such a workshop would have to be held post novation. The alternative is to hold the workshop first and delay Infraco Contract award until such time as the scope of work, price and programme are all defined more accurately." [PBH00018333, page 0002, paragraph 2.1.1.]

6.117 In the event, **tie** signed the Infraco contract in May 2008 despite the obvious inevitable adverse financial consequences for CEC of doing so prior to the resolution of the problem of misalignment.

State of design in 2008

6.118 Although progress on detailed design continued to be made between January and May 2008, the design programme remained incomplete, and the majority of approvals and consents were outstanding, when the Infraco contract was signed in the middle of May 2008. In particular, at that time, 296 out of 329 detailed design packages had been delivered; 22 out of 63 prior approvals had been obtained; and 30 out of 128 technical approvals had been obtained [SDS novation agreement, CEC01370880, Part 1, pages 0084–0085].

6.119 Of the design aspects that had been completed when the Infraco contract was awarded, that design was not "fixed" and was likely to be revised or changed, for a number of reasons, including to:

- obtain outstanding approvals and consents;
- cure the misalignment between the SDS design, the Employer's Requirements and BBS's civils proposals;

- incorporate items of BBS's design;
- achieve value engineering savings;
- reflect changes required as a result of the ongoing MUDFA diversion works;
- reflect changes required following final traffic modelling; and
- reflect changes resulting from the interdisciplinary co-ordination of design, including the system-wide assurance exercise at the end of the design process.

6.120 The fact that there was not a fixed design for the tram scheme when the Infraco contract was awarded, and that changes to design were likely after the award of the contract, gave rise to the risk of delay and increased cost to the construction works and was inconsistent with good practice. For example, Mr Crawley was asked whether he considered it appropriate to award the Infraco contract while design and approvals were outstanding, and he replied:

"I didn't think this was a sensible thing to do. If you just say the words out loud, [1] I'm going to start building it before I have finished designing it^[1], you can detect there is a problem there." [PHT00000014, pages 106–107.]

6.121 Mr Glazebrook expressed a similar view. He considered that any informed person would have foreseen the problems that would arise if the Infraco contract was awarded when design was incomplete [PHT00000015, page 11] and that "to expect to get price certainty in the situation in which the design was at at the time was completely unrealistic" [PHT00000014, page 188]. He was asked for his views on whether changes to programme or scope were likely after the award of the Infraco contract, to which he replied:

"Whatever the Board thought, it was absolutely inevitable that changes would occur. It could hardly have been otherwise when the design was incomplete and in virtually constant flux due to the ineffective organisational arrangements." *ibid.*, page 190.]

6.122 In his written statement Mr Chandler observed that:

"The fact that the design was not complete at the point of appointing the contractor had a serious impact on the remainder of the scheme. It meant that the ambiguity was there between the contractor and TIE on what the final design would be, and what the actual tram system was going to look like, the finishes etc. That led to a lot of dispute later between TIE and the contractor and was pivotal in the escalation of costs, programme overrun and decline in the relationship between all parties." [TR100000027_C, page 0033, paragraph 125.]

6.123 I accepted the evidence of these witnesses on this matter and of Mr Reynolds on the matter of misalignment of the SDS design, the Employer's Requirements and BBS's offer. In my view, it is extraordinary that **tie** considered it appropriate to enter into the Infraco contract in May 2008 when there was uncertainty about the scope of the work, price and programme. The principal consequence of doing so was that there were numerous changes after the award of the contract resulting in disputes and additional payments to Bilfinger Berger, Siemens and CAF, the consortium following the novation to the Infraco contract of the contract for the supply and maintenance of the tram vehicles.

6.124 Although in paragraph 6.123 I have commented adversely that **tie** had considered it appropriate to enter into the Infraco contract when there was uncertainty about the scope of the work, price and programme, its responsibility for the adverse

consequences of signing the contract in May 2008 should be shared with CEC. **tie** could only enter into that contract with the approval of CEC, who delegated that responsibility to its Chief Executive. Even if there were no issue about the accuracy or completeness of the information provided by **tie** to CEC when seeking that approval, it was still necessary for the Chief Executive to satisfy himself that the proposed contract met the requirements of CEC's resolution of 20 December 2007. Until he was so satisfied the Chief Executive should not have authorised **tie** to sign the Infraco contract. As discussed later in the Report CEC officials, on whom the Chief Executive relied, failed to undertake the necessary independent scrutiny of the information provided to them by **tie**.

Additional payments to Parsons Brinckerhoff

- 6.125** A further consequence of **tie**'s mismanagement of the SDS contract and the work to award the Infraco contract was that claims were intimated by PB for payment of additional sums and agreed with **tie**. In particular, on 31 May 2007, PB produced a claim for costs for additional management and supervision services [[CECo2085580](#)]. That document described PB's additional services and highlighted the disruption and costs for the period from the submission of preliminary design on 30 June 2006 to the issue of version 13 of the design programme on 9 April 2007. It also included a quantification of the overall delay to the SDS programme arising from the delay to the contract start date and the increased durations of the requirements definition, preliminary design and detailed design phases. PB claimed an extension of time of 40 weeks as at 9 April 2007 and an additional payment of £2,248,517 to that date. The main categories of claim for additional services were changes due to:
- the charrettes process;
 - additional third-party agreements;
 - **tie**'s requirements, or consents;
 - EARL, or **tie**'s failure to accept and review the preliminary design in a timely manner;
 - third-party developers' emerging designs; and
 - failure to update the master project programme.
- 6.126** On 28 July 2007, PB claimed a further £610,000 in respect of additional services for the period from 9 April 2007 to 22 July 2007 (resulting in a total claim of £2,858,517 for additional services between 3 July 2006 and 22 July 2007) [[PBH00003596](#), page 0003, paragraph 3.1].
- 6.127** An email dated 24 August 2007 from Mr Gilbert set out a proposed settlement of PB's claims at £2.5 million (payable in three tranches of £500,000, and a final payment of £1 million on completion of design) [[PBH00036744](#), page 0002]. An email dated 6 September 2007 from Mr Reynolds (in the same email chain) indicated PB's acceptance in principle to the proposed settlement. The agreed sum of £2.5 million in respect of PB's claim for additional management services (arising primarily from prolongation) to 22 July 2007 was duly paid.
- 6.128** Agreement was also reached that PB would be paid £776,172 for **tie**/TEL changes that had occurred in October 2006 (£600,000 of which related to the charrettes exercise) [[PBH00038887](#)].

- 6.129** In May 2008, **tie** agreed to settle various claims by PB for additional costs, arising largely as a result of the delays in progressing design, including change notices issued from October 2006 onwards. The agreed sums were set out in a document attached to an email dated 13 May 2008 from Mr Murray [[CEC01295126](#); [CEC01295127](#); see also [PBH00038887](#)]. That document noted that the following payments had been agreed with PB, including the sums mentioned in paragraphs 6.127 and 6.128 above, in addition to the sums due under the SDS contract:
- £776,172 in respect of **tie**/TEL changes during October 2006 (£600,000 of which related to the charrettes exercise);
 - £2,500,000 in respect of the settlement of PB's claim for additional services provided between the production of preliminary design on 30 June 2006 and 22 July 2007 (in respect of which settlement had been reached in September 2007);
 - £450,000 in respect of settlement of PB's claim for additional management and supervision services provided to **tie** after 22 July 2007 (which services arose from additional costs incurred by PB due to delay in the resolution of a number of critical issues, delay in completion of the MUDFA programme and additional services provided by PB to support **tie** in its negotiations with BBS – per the letter dated 19 February 2008 from Mr Reynolds with claims document: [CEC00186740](#));
 - £300,000 in respect of PB's claim for additional services provided as a result of the delay in the award of the Infraco contract and the novation of the SDS contract in the first half of 2008;
 - £900,000 in relation to work by PB to address the misalignment between the SDS design and the Employer's Requirements;
 - £1,726,171 in respect of **tie** changes between October 2006 and March 2008; and
 - £800,000 in respect of the settlement of outstanding change requests at novation (mainly in relation to change requests intimated in April 2008).
- 6.130** The above additional payments total £7,452,343. They represent an increase in excess of 30 per cent above the SDS contract price [[CEC00839054](#), page 0115, Schedule 3, Pricing Schedule]. The amount of the additional payments indicates the extent of the changes and delays that occurred in the design process before the award of the Infraco contract. The fact that **tie** agreed to make these additional payments to PB suggests that it recognised that many of the changes and delays to design before the award of the Infraco contract had occurred for reasons outwith PB's control and for which **tie** was responsible.

The responsibility for design delay

- 6.131** Various witnesses were critical of different participants in the Tram project and attributed responsibility for design delay accordingly. It appears from the evidence that criticism was directed at PB, CEC and **tie**. Accordingly I will consider the extent, if any, of that responsibility in each case.

Parsons Brinckerhoff

- 6.132** Before considering the issue of PB's responsibility for design delay I should record that Mr Miners, a former employee of PB, provided a statement to the Inquiry about particular concerns that he had when he worked on the project between June and August 2006 from PB's Manchester office [[TR100000314](#)]. The issues that he raised did not assist me in determining responsibility for delayed design.

- 6.133** It is unnecessary to rehearse the evidence of various witnesses who criticised PB for the early management of the SDS contract because Mr Reynolds accepted that, prior to his arrival in February 2007 as PB's Project Director for the SDS contract, the initial management of the contract had been poor particularly in respect of change control. As he put it, in trying to accommodate repeated change (in particular, in the second half of 2006), PB had lost sight of the need to enforce rigorous control over that process, which had been necessary to protect PB's commercial position and to highlight to all parties the volume of change. Both he and Mr Chandler, PB's project manager for the project between February 2006 and 2011, accepted that the requirements definition phase had not gone as well as PB had hoped and that there were issues concerning the quality and level of detail of some of the deliverables. Mr Reynolds and Mr Chandler also accepted that there had been issues with inadequate ground investigation and the late provision of survey information on the part of PB, which had arisen due to difficulties with access to sections of the route in Princes Street and along parts of the Network Rail corridor.
- 6.134** There was also evidence notably from Mr Fraser of CEC and Mr Bell of **tie** of quality and resource issues at PB and of underperformance by PB in producing detailed design and obtaining consents and approvals. That was certainly the impression that Mr Sharp had before joining **tie** but when he joined **tie**, he realised that although there was an element of underperformance by PB resulting in some delay, there were other reasons for the delay.
- 6.135** Any criticisms of PB require to be viewed in the context of the environment in which it was working, being one of continual changes, a failure to close out issues and poor overall project management by **tie**. Nevertheless, in the context of **tie**'s inexperience I consider that, as an experienced designer, PB ought to have made it clear to the most senior officials in **tie** and CEC that the unreasonably high number of changes, too late in the process, coupled with the failure to close out issues, made it impossible for PB to progress design meaningfully. In the following passage of his evidence Mr Reynolds appeared to acknowledge that this was an opportunity that PB had not taken:
- "... if you look at it from the overall project delivery, we could have been more vocal in highlighting the consequences of, for example, the charrettes process that was embarked upon in July 2006, which had a severe impact on programme. We should probably, rather than going along with that as the design provider addressing changing requirements, we should have been more vocal to make sure people appreciated the consequences of going down that side-track."
[PHT00000018, page 199.]
- 6.136** While it might be said that these matters were – or ought to have been – obvious to both **tie** and CEC (or, at least, could have been ascertained by these bodies with proper investigation), both **tie** and CEC were inexperienced in tram design and were entitled to rely on PB's expertise in that regard. Had there been senior representation from PB to **tie** at an earlier stage (i.e. from July 2006 onwards) of the unreasonably high volume of changes at too late a stage in the process, and that certain unresolved critical issues were holding up design, there is likely to have been a better appreciation of those problems at a senior level within **tie** and CEC, which ought to have resulted in steps being taken at an earlier stage to address and resolve them.
- 6.137** Another option available to PB to avoid repeated changes to design requirements would have been for it to have insisted, in accordance with normal practice, that each phase of design was formally agreed and approved before moving on to the next.

While that may have caused some initial delay, it would have ensured that design moved forward in a structured manner with each new phase starting from an agreed baseline. This ought to have reduced the risk of future change and delay arising from **tie** and CEC reconsidering design options that had been rejected earlier, as occurred in the charrettes process.

- 6.138** Had PB taken the steps mentioned in paragraphs 6.135–6.137 above, it is likely that the design programme would have been considerably more complete, and more approvals and consents would have been obtained than was the case before the close of the Infraco contract in May 2008.

CEC

- 6.139** A number of witnesses also made criticisms of CEC, including Ms Craggs, Mr Crawley, Mr Sharp and Mr Reynolds. It should be borne in mind that CEC is a statutory body consisting of elected members, otherwise known as councillors, whose policy decisions are implemented by officials. In referring to criticisms of CEC the witnesses were being critical of officials, for whom CEC is ultimately responsible.
- 6.140** The thrust of the criticism was that CEC did not engage with PB at the outset to inform the design or provide adequate guidance to PB as to what would be acceptable. Rather CEC considered that it had transferred design risk to PB and that it could make repeated changes and revisit options that had already been rejected. It failed to appreciate the effect on the project as a whole of such behaviour.
- 6.141** There seemed to be force in these criticisms but they should be seen in the context of **tie**'s failure to adopt a collaborative approach involving all stakeholders at an early stage to ascertain what design might be acceptable.
- 6.142** In a "lessons learned" document dated 20 August 2008, Mr Sharp stated:
- "CEC has persistently changed its mind, refused to make decisions, given third parties additional opportunities to re-open agreements and allowed the tail of smaller projects to wag the tram dog. In short, CEC has never behaved like the tram is the biggest project that Edinburgh will see in 50 years.
- "Privately, at least, someone should convey to CEC that their approach to planning matters in particular has cost a large amount of time and money ... The goalposts have moved so many times, we are not even playing the same sport any more."
[CEC01095155, pages 0004–0005, paragraphs 12–13.]
- 6.143** I consider that CEC contributed to the difficulties and delays in progressing design. While it is perfectly understandable that, as the statutory approval body, CEC could not fetter its discretion and that, as the client or promoter, it would wish for the best possible design for the project, nonetheless, I consider that CEC ought to have:
- given greater guidance to the designer, at the outset of the design process, on what was likely to be acceptable;
 - kept changes to a minimum; and
 - worked in a more collaborative manner with the designer to resolve particular design problems as and when they arose.
- 6.144** Such steps would not have involved CEC in fettering its discretion, or closing its mind to alternative, or better, design options if they arose, but would have given the designer clearer guidance on the design that ought to be acceptable to CEC.

Had such steps been taken by CEC, again, I consider that it is likely that the design programme would have been more complete, with more approvals and consents obtained, by May 2008 than was the case.

tie

6.145 As an organisation, **tie** had no experience in project managing or delivering a major infrastructure project, far less a light rail or tram project. That was compounded by the fact that very few individuals within it had experience of the latter. For example, Mr Harries considered that one of the main problems with the project was

“a lack of experienced people in senior positions [in **tie**] who understand the complex nature of interfaces on a tram project” [PHT00000016, page 40].

6.146 He explained that tram projects are extremely complicated and he compared them with constructing a new railway and adding the further complication of putting it on city streets involving people, other vehicles, pedestrians, buildings and everything else associated with running a city. Having experienced people who understood these matters at a senior level in the management of the project reduced the risk of things going wrong.

6.147 There was also evidence of organisational confusion within **tie**, with different teams within it giving different instructions to PB at different times, in an uncoordinated manner. Mr Glazebrook considered that the problems with design were compounded by

“Tie organisational confusion – it was as though everyone was encouraged to meddle with every conceivable aspect of design, regardless of their role, knowledge and experience” [PHT00000014, pages 130–131].

6.148 In the “lessons learned” document mentioned in paragraph 6.142 above, Mr Sharp noted:

“The SDS contract has also suffered from a lack of continuity in tie management and often a lack of attention – it has not always been possible to identify the single individual who was really responsible for managing the SDS contract. As a result SDS has at times been given conflicting ‘instructions’ and the culture has grown in tie that it is fair game for anyone to ask SDS to do things and fair game for anyone to convey criticism to SDS.” [CEC01095155, page 0004, paragraph 7.]

6.149 Evidence of **tie**’s failure to manage the project can also be found in allowing the procurement team to agree with the preferred bidder changes to the Employer’s Requirements without reference to PB, resulting in the development of inconsistent proposals and misalignment of Employer’s Requirements, design and Infracore proposals, thereby causing design delay and associated costs.

6.150 Another indication of **tie**’s management failure was its omission to appoint an individual to manage the SDS contract until Ms McGregor’s appointment in August 2006 (i.e. almost one year after the SDS contract was entered into). **tie**’s failure to make such an appointment might explain why PB was not told of the changes to design made as a result of the parliamentary process until around March or April 2006, when, clearly, it ought to have been advised of them earlier. It is self-evident that the person charged with designing a tram project requires as a starting point the correct information in terms of alignment and horizontal and vertical lines of deviation as determined by the Scottish Parliament.

- 6.151** I consider that **tie**'s inexperience, and failures in project management, contributed to the difficulties and delays that arose on the design programme. In particular, I consider that it failed to:
- manage the SDS contract properly from the outset;
 - resolve critical issues necessary for design development;
 - recognise and control the unreasonably high number of changes that occurred too late in the design process; and
 - recognise, at a sufficiently early stage, that PB required **tie**'s assistance, as project manager, to enable the design programme to be completed and approvals and consents to be obtained.
- 6.152** In particular, PB required **tie**'s assistance in ensuring that the design wishes and requirements of CEC and other third parties were clarified at an early stage and were not altered so materially that it necessitated design changes and delays to the project's programme. Had **tie** shown proper leadership in these matters, I consider it likely that many of the difficulties and delays that arose (in particular from June 2006 onwards) would have been avoided, or at least reduced, and that design would have been considerably more complete, with more approvals and consents obtained, by May 2008 than was the case. Indeed I consider that it is probable that **tie** would have delivered the procurement strategy of completing the design before the award of the Infracore contract and of transferring design risk to BSC.
- 6.153** In short, I consider that although PB and CEC contributed to the design delay and should bear some responsibility for it, the primary responsibility rests with **tie**. I find additional support for that view in **tie**'s acceptance of PB's claim for additional payments and settlement of that claim in the sum of almost £7.5 million, being more than 30 per cent of the SDS contract price.

Chapter 7

Design Following Novation and Contract Close

- 7.1** At the time of contract close in May 2008, the programme for design was such that the final design package would be submitted within seven months by January 2009 (the "amended design date") [letter dated 6 May 2009 from Mr Reynolds of Parsons Brinckerhoff ("PB") to Bilfinger Berger, Siemens and CAF ("BSC"), [PBH00003626](#)]. The anticipated date for the completion of the design package was in stark contrast to the original plan that, prior to the award of the infrastructure contract ("Infraco contract"), design would be complete to the extent of securing all prior consents and approvals, leaving Infraco to finalise the design by incorporating into it the details of the equipment, components and services required for the Edinburgh Tram Network. As matters developed, even the amended design date was not met and it took much longer to complete the design. This can be seen from the terms of the letter mentioned above and from consideration of the following sample of minutes of meetings and progress reports.
- Bilfinger Berger's ("BB's") internal project report for November 2008 noted that progress in finalising approvals and consents for track and highway drawings by PB had been poor and was threatening to delay the commencement of works in Princes Street in January 2009 [[BFB00112174](#), page 0005, paragraph 1.3.1].
 - BB's internal monthly report for August 2009 noted that production of civil and buildings drawings in accordance with the original design was 86 per cent complete [[BFB00112250](#), page 0005, paragraph 1.3.1].
 - By December 2009, BB's internal monthly report noted that PB was seeking to achieve completion of the design in spring 2010 [[BFB00112194](#), page 0005, paragraph 1.3.1].
 - The progress report by PB dated 15 January 2010 noted that from a total of 114 Issued for Construction ("IFC") design packages, 102 (90 per cent) had been delivered [[BFB00004338](#), page 0028, paragraph 4]. Four months later, the position had barely advanced. BB's internal monthly report for May 2010 noted that the design programme was 91 per cent complete and that it was aimed to be complete in June/July 2010 [[BFB00112199](#), page 0005, paragraph 1.3.1].
 - BB's internal monthly report for October 2010 noted that design was 98.2 per cent complete and that the completion of design was delayed due to "informatives" not being closed out and "the constant unwillingness by the authorities (tie, CEC, BAA [the British Airports Authority] etc) to approve the submitted design" [[BFB00112204](#), page 0005, paragraph 1.3.1]. The process referred to as "informatives" and the difficulty in getting approvals are considered in paragraphs 7.9 and 7.10 below.
- 7.2** The position outlined in the October 2010 report remained until the mediation at Mar Hall in 2011.
- 7.3** As with the position prior to contract close, it was not a single factor that caused the delay. The principal ones that emerged in the evidence were as follows.

Piecemeal design and consents/approvals

- 7.4** Except to the extent that they were modified by the Novation Agreement, the terms of the existing System Design Services contract ("SDS contract") continued to apply between PB and BSC post-novation. One important modification was made to the requirement to obtain consents for the works as designed. As was noted in paragraph 6.8 of Chapter 6 (Design (to May 2008)), the SDS contract imposed an obligation on PB to obtain at its own expense whatever consents were required to carry out the works [CEC00839054, page 0029, clause 5.1]. "Consents" is defined in the SDS contract as follows:
- "without limitation all permissions, consents, approvals, non-objections, certificates, permits, licences, agreements, statutory agreements and authorisations, Planning Permissions, traffic regulation orders, building fixing agreements, building control approvals, building warrants, and all other necessary consents and agreements from the Approval Bodies, or any Relevant Authority, any other relevant third parties whether required by Law or the Tram Legislation or under contract" [ibid, page 0008].
- 7.5** As was explained in paragraph 6.8 of Chapter 6 (Design (to May 2008)), the effect of clause 4.8 of the SDS contract was that whenever any Approval Body withheld its consent to the design, PB, at its own expense, had to amend the design even where the Approval Body had changed its requirements after the design had been prepared on the basis of its earlier requirements. The Novation Agreement amended this absolute obligation imposed upon PB such that PB was not liable for the cost of amendments required by any Approval Body where the requirements were:
- inconsistent with or in addition to the Infraco Proposals or the Employer's Requirements;
 - not reasonable given the nature of the Approval Body; or
 - not reasonably foreseeable within the context of the Infraco Proposals or the Employer's Requirements.
- 7.6** If any of the above exceptions applied, the amendment would be deemed to be a Client Change, resulting in the expense associated with it being the liability of Transport Initiatives Edinburgh Limited ("tie") [CEC01370880, Part 1, page 0020, Schedule of Amendments to the SDS Agreement clause 4.8]. Moreover, the Novation Agreement noted that any changes to design required as a result of the development workshops to be undertaken to determine the development of the Infraco civils proposals and any consequential amendment to the design were to be treated as a tie Change Order for which PB was entitled to be paid [ibid, Part 1, pages 0007–0008, clauses 4.7–4.8].
- 7.7** Despite the modification of PB's absolute liability to incur the cost of any amendments to the design to secure the necessary consents, the obligation to carry out the work required to obtain any necessary consents continued to fall on PB. The evidence was that, throughout the period after contract award, there was a substantial backlog in the process of getting these approvals.
- A progress report by PB dated 8 May 2009 noted that, out of a total of 220 planning and technical approvals, 187 had been approved (85 per cent), with 92 per cent of planning approvals granted and 79 per cent of technical approvals granted. It was noted that:

"The remaining outstanding approvals are either to be approved immanently [sic], or have been subject to re-prioritisation and long-standing changes, which has caused the original dates to slide significantly." [BFB00004354, page 0005, paragraph 3.1]

In terms of delivery of the designs, from a total of 115 IFC design packages, 100 (87 per cent) had been delivered [[ibid](#), pages 0004–0005 and 0021, paragraph 4].

- By September 2009, out of a total of 231 planning and technical approvals sought, 202 had been approved (88 per cent), with 92 per cent of planning approvals granted and 84 per cent of technical approvals granted. From a total of 114 IFC design packages, 101 (89 per cent) had been delivered. Again, it was noted that the remaining outstanding packages were being finalised, that they had been subject to changes and/or delays due to resolution of changes and that several IFC drawings already submitted would require to be updated in line with the emerging changes. It was noted also that there were conflicts between the utilities IFC design and the approved infrastructure design [[BFB00004358](#), pages 0005–0006 and 0022, paragraph 4].
- The progress report by PB dated 15 January 2010 disclosed that there had been barely any change; out of a total of 229 planning and technical approvals, 204 had been approved (89 per cent), with 93 per cent of planning approvals and 85 per cent of technical approvals having been granted [[BFB00004338](#), page 0006, paragraph 3.1].
- What progress appeared to have been made was undermined by the progress report by PB for June 2010. It disclosed a position that had worsened. It said that out of a total of 259 planning and technical approvals sought by then, only 203 (fewer than in the previous report) had been approved, with 87 per cent of planning approvals granted and 72 per cent of technical approvals granted. The number of IFC packages delivered had risen by seven from the figure in September 2009 to 108 [[BFB00004342](#), pages 0005–0006, paragraph 3.1 and 0031, paragraph 4].

7.8 Although it is correct to note that by the dates of the above reports very much the majority of approvals had been given, this must be seen against the background that the original intent was that the design was to be completed – and therefore the approvals given – by the time of contract award.

7.9 When it was decided to dispense with the review by Technical Support Services of the designs provided by PB, it was the intention that PB would submit design in fully complete and self-assured packages (with design interdependencies already checked). These were referred to as Design Assurance Statement Packages. However, in each package of design there were always one or more outstanding items. These outstanding items were referred to as “informatives”. A Project Assurance Review for City of Edinburgh Council (“CEC”) prepared by Mr Poulton in July 2010 described what was done as follows.

“Where there was missing information, or individual issues which could not be resolved, approval was granted on the understanding that the missing information would need to be submitted, and approved, prior to commencement of construction. This outstanding information was designated ‘Informative’, in line with the Planning process, and this action was taken to allow the rest of the package to proceed to the next review stage, i.e. the Informative process only came into existence because the designs and design submissions were incomplete or in some instances inadequate.” [[CEC02086414](#), page 0020.]

7.10 These outstanding items meant that design was produced and submitted in a “piecemeal” fashion and that meant that **tie** and CEC were not able to review and approve design in the most efficient and timely manner [for the frustration to which that gave rise, see the emails by Mr Glazebrook dated 30 April and 28 May 2009: [TIE00037854](#); [TIE00502629](#)].

Changes

- 7.11** In addition to, but connected with, the requirement to get approvals and consents before design was finalised, it was necessary to address the various changes that were required both as part of that process and otherwise. A progress report by BSC (which reports were sent to **tie**) for the period to 13 September 2008 noted that:
- "BSC is continuing to inform **tie** of the delays or potential delays regarding prior and technical approvals due to numerous design changes from CEC during the consultation stage.
- "It is of great concern that after the extended period of informal consultation new comments are received at this stage which will, in many cases impact on the IFC dates and will require change instructions to be issued for the design to be amended. The informal consultation process, intended to avoid this problem, can not be considered successful." [[CEC01154352](#), Part 1, page 0015, paragraph 4.2.1.2.]
- 7.12** In relation to technical approvals for roads, the report noted that the number of comments received from CEC was a "real problem", and it gave an example of more than 1,200 comments (running to 70 pages) having been received in relation to sub-sections 1C1 and 1C3 [[ibid](#)]. Similar concerns were expressed in the BSC progress report for the period to 8 November 2008 [[CEC01169379](#), Part 1, page 0010, paragraph 4.1.1.2], and in a claims document by PB's sub-contractor, Halcrow, in November 2009. Mr Chandler explained that PB had chosen Halcrow as its main sub-contractor because it had a strong local presence in Edinburgh and their approvals and consents team were very familiar with the requirements of CEC [[PHT00000020](#), page 10]. In its claims document Halcrow stated that CEC had made thousands of comments on roads design submissions, which was far beyond what Halcrow could have anticipated given its experience in other projects, and that
- "[e]ach close-out letter from CEC is accompanied by further schedules of comments including new comments not previously raised at the technical approval stage" [[BFB00095827](#), page 0011 (see also page 0004)].
- 7.13** Addressing the comments would lead to changes which would in turn require updates to the planning approvals [progress report by PB dated 8 May 2009, [BFB00004354](#), page 0006]. This in turn would require amendment to and approval of IFC drawings where these had been prepared on the basis of earlier approvals.
- 7.14** CEC was not the only party generating changes, however. A report to CEC's Internal Planning Group on 27 July 2009 included a table in which it was noted that **tie** had admitted that between 40 per cent and 80 per cent of changes and delay were down to it [[CEC00688908](#), page 0005]. Mr David Anderson was asked about this entry by the Inquiry in his written evidence, and he replied:
- "There was criticism about the responses given by tie to information requested by Council Officers and about tie not having been open enough on their responsibility for delays and changes to design." [[TR100000108_C](#), page 0066, paragraph 77.]
- 7.15** An idea of the scope of the changes to the design and the problems that resulted from this is apparent from the following.
- A progress report by PB dated 8 May 2009 noted that 182 design changes had been identified, with £1.5 million worth of change instruction having been issued to PB. Approximately £1.7 million worth of changes had yet to be instructed. [[BFB00004354](#), page 0004, paragraph 2.1.2.].

- A letter from Mr Reynolds of PB to BSC, dated 6 May 2009, referred to in paragraph 7.1 above [PBH00003626], claimed that the scope of work that PB was being required to perform under the SDS contract was significantly different from that envisaged at novation as a result of changes that were still being made. He said that, as a result, it was not possible to define the end of Phase III – the completion of the design deliverables under the original SDS contract.
- A progress report by PB dated 29 September 2009 noted that 215 design changes had been identified, with £2.4 million worth of change instruction having been issued to PB. It was, again, noted that various changes being instructed as part of the approvals process would also require updates to several IFC drawings that had already been submitted for approval. [BFB00004358, pages 0004–0006 and 0022, paragraph 4.]
- The progress report by PB for June 2010 noted that 263 design changes had been identified, with £3.1 million worth of change instruction having been issued to PB. It noted that the outstanding IFC packages had been subject to change and/or delays to resolve comments and that several IFC drawings already submitted would require to be updated to accommodate emerging changes [BFB00004342, pages 0005 and 0031, paragraph 4]. This was a feature of the iterative approach taken to design preparation.

Siemens design

- 7.16** Although prior to novation, as between **tie** and BSC, the responsibility for design lay with **tie**, that responsibility concerned only the civil engineering and construction works necessary to construct the track. It was always intended that after contract close the designs for the overhead line equipment (“OLE”) and track systems would be carried out by the contractor within Infracore having the expertise in this regard, namely Siemens plc (“Siemens”). The initial design for track and roads had been carried out before contract close, but after that date Siemens had to prepare its design of OLE and track systems. The ongoing critical delay to Siemens’ progress of design was due to lack of access, arising from ongoing MUDFA delays. However, in the preparation of the designs for OLE and track systems, it became necessary in parts to revise the designs already completed to accommodate Siemens’ proposals. In the view taken by BSC of where the responsibilities lay, such revision required agreement by **tie** of any cost implications. Obviously, this could not take place until Siemens produced its design. This complex structure was made worse because Siemens was late in producing its designs that would require **tie**’s agreement of any cost implications. The monthly project reports from BB in the latter part of 2008 noted that BB and Siemens were mobilising additional design resources in an attempt to recover the delay [BFB00112170, page 0005, paragraph 1.3.1]. This was also apparent in Mr Reynolds’ email dated 30 October 2008, which noted, among several issues, the absence of Siemens’ design for trackform and OLE and the low volume of activity on BSC design development. The latter concern was exacerbated because the lack of activity by BSC included instances of designs that had previously been granted approval conditional upon design completion by BSC. Once the designs had been developed by BSC they also required to go through the approval process [CEC01149381].
- 7.17** The problems continued into 2009. BB’s internal monthly report for January 2009 noted that some progress in finalising approvals and consents for track and highway drawings had been achieved by the design of civil works enhancements to suit Siemens’ proposals (notably for a ground improvement layer under the track), but that duct and OLE foundation designs had been delayed by Siemens’ late design

finalisation and protracted negotiations with **tie** over payment for the design work. It noted that additional resources were in place to address the significant design interface workload required [BFB00112178, page 0005, paragraph 1.3.1]. In February 2009, it was noted that the work was in progress [BFB00112183, page 0005, paragraph 1.3.1] and in March they were close to finalisation [BFB00112188, page 0005, paragraph 1.3.1]. BB's internal monthly report for May 2009 noted that civil drawings, revised to incorporate Siemens' design were further delayed by poor performance by PB and the late provision of information by Siemens. The fact that these criticisms appeared in the contemporaneous internal reports of Siemens' consortium partner was significant. Although the Inquiry only recovered these reports at a late stage following court proceedings they were made available to all core participants, including Siemens. Siemens made no request to lead evidence in rebuttal of the contents of these reports that commented adversely on delays by Siemens in producing designs.

Addressing misalignment

7.18 As noted in Chapter 6 (Design (to May 2008)), even before the contracts were signed it became apparent that there was a "misalignment" between the System Design Services ("SDS") design, the Employer's Requirements and BBS's civils proposals. This had arisen as a result of changes made to the requirements by **tie** in 2007 while the tendering and contract negotiations process was under way. While Mr Nolan said that misalignment was something that he had encountered in other contracts [TR100000114_C, pages 0018–0019, paragraph 44], I consider that until the resolution of the misalignment it would be likely to lead to confusion and disputes during the works as to what obligations had been undertaken. The Novation Agreement stated that workshops to address this would be held after contract close [CEC01370880, Part 1, page 0007, paragraph 4.7]. Mr Chandler said that it was intended that they be held within eight weeks but this date was not met, and that it took four to five months for some of the workshops to be held [PHT00000020, page 8g]. He considered that, as programme manager, it was **tie**'s responsibility to ensure that they took place on time. Even when they were held, they did not resolve all the issues. The misalignment was still outstanding a year later and was one of the matters considered in the informal mediation between **tie** and BSC in June 2009 after the Princes Street dispute [see **tie** position paper, CEC00951734].

7.19 The changes arising from the workshops when they were held are summarised in a schedule produced by PB [BFB00095824]. The effect was that change notifications were issued by BBS between January and September 2009 as a result of the following workshops:

- trackform;
- roads construction;
- overhead line equipment;
- tram stops; and
- sub-stations.

- 7.20** From the above it is immediately apparent that this meant that the misalignment led to changes being made more than a year after the contract was signed. Yet further changes flowing from the workshops were made between January and April 2010 in relation to the following:
- earthing and bonding;
 - special trackform construction at shallow-depth obstructions; and
 - Cathedral Lane sub-station.
- 7.21** While these issues were being resolved, the designs relating to them could not be finalised and this led to delay.
- 7.22** Although BB's internal monthly reports discussed in paragraph 7.17 above mentioned the ground improvement layer at the instance of Siemens, it omits any reference to PB in that regard. PB's design was always based upon a fundamental assumption that a reinforced concrete slab was required under the trackform. The justification for that was based upon its experience in other cities of finding voids under the road pavement caused by historical damage to drains resulting in materials around the drain being washed away over the course of time. The risk was that over a period of time (perhaps several years) the high load of the tram passing over the trackform and the associated vibration through the trackform into the pavement underneath could cause the trackform to collapse. PB was responsible for the formation up to the underside of the trackform and would have been responsible for any collapse. Accordingly, its design before contract close included the reinforced concrete slab that PB always maintained was necessary despite pressure from **tie** over a prolonged period to change its opinion. In contrast, the Infraco offer was based upon shaving the existing pavement and putting a very thin trackform over the top. This was an example of the misalignment at contract close between the SDS design and the civils proposals of the Infraco offer that was accepted by **tie**. Mr Chandler, of PB, discussed this issue in his evidence [PHT0000020, pages 14, 56–61 and 65]. I accepted his evidence in that regard. Had **tie** required contractors to submit their tender on the basis of designs developed from Employer's Requirements and had not permitted Infraco to submit its tender based upon a different design without consulting PB about any implications of such change there would have been no need for Siemens to insist upon the need for a ground improvement layer.

Disputes concerning payment for changes and effects of novation

- 7.23** As I have noted in Chapter 5 on the procurement strategy for the Edinburgh Tram project (the "project"), it was part of that strategy that when the Infraco contract and Tramco contract were signed, the SDS contract would be novated to the consortium made up of the Infraco contractors. It was referred to in the various versions of the Business Case and the SDS contract contained provisions requiring PB to agree to novation (if asked to do so by **tie**) when a contractor was appointed to carry out the infrastructure works.
- 7.24** Novation is a process whereby, with the agreement of all parties, all rights and obligations under a contract are transferred from one party to another. Commonly, the agreement for novation will state that the relationship between the provider of goods and services and the "new" client will be regulated by – and be taken always to have been regulated by – the existing contract and that, as between the existing parties to the contract, that contract shall be regarded as at an end. This means that the parties to the original contract no longer have rights against, or obligations owed to, each other and the new party stands in the shoes of the party that has

been released from its obligations. It is up to the parties to determine how their relationship(s) should be structured, and it may differ from what I have just described, but in the Tram project it followed that outline. This meant that not only would the contractual relations concerning design in the period following novation be between PB and BSC; it would be as if this had always been the case. The only rights and obligations that **tie** would have in relation to design would be against BSC.

7.25 Novation is quite common in large construction contracts in which the contract(s) with the professionals, such as architects and engineers comprising the design team and who are engaged at an early stage, are transferred to the contractor who is appointed later to carry out the works. It avoids a situation in which, if something goes wrong and if the client seeks to make a claim in relation to it, the designer claims that the problem was caused by the contractor responsible for construction and the contractor claims that it was caused by the designer. If all the obligations are owed by one party, the client can claim against that party and leave it to the contractor and the designer to resolve matters between them based on their contract.

7.26 The reason that the contracts for the Tram project were not structured from the outset so that the designer was in a contract with the contractor and that contractor undertook all obligations (including design) to **tie** is that it was intended that the design services be carried out long before **tie** was in a position to appoint the contractor. While it would have been possible to have appointed a single contractor or consortium of contractors from the outset to do all the works, it was considered that this would not lead to the most competitive pricing and would mean that a final decision as to the infrastructure contractor would have to be taken at a much earlier stage. In my view, no criticism arises from the intention to adopt an approach of novating an existing SDS contract at the point that the Infraco contract was signed, but it does appear that the practical consequences were not thought through in the situation that existed in May 2008.

7.27 The difficulties that arose with, and out of, novation of the SDS contract related to the fact that the design was behind schedule when the Infraco contract was awarded. The intention had been that by that time the design would be completed and all the consents and approvals obtained. As Mr Chandler explained:

“We knew to understand what the implications of being novated into that contractor were going to be, given that at the time we had originally agreed to enter into a contract which involved novation at a point, we had expected that we would have completed the design, it would all have been approved by that point, and it was only going to be the introduction of the contractor’s preferred equipment supply that would change that design.

“The civils elements should really have been completed, the roads, the structures, the rail design, up to the point of component selection. What we were doing after novation originally we had understood to be the finalisation, selection of the tram shelters, the specific ones that the contractor was procuring, and replacing those with our generic shelter, details that we had previously identified. That was what we had expected to be doing after novation. In reality there was going to be a lot of additional design to be completed or finalised due to the delay with the approvals and consents. The critical issues were still potentially unresolved so we needed to understand what the impact on us and the contractor was going to be after novation.” [TR10000027_C, pages 0129–0130, paragraphs 531–532.]

- 7.28** As was noted in Chapter 6 (Design (to May 2008)), the position in May 2008 was very different in many respects. The extent to which input was required from PB after this date is apparent from the fact that it was paid £14,117,112 by BSC in relation to services provided between SDS novation in May 2008 and the completion of the project [WED00000623]. That payment was based upon a draft final account that included the following claims as well as other payments and allowances for a contra charge:
- £7,962,617 in relation to design core scope and design change;
 - £1,054,688 in relation to construction support;
 - £3,294,237 in relation to extended construction support;
 - £1,069,517 for design support;
 - £459,643 for design completion; and
 - £907,593 for prolongation [WED00000622].
- 7.29** The payments for construction support, extended construction support and design support appear to me to include work additional to the services to be provided by PB under the SDS contract. That view is consistent with Mr Reynolds' references in an internal email dated 19 April 2008 to PB's involvement in five work streams after novation [PBH00018332]. These included a new scope of work to deliver detailed construction support services mainly to BB as the consortium partner that was responsible for civil engineering and another new scope of work to deliver management services to Siemens, the consortium partner that was responsible for the design and installation of systems, in order to integrate its designs with the SDS design and to obtain consents and approvals. It is not the position that *all* of the additional charge represents additional work and for a fair comparison of payments made with the original SDS price, some people might argue that the cost of such additional work should be excluded. However, even if the figures for construction support, extended construction support and design support are excluded for that purpose the payments made in respect of design core scope and design change, for design completion and for prolongation exceeded £9.3 million, representing an increase of approximately 40 per cent of the SDS contract price of £23,329,853. If the excluded sums are included the total payment of £14.1 million represents an increase of approximately 60 per cent of the SDS contract price.
- 7.30** The problems that would arise as a result of novation when the design was so incomplete are another reason why it was not appropriate to press ahead and award the contract in May 2008. I consider that decision more fully in Chapter 12 (Contract Close).
- 7.31** Design work was still required in relation to the Multi-Utilities Diversion Framework Agreement ("MUDFA") works. As these works were not in general to be undertaken by the Infraco contractors, it was not appropriate that the design be carried out by PB as part of its contract with BSC. For **tie** to have a contractual right to have the works carried out by PB, a separate agreement had to be concluded between them for these services. Special arrangements were also required to pay for outstanding road designs and to pay for ongoing work required to remedy the misalignment between the Employer's Requirements, the SDS design and the Contractor's Proposals from BBS. This is considered later at paragraphs 7.35–7.45.
- 7.32** Even in relation to the core element of design of the infrastructure works, there was some unhappiness that novation was to take place when the design was so

incomplete. It meant that at the time of novation, work was still outstanding which it had originally been intended would be carried out while **tie** was in control. Mr Chandler advocated the postponement of novation until the design was nearer completion but, as noted in Chapter 12 (Contract Close), there was a marked reluctance within **tie** to do anything that would further delay award of the Infraco contract. One result was that following novation of the SDS contract, when PB was employed by BSC rather than **tie**, the loss of direct dealings and direct contractual obligations meant that **tie** lost both visibility and control over the design process. In an email dated 11 December 2008 Mr Sharp noted that

"since we novated SDS we haven't had a good grip on design production versus programme" [[TIE00248531](#), page 0001].

7.33 Mr Bell gave evidence that, after SDS novation, "it took longer to get to the root of any particular issues or problems, be they tie, CEC or Infraco, SDS related" [[PHT0000025](#), page 31]. He also stated:

"After May 2008, responsibility for progressing the design passed to the contractor and so the reasons for continued slippage in that period were opaque to TIE." [[TRI00000267](#), page 0008.]

7.34 This ought not to have been a surprise, but it does not seem to have been considered prior to novation.

7.35 In addition to the issue of control, there was an issue concerning payment, which was linked to the principal dispute between **tie** and BSC. It concerned where the liability lay to complete the designs following contract award and to pay for any increase in construction costs inherent in those completed designs. If the argument being adopted by **tie** was correct, BSC would not be entitled to any additional payment for the work required to develop the designs from the Base Date Design Information ("BDDI") mentioned in the Infraco contract to the IFC stage. PB would be required to have significant input in relation to this development and, naturally, would want to be paid for it under the novated contract. BSC, on the other hand, did not want to instruct PB to undertake that work and incur any liability to pay for it unless and until it was comfortable that **tie** would pay for it. As Mr Chandler noted, Schedule Part 4 ("SP4") (of the Infraco contract) was drafted as though the design was complete and that payment would only be made to BSC for Notified Departures as defined in that contract [[TRI0000027_C](#), page 0130, paragraph 533]. This created a situation in which BSC was not instructing PB to carry out the necessary work and the production of detailed drawings for structures and other areas affected by client changes was held up [[BFB00112190](#), page 0005, paragraph 1.3.1].

7.36 The continual slippage in design is apparent from the fact that Version 51 of the SDS programme was provided to BSC on 23 November 2009 [recorded in PB progress report for January 2010, [BFB00004338](#), page 0005, paragraph 2.3], whereas in May 2008, when the Novation Agreement was signed, version 31 was current [Close Report, [CEC01338853](#), page 0007, paragraph 2.2]. In late 2009, BB considered what steps might be taken to improve the position in relation to completion of design. This was motivated at least in part by concerns as to its own position if the outcome of the dispute as to where responsibility lay for completion of the design went against it. As a result of this, a Memorandum of Understanding ("MoU") between PB and BBS was prepared. Mr Ochoa, Change Manager at BB, sought advice from Pinsent Masons, solicitors for BB, in relation to it. An email dated 9 December 2009 from Ms Moir, of Pinsent Masons, noted that she understood that the purpose of the MoU was to get

agreement from PB to an acceleration of the design programme, to which it would sign up in exchange for payment of additional sums. She noted in her email:

"This is required because Infraco believe SDS may have a successful defence in relation to any claim under the SDS Agreement for late delivery of the design – as a result of BB/Siemens failure to provide design information, carry out the CIDR [Consortium Interdisciplinary Review] etc in time and in accordance with the current design programme. This could result in Infraco being exposed under the Infraco Contract if as a result of the OSSA [On-Street Supplemental Agreement] or success in the Adjudications, tie instructs or Infraco become obliged to proceed with the works – for which there is no design at this time as a result of Infraco failures as set out above. However, Infraco also believes that SDS is culpable for some of the delay – but intend to deal with this issue 'after the fact' given the potential exposure as a result of the design being incomplete and the need to have SDS 'on side' to assist with future ND [Notified Departure] claims." [CEC00328711, page 0002; TRI00000011, page 0013.]

- 7.37** Mr Foerder also explained that while BBS considered that its interpretation of the contract was correct there were initially no adjudication decisions to support it, and there was a risk to BBS that, if its interpretation of the contract was found to be wrong, it might find itself in a position of receiving an instruction to commence works but would not be able to do so because of incomplete design [PHT00000044, pages 85–87].
- 7.38** The steps taken by BB to address the problem were part of what was referred to as the Civil Design Completion Programme. The PB progress report from November 2009 noted that, at BSC's request, it had submitted a proposal to provide additional staff to resource the programme, which was intended to achieve earlier closeout [BFB00004337, page 0004, paragraph 2.1]. It identified works that BSC was to instruct PB to carry out and recorded that BSC would pay 100 per cent of the costs of some and 75 per cent of the costs of others. In relation to the latter group, BSC would seek the whole amount from tie and PB would assist them in this. If BSC were successful in recovering all the cost from tie, it would make a balancing payment to PB so that it had been paid the whole cost of the works [ibid, page 0005, paragraph 2.1.2].
- 7.39** The November report said that the signing of an MoU incorporating the proposal was imminent. It was still recorded as being imminent in the progress report two months later, in January 2010 [BFB00004338, page 0005, paragraph 2.3]. In fact, rather than a non-binding MoU, on 25 February 2010 the parties signed a binding Minute of Agreement addressing the issue [TRI00000011]. This was expressly without prejudice to the terms of the SDS Agreement, and its purpose was recorded in clause 18 to be "solely to allow BBUK to mitigate its loss in respect of the late delivery of the design, by means of an extra incentivisation payment to the SDS Provider as per Appendix 5, to compensate SDS for an additional amount of design coordination resources" [ibid, page 0003].
- 7.40** The Report set out time limits for provision of information by Siemens and PB [ibid, page 0002, clause 4 and page 0005, appendix 1] and provided for payment for works which tie had not accepted were changes. BSC would pay for such works as outlined in paragraph 7.38.
- 7.41** Mr Foerder gave evidence that BB entered into the agreement with PB "to unlock the situation because tie was refusing to accept the design changes ... Because we couldn't get approvals on the Notified Departures from tie ... nothing could progress. SDS was not willing to put more commercial risk to themselves.

So we decided that we take that burden, to enable them to progress the design, and get cost reimbursement through the consortium." [PHT00000044, page 83.]

7.42 In his oral evidence, Mr Walker put the matter more succinctly in saying that the purpose was

"[t]o incentivise the designer to have adequate resource immediately available at our beck and call" [PHT00000035, page 147].

7.43 Mr Foerder said that the agreement

"was a way to get the design progressed by SDS with commitment from our side to reimburse the cost" [PHT00000044, page 86].

7.44 He also recognised that, in relation to the dispute concerning changes from the BDDI design to the IFC design, assistance from PB was necessary. He said:

"to enable us to identify Notified Departures properly, we needed the assistance of SDS, because they actually identified what is different and why the differences occurred between what was originally provided and what was finally coming out ... You needed also a description [of] why and what [had] changed, and there we needed the assistance of SDS." *ibid*, pages 89–90.]

7.45 In my view the agreement was a pragmatic solution to the problem that had arisen whereby delays in design were caused by the underlying dispute between **tie** and BSC (as to which party was to bear the risks arising from design development and completion). The agreement also, of course, addressed BB's concerns that it might be held liable for design delay if it was proved wrong in its interpretation of the Infraco contract. Although it engendered suspicion from **tie** – which may have been fuelled by the fact that it was not provided with a copy of the agreement when it requested it – there was nothing improper about it.

Grinding to a halt, Mar Hall mediation and beyond

7.46 As discussed in Chapter 19 (Mediation and Settlement), by late 2010 the project was in crisis. By letter dated 29 September 2010, BSC advised **tie** that it would no longer undertake certain "goodwill works", ie works associated with the list of Infraco Notices of **tie** Change ("INTCs") enclosed with the letter in respect of which there was no **tie** Change Order or agreed estimate [TIE00409574]. Mr Foerder gave evidence that design had been progressed up until that time, but that it then slowed down

"because from October 2010 to the mediation, not much happened really, apart for the preparation for the mediation" [PHT00000044, page 162].

7.47 Even as work on the infrastructure works ground to a halt, the problems with design remained. A progress report by PB dated 25 January 2011 noted that 303 design changes had been identified, with £3.28 million worth of change instructions having been issued to PB. Out of a total of 269 planning and technical approvals that would be needed to complete the design, only 219 (81 per cent) had been approved [BFB00004350, pages 0004–0007]. In addition, even where approvals had been obtained, there were problems. A paper produced by Mr Conway, of CEC, for Dame Sue Bruce on 9 March 2011 noted, in relation to planning approvals, that:

"There are areas where the current design does not match the Planning consents obtained. This is generally because the design has changed since approval was sought, and it is necessary to align those changes and for Infraco to obtain consent for those changes." [CECo2087162, page 0002.]

7.48 At the Mar Hall mediation in March 2011, an agreement was reached to settle the dispute between the parties. Certain Key Points of Principle were initially agreed, which were then developed into more detailed Heads of Terms [both documents are contained in [CEC02084685](#)]. The Key Points of Principle included:

- "9. CEC Planning Approvals – 3 weeks for CEC to confirm acceptance of outstanding issues on Technical and Planning Informatives.
10. Substantive cultural shift in the behaviour of all Parties including interaction, co-location and empowerment." [ibid](#), page 0001.]

7.49 The Heads of Terms included the following provision:

"11. Design and Approvals

- 11.1 CEC shall procure that CEC Roads Department shall meet with Infraco and its designers in order to agree and resolve all outstanding, Technical Informatives and critical issues with the design within 1 month of the date of execution of the Heads of Terms.
- 11.2 CEC shall procure that CEC Planning Department shall notify Infraco of all outstanding issues which preclude discharge of Planning Informatives within 3 weeks of the date of execution of the Heads of Terms.
- 11.3 Infraco shall 'self-certify' the civils and systems technical Design and tie shall have no right or obligation to review and/or approve the civils and systems Design.
- 11.4 Any remaining unresolved issues in respect of Approvals shall be dealt with at a meeting of senior representatives from CEC and Infraco on 7 April 2011.
- 11.5 The parties shall work together to ensure that the statutory approvals for the On-Street Works are obtained before 1 September 2011." [ibid](#), page 0005.]

7.50 Immediately following the mediation, nine full-time and two part-time CEC staff were relocated to work within BSC Tram project offices as a new way of working with a view to speeding up the process. Notwithstanding the scope of the agreement reached in the mediation, the intention was, subject to certain exclusions, to complete all consents and approvals required for the route all the way to Newhaven by 30 April 2011, but to give priority to the stretch from the Airport to St Andrew Square [[CEC02087166](#), page 0001]. The new approach bore fruit to a remarkable degree. An email dated 5 April 2011 from Mr Conway reported that the number of open technical approvals comments had reduced from 2,782 on 24 March 2011 to 85 by 5 April 2011 [[CEC02083973](#), Part 2, page 0118]. Mr Glazebrook said that he was aware of Mr Conway's having galvanised and enlarged the CEC team to address and close out the outstanding issues and, while he was not personally involved in the resolution of the open technical approvals noted in Mr Conway's email, he considered that

"when people engage and collaborate, this is exactly the sort of dramatically beneficial result that ensues" [[PHT00000015](#), page 30].

7.51 It is notable that while the CEC comments presented a problem when they were made to – and the responsibility for dealing with them rested with – **tie**, they were resolved when CEC had to deal with them itself. It appears that CEC having direct responsibility resulted in there being a willingness and resolve on its part to collaborate to resolve them.

- 7.52** Mr Weatherley, of Turner & Townsend, gave evidence that when his firm was instructed by CEC as project manager after Mar Hall, several design issues remained outstanding, including:
- the design of public realm works;
 - tram and carriageway alignment in York Place;
 - the Cathedral Lane sub-station;
 - on-street works traffic modelling;
 - the Edinburgh Gateway retaining wall; and
 - Scottish Water legacy works north of York Place.
- 7.53** All these matters (and other design issues) were resolved in regular design meetings involving all interested parties. Mr Weatherley explained that there were occasions when works adjacent to utilities had to be re-designed because of the presence of those utilities, and the need for that re-design did hold up the construction programme. Nonetheless, he said that apart from this he was unaware of any examples in which the lack of design delayed the construction [[PHT00000046](#), pages 63–64].
- 7.54** Mr David Anderson, of CEC, considered that the responsibility for progress not having been made earlier rested with the “programme director” within [tie PHT00000043](#), pages 191–192]. I accept Mr Anderson’s evidence that the responsibility lay with the programme director. There was some confusion in the evidence as to who was the programme director bearing such responsibility. Mr Anderson clearly considered that Mr Bell held that position at the appropriate time [[ibid](#), page 182]. Although her evidence about her various roles was confusing, I am able to conclude that Ms Clark was Programme Director from August 2006 and that at some point before contract close she became Delivery Director, retaining her responsibilities for the overall programme of the project [[PHT00000025](#), pages 101–106]. On 30 October 2007, with the agreement of the [tie](#) executive team and the [tie](#) Board, Mr Gallagher introduced organisational changes [[CEC01441488](#)] that appointed Mr Bell as Tram Project Director (“TPD”) (Designate) for the construction phase of the project. He was to work in parallel with the existing TPD (Mr Crosse) who was responsible for procurement to financial close on 28 January 2008, when Mr Bell would become TPD. Mr Bell confirmed that he undertook his new role from the end of October 2007 or within a few weeks of that date, and that he and Mr Crosse “were running in parallel during the first month or so in 2008” [[PHT00000024](#), page 21]. I have assumed that that delay beyond January was because of the delay in reaching financial close. Mr Gallagher’s document confirmed that Mr Bell would have other responsibilities in “fully” managing various teams, including the programme team led by Ms Clark. Mr Bell confirmed that he had acted on that basis [[ibid](#)]. On the basis of the above evidence it appears that Mr Bell had ultimate responsibility for programme management after 30 October 2007 and still had that responsibility at contract close. I agree with Mr Anderson that responsibility for progress not having been made earlier rested with Mr Bell.
- 7.55** Mr David Anderson also said that following the mediation there was a noticeable improvement in Infraco’s rate of successful submission of satisfactory design work. He considered that this was due in part to more effective joint working and the co-location of key staff [[TR100000108_C](#), page 0008]. Mr Sharp considered that the rapid progress could only be achieved because BSC had carried out the drawings before the mediation but had held them back until a settlement was achieved. He accepted,

however, that this was based partly on speculation [PHT00000015, pages 176–181]; and it was denied by Mr Foerder [PHT00000044, pages 161–162], who attributed the improvement to the cultural change mentioned below. Other witnesses from PB and BB disputed the suggestion that there had been a deliberate tactic not to resolve CEC comments or progress design before Mar Hall and, instead, gave evidence of a change in culture after the Mar Hall settlement agreement – in particular, on the part of CEC. Mr Reynolds said that after Mar Hall, “there was a cultural change to design acceptance” [PHT00000019, page 155]. Mr Chandler’s evidence was to the same effect, and he considered that if the approach after the mediation had been present from the outset, resolution of a lot of the problems that had dogged the project could have been achieved sooner [TR10000027_C, page 0172, paragraph 704]. Mr Foerder stated:

“It was hands on and suddenly worked.

“With all the parties working in a collaborative approach, the remaining problems were overcome. This worked very well. If the will had been present earlier, it could have worked earlier.” [TR10000095_C, page 0091, paragraphs 274–275.]

7.56 I accept that the cultural change after mediation resulted in a co-operative approach that was more conducive to progress than the confrontational approach that existed before Mar Hall. I do not have material that would enable me to reach a conclusion that before Mar Hall BSC withheld co-operation deliberately as a tactic. I do, however, accept Mr Sharp’s view that the deal done at Mar Hall meant that BSC had a clear commercial interest that matters be resolved, as failure to resolve them became its problem [PHT00000015, pages 180–181].

7.57 The change wrought in 2011 demonstrated that the difficulties and delays were not inherent in the project; with appropriate management of the issues and structures for dealing with them, they were quickly resolved. I do not consider that anything that happened in the mediation or in 2011 meant that the structure and approach could not have been adopted before then. Had this been done, I agree with the views of the witnesses that many of the problems could have been resolved. The notable exception is the difficulties arising from the dispute as to who was responsible for the design. This could not be addressed as a matter of how the work was done; it required a fundamental re-drawing of contract duties and rights. The agreement at Mar Hall removed that as an issue and, while it had remained, the dispute as to who was to carry out the design and who bore the liability to pay for that work would inevitably have cast a shadow over the design process.

Responsibility for the situation

7.58 Predictably, witnesses who gave evidence about the problems laid the blame for the situation at the door of other parties. From within **tie**, Mr Sharp was critical of CEC’s failure to have a constant view of what it wanted. He considered that this was the biggest cause of delay until August 2008. After that date he considered that PB bore responsibility for failing to get design correct after the award of the Infracore contract and for failing to co-ordinate the design properly [*ibid.*, pages 158–159]. He considered also that there were still some issues where people did not make up their minds about the design option that was required. Although CEC and **tie** continued to cause some delay in that regard, he considered that these bodies caused less delay after the award of the Infracore contract than previously. He also considered that BSC was not taking a particularly active management of PB. In that regard he was unsure whether BSC was not exercising strong management or whether it was but

PB was nonetheless under-performing. **tie** had asked BSC for evidence of strong management but it was not provided to **tie**. It seems to me that in either event the responsibility lay with BSC. Mr Sharp considered that: "It suited them for the design to not progress as rapidly as it could." [*ibid*, pages 169–171.]

- 7.59** In early 2010, **tie** carried out an audit of the design processes under BSC's control. It focused on particular areas in which there had been changes in design. A draft of the conclusions of this report [CEC00338516, page 0002] found that there was little evidence that BSC had properly managed the design process and no evidence that BSC had paid serious attention to "best value" design solutions. These conclusions were repeated in the final version of the report [CEC00544638]. However, I do not place reliance on the conclusions of this audit. It was undertaken as part of the efforts to put pressure on BSC in the context of the contractual disputes [see, e.g., Project Director's Report, included with Tram Project Board ("TPB") Agenda and Papers for the meeting on 13 January 2010, CEC00473005, page 0012, and Mr Jeffery TRI00000097_C, page 0012, paragraph 71]. Further, there was some question as to whether clause 104 of the Infraco contract, under which **tie** purported to conduct the audit, entitled it to do so, and this led to a refusal on the part of BSC to co-operate.
- 7.60** Mr Fraser of CEC considered that delay arose from a failing of PB in providing incomplete and non-integrated designs without general arrangement drawings to pull them together [PHT00000004, pages 193–194]. He defended the number of comments from CEC, saying that it had been simply carrying out its statutory duty to ensure compliance with standards and that the number of comments reflected the inadequacy of the design submissions [TRI00000096_C, pages 0006–0007 and 0066; PHT00000004, pages 192–193]. In relation to the problem that outstanding matters prevented completion of design packages, he considered that that simply reflected the complex, interdependent and iterative nature of the design process of the project and that there was no "short cut" through that process [*ibid*, pages 196–197 and 199]. I consider that although this may be true, it nonetheless leads to the conclusion either that, in view of the process for completion of designs that had been put in place, the time allotted for their approval was inadequate, particularly as it involved obtaining the agreement of interested third parties, or that CEC could not accommodate the allotted timescale.
- 7.61** Mr David Anderson, of CEC, considered that the delay in completing design after financial close was due to a combination of a failure on the part of BSC to manage the design process and failures within **tie** as well as the need to obtain third-party approvals [TRI00000108_C, pages 0093 and 0101]. In relation to the failures within **tie**, he considered that at SDS novation insufficient attention was paid to providing incentives for success and penalties for failure in completing design. Delays in completing satisfactory designs meant that BSC took longer to complete the contract and could benefit from Notified Departures and extension of time claims. However, in his statement, he said that from the information made available to him, he understood that the main cause of delay was PB's not having completed satisfactory designs for which instructions and information had been issued by **tie** [*ibid*, pages 0008–0009]. In his oral evidence he was more guarded and said:
- "it was never entirely clear where the problems with design lay, whether it was the failure of **tie** to issue instructions, whether it was the failure of SDS to produce the designs and ... the failure of BBS to manage SDS in producing the designs ... the failure of BB to produce estimates, or whether it was the failure of the planning service to expedite approvals, or indeed building control or highways" [PHT00000043, pages 131–132].

- 7.62** From within PB, Mr Chandler considered that "the main issue that caused the delay on the scheme was the lack of positive decision making and leadership" [TR10000027_C, pages 0172–0173, paragraph 707]. He was of the view that there was a fundamental inability to lock down the design and develop it through to IFC status.
- "We were continuously changing the design because of the various different outstanding decisions that were required to be made and they were outside of our gift ... the efforts that were put in to try and accommodate those and to go around the design loop several times; it was astonishing really just how much additional design work was undertaken and how that prolonged the scheme." *ibid.*, page 0174, paragraph 711.]
- 7.63** He considered that the biggest challenge to PB was obtaining decisions from third parties who were not operating to the same timescales that the project required *ibid.*, page 177, paragraph 726]. He was also critical of the high number of comments from CEC, and considered that:
- "It was largely as a result of the CEC comments, particularly around the roads submissions, that resulted in the continued programme slippage." *ibid.*, page 0162, paragraph 659.]
- 7.64** He was of the view that the delay after financial close in completing design and obtaining consents and approvals resulted from a number of factors, namely: the misalignment between the SDS design based upon the Employer's Requirements and the design upon which BBS had based its offer; BBS's assumption that some of the design principles would change; and its assumption that it would be able to introduce value engineering ("VE") opportunities, particularly with structures and trackform. PB had grave doubts that the VE opportunities would be acceptable to the approval bodies or even technically feasible because of PB's detailed knowledge of the infrastructure. Significantly, he was also of the view that the dispute between **tie** and BSC in respect of which party was to bear the risks arising from design development was a "significant" factor in the delays that arose in completing design, and that PB had not anticipated that that matter would get so "bogged down" [PHT0000020, pages 85–88].
- 7.65** From the standpoint of BSC, Mr Walker considered that the continued slippage in design after the award of the Infraco contract was due to inexperienced designers in PB, an apparent unwillingness by PB to resource the work properly and the fact that
- "the design was in such disarray that the designer was almost overwhelmed when trying to complete the design in the time that we required" [TR10000072_C, page 0041, paragraph 83].
- 7.66** He also referred to delays resulting from the need for third-party approvals *ibid.*, pages 0041–0042, paragraph 83] and the dispute between **tie** and BSC. He referred to the issue of entitlement to payment under the contracts and said that PB needed an instruction from BSC to undertake additional design work; BSC was not in a position to instruct PB until BSC had, in turn, received an instruction from **tie** to undertake that work (with **tie** being reluctant to give such an instruction, given its view that BSC was responsible under the Infraco contract for normal design development and completion) [PHT0000035, pages 141–142]. As noted in paragraph 7.39 above, this was addressed by the Minute of Agreement.

- 7.67** Mr Foerder considered that any delays on the part of BSC were not, as he put it, a dominant factor in the delay [[PHT00000044](#), pages 87–88]. By way of high-level reasons for the problems, he referred to CEC and third-party approvals, uninstructed design changes and conflicting requirements due to misalignment [[TR100000118](#), pages 0054–0062, paragraphs 10.15–10.44; [PHT00000044](#), page 88]. By way of more detail, he referred to the following.
- The disagreement over which party required to pay for design changes [[ibid](#), pages 68–69] and the fact that **tie** was unwilling to issue a **tie** Change Notice for changes required following design misalignment workshops [[ibid](#), page 73].
 - Outstanding third-party approvals and consents.
 - The “immense” number of comments made by CEC on submitted design.
 - A very cumbersome design approval process (requiring approval of design by both **tie** and CEC).
 - **tie**’s mismanagement of the design approval process (there having been, for example, more than 300 design changes after the award of the Infracore contract, the majority of which were instructed by CEC or **tie**, as a result of, for example, third-party agreements or betterment and preferential engineering by CEC).
 - Third-party agreements (ie delay or inability by **tie**/CEC to obtain agreement with third parties for the design at certain key locations).
 - Changes and delays caused by undiverted utilities [[ibid](#), pages 65–77].
- 7.68** He considered that PB had delivered a reasonable service in the circumstances [[TR100000095_C](#), pages 0028, 0041 and 0072, paragraphs 87, 128 and 214; [PHT00000044](#), page 78].
- 7.69** Some of the witnesses, however, were more candid in admitting the failures within their own organisations. As I noted in Chapter 6 (Design (to May 2008)), Mr Chandler and Mr Reynolds accepted that there had been shortcomings in the performance of PB (paragraph 6.133). Mr Glazebrook was critical of **tie** and CEC. He gave evidence that
- “in any situation where substantially things haven’t changed in terms of processes, procedures, attitudes, organisational arrangements, it’s inevitable that the problems that occurred before will continue” [[PHT00000015](#), page 20].
- 7.70** He considered that the duplication of roles and meddling in design within **tie** became worse after financial close as a result of additional teams being created (ie a project management team and a financial/cost management team) [[PHT00000014](#), pages 127–129]. He also stated that
- “up to the point I left [in 2011], it was certainly still in my recollection exceptionally difficult to get input from CEC at the right point to avoid rework and wastage of time and resource” [[ibid](#), page 148].
- 7.71** I accepted Mr Glazebrook’s comments. There had been a consistent pattern of delay in achieving design prior to contract close. Nothing had been done at close to revise the various working patterns and structures or to address the areas where the delays had occurred, and there was therefore no reason to expect that there would be any improvement in this regard. In view of the problems that existed with design at contract close, **tie** ought to have undertaken an examination of the causes of the problems and sought to remedy them. Instead it appears from minutes of the **tie** Board and the TPB that they were content to place all the blame

on PB. In 2007, when leading up to the intended contract close in December, the minutes of meetings of the TPB and the **tie** Board refer to “underperformance”, poor performance and failings by PB [papers for meeting of TPB on 23 January 2007, [CECo1360998](#), pages 0002–0003 and 0009; papers for TPB Meeting 20 February 2007, [CECo0689788](#), pages 0005–0006; papers for meeting on 12 July 2007, [CECo1565576](#), page 0006; minutes of **tie** Board meeting 27 August 2007, [CECo1271486](#), page 0006; minutes of meeting of **tie** on 24 September 2007, [TIE00147433](#), page 0003]. For completeness, however, it should be noted that Mr Glazebrook considered that at least part of the blame lay with BSC. He said:

“Infraco changed many designs apparently to suit their own design and risk agenda. This resulted in further time and cost escalation.” [[PHT00000015](#), page 23.]

- 7.72** He explained that this related to structures in the off-street section. His reference to BSC’s motivation was based upon an impression that he gained from others [[ibid.](#), pages 23–24].
- 7.73** Another factor to be considered is the outcome of the claim for additional payment by PB from **tie** under the Novation Agreement. By letter dated 20 October 2010, PB applied to **tie** for payment of £973,214 of the £1 million incentivisation sum agreed at the time of SDS novation in May 2008 [[BFB00095830](#); [BFB00095829](#)]. The accompanying application sought payment on the basis that 57 deliverables had been delivered on time (£508,928); 52 deliverables had been delivered without fault on the part of PB (£464,285); and just three deliverables had been delayed due to PB (-£26,785) [[ibid.](#)]. Mr Chandler gave evidence that while there was some debate in relation to whether some of the deliverables for which payment was claimed had been delayed because of fault on the part of PB, in the event, the vast majority of the deliverables claimed for were accepted and paid, resulting in approximately £800,000 of the £1 million incentivisation sum being paid [[PHT00000020](#), pages 104–105]. In my view, this is indicative of a lack of significant culpability on the part of PB.

Conclusions

- 7.74** As I noted in Chapter 6 (Design (to May 2008)), one of the causes of delay in the design prior to award of the Infraco contract was the failure by **tie** to manage the design process properly. However, even once the management role was no longer **tie**’s the delay continued, and this indicates that there were other causes. As with the position before signing the Infraco contract, there was not a single cause for the delay in completing designs and the blame does not lie with a single party. It is useful, in light of the discussion above of the issues that arose, to consider the position of each party in turn.

Parsons Brinckerhoff

- 7.75** PB did not produce complete and integrated design packages for review and approval, and there continued to be concerns in relation to the quality of some of the design submissions and some resourcing and co-ordination issues on its part. The fact that the designs were not being produced in complete packages exacerbated the problems with obtaining approvals. Although these were failings on the part of PB and contributed to the delay, I do not consider that they are the dominant cause.

BSC

7.76 BSC bears responsibility for the delay in provision of the Siemens design and the changes that resulted from that. As the management of PB was its responsibility following novation, it bears responsibility for the problems there also, although this must be seen in the light of the effect of the dispute as to liability for completion of designs and the relatively minor weight that this has when considering causes of the problems at this stage.

CEC

7.77 I consider that CEC bears some responsibility in this period just as it did before contract close. CEC continued to fail to work in a collaborative manner to resolve design issues swiftly and with clarity or to provide a focus on enabling the project to proceed smoothly. The lateness and sheer volume of the comments were bound to cause delay and expense, and it is very surprising that it was allowed to continue unchecked. I accept that as a public body with statutory responsibilities it would be inappropriate or even unlawful for it to fetter its discretion. The change that came about after the Mar Hall mediation, however, is striking. There is no suggestion that CEC ignored or in any way compromised its obligations in that period, and yet matters were dealt with in a wholly different way. The impression that I have is that prior to the agreement at mediation each department or section of CEC had been focusing only on what the ideal position would be for its own particular responsibilities. In effect, CEC commented with a number of voices rather than a single, considered voice. The decisions made by local authorities in relation to consents etc. are usually matters that require some judgement, which involves balancing different – and sometimes competing – issues before reaching a single concluded view; they are not black-and-white. As such, it would have been legitimate to take into account when giving comments the overriding CEC view that there should be a tram system and that it would bring benefit to the city. Had there been someone with responsibility to oversee and co-ordinate the response from CEC to the many requests for approvals and consents, I think it likely that the responses would have been more proportionate, focused and reasonable. Without this, in carrying out its work, PB in effect had to meet the requirements of multiple masters with divergent interests.

tie

7.78 **tie** accepted responsibility for a large proportion of the changes and delays. It bears responsibility for permitting the situation to arise in which the Employer's Requirements, the SDS design and the BSC proposals were not in alignment and therefore for the delays that arose from the work required to remedy it. In so far as the contract mechanisms for completion of and approval of design led to delay, **tie**, as the party responsible for drafting the contracts, must bear responsibility for that also.

7.79 All the above were made worse, however, by the dispute that arose between **tie** and BSC as to which party was to bear the risks under the Infraco contract arising from the development and completion of design and the concerns about whether PB would be paid for work. This was one of the main factors in this period. As I consider elsewhere,¹⁴ the responsibility for that situation rests with **tie** and, in particular, the persons responsible for negotiation of the terms of SP4. This is a further example of the problems caused by that contract drafting.

¹⁴ Chapter 11 (Contract Negotiations) and Chapter 12 (Contract Close).

Chapter 8

Utilities

- 8.1** In addition to providing means of travel from place to place, roads are also used to a considerable extent to provide routes for the various utility services required for homes and businesses. These include water, sewerage, electricity and gas and also the various communication media such as telephone lines and fibre optic cables. The carriageway also requires to accommodate drainage of the road itself, and electricity supplies for street lighting and road signs. We are all familiar with the roadworks required to carry out works on these services buried under the road and the inconvenience that results. That inconvenience would be all the greater if it were necessary to access services under a tram line. The works to reinstate track and track bed would be more difficult to achieve and could result in greater disruption. As this would clearly be unacceptable, it was necessary to remove almost all the utilities under or close to the new Edinburgh tram line before it was laid.
- 8.2** Even viewed in isolation, this element of the works itself ran over budget and took longer than expected, and it is relevant to examine the reason for this. The effects went further than the works to the utilities, however, as the delay caused knock-on effects with the infrastructure works, which led to further delay and expense there.
- 8.3** The number of utilities buried in the roads – and the facts that the period during which they had been installed extended over more than 100 years and there was no overall plan of what had been installed – meant that the task of moving the utilities was significant. The first stage was to identify which utilities lay under the road, and in precisely which locations, in order to identify what had to be moved. When the construction of the tram line was first planned it was known that utilities records were unlikely to be complete and accurate and that it was likely that unexpected utilities and underground obstructions would be found when the ground was excavated [Mr Barclay [PHT00000031](#), pages 24–26; Mr Malkin [ibid](#), page 138; Mr Casserly [PHT00000022](#), page 63; Mr Reynolds [TR100000124_C](#), page 0059, paragraph 188; Mr Chandler [PHT00000020](#), page 128]. This had been the experience in other recent tram projects in the UK and was particularly likely to be the case in a historic city like Edinburgh, where numerous layers of utilities had been laid, diverted and abandoned in the ground over many years. Water and gas pipes and electricity cables started to be placed in the roadways well over 100 years ago. The means of keeping records of this were, by today's standards, primitive. Although there is now a statutory requirement to log accurately the position of utilities, fully computerised records and databases are a recent addition [Mr Barclay [PHT00000031](#), pages 27–28]. In addition, the condition of apparatus would sometimes not be known until it was uncovered. The problem, however, was not just one of identifying which utilities must be moved to provide a clear path for the trams; it was also necessary to identify where the replacement pipes, cables and sewers could be placed. This was not straightforward, as the areas in question were likely already to be congested with existing utilities and there were constraints as to the distance that had to be maintained between different apparatus and the required depth of cover.

- 8.4** The statutory regime that regulates utilities placed in roads is contained in the New Roads and Street Works Act 1991 (the "1991 Act"). Section 143(1) of the 1991 Act states that where apparatus in a road will be affected by works, such as the Tram project, the utility undertaker and tram authority shall take such steps as are reasonably required—
- (a) to identify any measures needing to be taken in relation to the apparatus in consequence of, or in order to facilitate, the execution of the authority's works,
 - (b) to settle a specification of the necessary measures and determine by whom they are to be taken, and
 - (c) to co-ordinate the taking of those measures and the execution of the authority's works,
- so as to secure the efficient implementation of the necessary work and the avoidance of unnecessary delay."
- 8.5** Regulations made under the 1991 Act state that if there is a dispute between the utility undertaker and the transport authority in relation to the above matters, it may be settled by the Scottish Road Works Commissioner (the "Commissioner") [Road Works (Settlement of Disputes and Appeals against Directions) (Scotland) Regulations 2008 (SSI 2008/89), reg 2(2)(e)].
- 8.6** The 1991 Act also makes provision for a code of practice to be issued. When the Act was passed, this would have been issued by the Secretary of State for Scotland but, since devolution, it has been the responsibility of the Scottish Ministers. Such a code of practice, giving practical guidance on the matters mentioned in section 143(1) of the Act and the steps to be taken by the authority and the utility undertaker, was issued in June 1992 [Code of Practice on measures where apparatus is affected by major works (diversionary works), approved by the Secretaries of State for Transport, Wales and Scotland, June 1992, [TR100000302](#)] (the "Code").
- 8.7** The Code contains no provisions that relate specifically to tram works. Appendix C to the Code sets out recommended procedures for consultation, planning and the execution of any utility works that may be required as a result of the authority's works [libid](#), pages 0057–0065]. It envisages that execution of any necessary work to the utility will be carried out by the utility undertaker. Prior to execution of work, it has a procedure for exchange of information between the parties. It requires that the authority submit details of the proposed scheme to the undertaker and that the undertaker responds with preliminary details of the effects on its apparatus and budget estimates for the works. The estimate should normally be provided within 20 days. When the design of the scheme has been finalised, it should be submitted to the undertaker and within 25 working days the undertaker should provide a description of the measures that are required, a detailed specification of the works required, a detailed estimate and programmes and timescales for the work. The effect of the Multi-Utilities Diversion Framework Agreement ("MUDFA") contract supplanted the detail of these stages, and I refer to them simply to indicate the pre-existing mechanisms that envisaged an exchange of information between the two parties. Even if the Appendix C procedures had been used, there was a need for exchange of information to identify which works were required and the likely costs. In the Tram project, prior to the Mar Hall mediation, neither side fulfilled the expectations of the Code regarding the provision of information.

8.8 For completeness I note that, in evidence to the Inquiry, Mr Rumney noted that an attempt was made to update the Code in 2003, but that it was held up pending a court decision in the case of *British Telecommunications plc v Gwynedd Council*, which concerned whether the costs of preparing a detailed estimate for the proposed diversion works were part of the costs that the Act required to be shared [TR100000283, pages 0005–0006, paragraph 32]. Although that decision was given by the Court of Appeal in 2004 to the effect that these were part of the “allowable costs” [(2004] EWCA Civ 942] a new Code has not been issued. Mr Rumney considered that, as a result, the Code is now markedly out of date and does not reflect changes in legislation since it was adopted. During the preparation of this report the Solicitor to the Inquiry obtained information from the Commissioner about the current position in relation to the Code. I am extremely grateful to the Commissioner for his assistance, which confirmed that the Code is still in force but that there has been a series of Advice Notes relating to diversionary works, the most recent being Advice Note No. 2010/1 by the Highways Authorities and Utilities Committee [HAUC (UK)] [GOV00000030]. As disclosed in correspondence between the Solicitor to the Inquiry and officials in Transport Scotland [TR100000315], the Code is the subject of a joint review by the Department for Transport (“DfT”) and Transport Scotland. See Appendix 5.

The MUDFA concept

8.9 As was noted in Chapter 5 (Procurement Strategy), the report by the National Audit Office entitled ‘Improving public transport in England through light rail’ [CEC01708649] noted that the diversion of utilities tended to be an expensive part of tram or light rail schemes, and it recommended that the DfT fund projects only where the promoters had adequate proposals for managing the risks associated with such diversions. (See paragraph 5.5 above, where I refer to Mr Kendall’s statement to the Inquiry on this subject.) Accordingly, Transport Initiatives Edinburgh Limited’s (“tie’s”) procurement strategy for the Edinburgh project sought to address the risks associated with the diversion of utilities by completing design and utilities diversion works in advance of the infrastructure works rather than having them undertaken by the infrastructure contractor. The intention was that the infrastructure contractors should, in general, be handed a utility-free zone in which they could undertake their construction. This entailed that excavations would be carried out to enable the utility works to be done, the road would then be reinstated and, later, when the infrastructure works were done there would be further excavation, works and reinstatement. The result was that there would be disruption to road users and businesses on the road twice: once when the utility works were carried out and again when the tram works were carried out. The view was taken that despite this it was a preferable way to have the works carried out in terms of delivering the Tram project. It was also considered that the *overall* period of disruption would be shorter, as the roads would not remain in a disrupted state in the period between concluding the utilities works and commencing the infrastructure works.

8.10 There were some exceptions to the principle that the utility work would be carried out in advance of infrastructure works where it was always intended that the works would be carried out by the infrastructure contractor (“Infraco”). Other than those instances, the prior completion of the MUDFA works was one of the pricing assumptions contained in the Infraco contract. However, as noted in Chapter 12 (Contract Close), it was apparent that there was slippage in the MUDFA programme before the Infraco contract had been signed. The timetable slipped further as the works were carried out on the utilities.

- 8.11** In paragraph 8.6 above, I have noted that the assumption in the Code promulgated under the Act is that the alterations to utilities will be carried out by the utility companies themselves. The intention for the Tram project, however, was that, a single contractor appointed by **tie** would carry out all the utilities works except where they related to the diversion of apparatus requiring specialist skills such as high-pressure gas mains, high-voltage electricity supplies and certain telecommunications cables [Final Business Case, version 2, [CEC01395434](#), Part 5, page 0109, paragraph 7.72]. This was a novel approach. Although other projects had sought to move utilities prior to infrastructure works getting under way, in those instances each utility company remained responsible for diverting its own apparatus leg in the Croydon and Manchester tram schemes, as discussed in the advice note produced by UK Tram – Phase 2, Guideline 3: 'The Causes and Control of Cost Creep and Cost Escalation' (June 2010), [TR100000303](#)].
- 8.12** In pursuit of this approach, on 4 October 2006, MUDFA was concluded between **tie** and Alfred McAlpine Infrastructure Services Limited ("AMIS") [[CAR00000300](#), Parts 1–2]. Following the acquisition in February 2008 by Carillion plc of Alfred McAlpine plc, AMIS later changed its name to Carillion Infrastructure Services Limited and then to Carillion Utility Services Limited. There was no change in the party to the contracts. In this Report, I have generally sought to use the name of the company as it was at the time of the event or events that I am describing, but they may be regarded as being interchangeable.
- 8.13** The full scope of the services to be supplied by AMIS was set out in Schedule 1 to MUDFA [[ibid](#), Parts 1–2, page 0146 onwards]. The contract provided for the MUDFA works to be undertaken in two phases: a pre-construction services phase followed by a construction services phase. The pre-construction phase involved AMIS in preparing for the construction phase of the MUDFA works, including planning the works, planning the traffic management arrangements, preparing procedures, setting up site offices and materials compounds, resource planning and establishing relationships with the various parties [Mr Malkin [TR100000056_C](#), pages 0009–0010]. The pre-construction deliverables are set out in Schedule 1 (scope of services) to MUDFA [[CAR00000300](#), Part 1, pages 0162–0164, clause 2.52].
- 8.14** During the pre-construction phase AMIS was to receive the Issued for Construction ("IFC") utility design drawings and plan the utility diversion works. In response to a tender query dated 8 May 2006 by AMIS, **tie** indicated that it was anticipated that detailed utility design would be complete between 25 April and 21 July 2006 and, after comments on the detailed design by **tie**, the utility companies and the MUDFA contractor, IFC utility design would be available between 13 September and 21 December 2006 [letter dated 23 August 2007 from AMIS to **tie** [CEC01702113](#)]. In the event, as will be discussed below, there was significant delay in producing the IFC utility design.
- 8.15** In the course of the evidence, reference was made to sections of the route where utility diversion works were planned or undertaken. To assist the reader's comprehension of that evidence and of references in this report to work planned or undertaken in a particular area identified by number it should be understood that the route of line 1a was divided into various sections, which are illustrated in Table 8.1. References in this report to sections by number refer to the numbers allocated to each section in that table. Sections 3 and 4 are omitted from Table 8.1 because they relate respectively to the section from Haymarket to Granton Square (line 1b) or the later extension from Granton Square to complete the northern loop of the network.

Table 8.1: Sections of the route of line 1a

Section	Description
1	Newhaven Road to Haymarket, sub-divided into: 1A – Newhaven Road to the Foot of Leith Walk 1B – Foot of Leith Walk to McDonald Road 1C – McDonald Road to Princes Street West 1D – Princes Street West to Haymarket
2	Haymarket to Roseburn
5	Roseburn to Gogar, sub-divided into: 5A – Roseburn to Balgreen Road 5B – Balgreen Road to Edinburgh Park 5C – Edinburgh Park to Gogarburn
6	Gogar Depot
7	Gogar to Edinburgh Airport

- 8.16** MUDFA was a re-measurement contract rather than a fixed-price contract. This meant that at the outset there was no statement of what the final cost should be. Instead, the contract recorded the rates that would be paid for the work to be carried out and the sum due would be determined once it was known which works had actually been undertaken. This was done because at the outset it was not possible to predict with any accuracy what work would be required. After the adverse experience in Nottingham, if a contractor was to undertake to carry out all the work for a fixed price, in order to avoid potentially huge losses, they would require to submit a price that took account of the anticipated worst-case scenario. Such a precautionary approach was thought likely to inflate the price unnecessarily but, even with such an approach, contractors might decide that they were not willing to bear the risk that things turned out to be even worse than expected. This could make it difficult to find contractors willing to carry out the works, resulting in a difficulty in attracting sufficient interest to result in competitive bids when the contract was put out to tender.
- 8.17** A report to the City of Edinburgh Council ("CEC") on 21 September 2006 noted that although it was not possible to finalise the scope of the utilities diversion work until the MUDFA contractor had been appointed and the pre-construction stage had been completed, it was estimated that the total value of MUDFA would be in the order of £50 million [CEC02083472, page 0004, paragraph 3.13]. Mr Barclay said that, at the time, the MUDFA works for this project constituted the largest multi-utility project ever undertaken in Europe. He considered that people failed to appreciate the magnitude of the MUDFA project. The process was extremely complex and he was of the view that insufficient time had been allocated at the outset before work started. With hindsight, he considered that design should have started a year earlier and that in future tram projects utilities should be diverted "well in advance of the tram infrastructure team commencing their work" [TRI00000024_C, pages 0032–0034, paragraphs 97 and 103].
- 8.18** Pre-construction services were expected to start in late July/August 2006, with construction programmed from January 2007 to April 2008. As was noted in paragraph 8.14 above, it was planned to issue preliminary design for all sections by the end of 2006. To complete the utility designs it was necessary to have the infrastructure

design, as it would dictate which apparatus had to be moved. It was reported that, by mid-autumn, the new road layout, overhead line equipment ("OLE") pole positions, the track bed alignment and cross-sections along the full length would be known. Feedback from some of the utility companies, however, was that the programme was very tight and would be difficult to achieve [CEC01872859, page 0002, paragraph 4.4].

- 8.19** In addition to MUDFA, between August 2005 and June 2008, **tie** (and, in some cases, CEC) entered into a number of agreements with utility companies in relation to which information and approval would be sought and provided and how the MUDFA works would be carried out. These agreements included those with Scottish Water (in August 2005) [CEC01015132]; Transco and Scotland Gas Networks ("SGN") (in October 2005) [CEC01275865]; British Telecom ("BT") (in February 2006) [CEC01580825]; and Scottish Power (in June 2008) [CEC01370893].
- 8.20** MUDFA contained embargo periods during which utility works could not be undertaken in certain parts of the city. In particular, no works were to be undertaken in the city centre (between Haymarket and London Road) between early August and early September (for the Edinburgh Festival) or between early December and early January (for the Christmas period) [CAR00000300, Part 1, page 0205, Schedule 2, clause 8.5]. In addition, it was agreed with Forth Ports that MUDFA works would not be undertaken between October and January, so as to avoid the Christmas season. There was evidence that if, for whatever reason, the window of opportunity for carrying out works in these areas was missed, there could be a significant delay. In addition, because of a high demand for gas in winter, certain works could not be done to the gas network between November and March each year, and allowance had to be made for delays associated with emergency work to utilities unrelated to the Tram project [Mr Bell [TR100000109_C](#), pages 0014–0015].
- 8.21** The programme contained in Schedule 8 to MUDFA [CAR00005833] envisaged that the pre-construction services would be undertaken between 31 July and December 2006 and the MUDFA construction works would thereafter take approximately 14 months between March 2007 and May 2008. At the time when MUDFA was entered into it was anticipated that the Infraco works would commence at the beginning of 2009, which, if the diversion works had been completed by May 2008, would have allowed for a gap of approximately seven months between the programmed completion of the MUDFA works and the planned commencement of the Infraco works. The date for starting pre-construction work was, however, clearly impossible, as MUDFA was not concluded until October 2006, so, from the very outset, it must have been clear that the programme was slipping. In 2007 a revised MUDFA programme was agreed, which provided for the MUDFA construction works starting in July 2007 and finishing by the end of 2008, ie a period of approximately 18 months, with almost no buffer between then and the start of the Infraco works.
- 8.22** Even this new period was not realistic for the completion of the required works. The length of the on-street section in the Edinburgh Tram project (ie from Haymarket to Newhaven) was approximately eight kilometres. Mr Rumney gave evidence that a total duration of 18 months for the MUDFA works did not sit with the duration of diversion works in comparable projects. In Manchester, where there was a 2,000-metre on-street section, and in Birmingham, where there was an 800-metre on-street section, the works took about 2 years to complete [TR100000283, page 0019, paragraphs 95–97]. In view of erosion of the buffer period between completion of the MUDFA works and the commencement of the Infraco works, this meant that from the outset it should have been obvious to **tie**'s senior officials that problems were inevitable and that the MUDFA works would impinge on the Infraco works.

8.23 Moreover, I accept Mr Barclay's evidence that inadequate time was allowed to accommodate delays associated with inadequate records of utilities and unexpected obstructions or cavities. Even without the benefit of hindsight, **tie** ought to have anticipated such delays, bearing in mind the known difficulties at that time relating to the records of existing and redundant utilities and the uncertainties of what lay below the ground in the historic city of Edinburgh. **tie** should also have realised that the time allocated for the diversion was inadequate when account was taken of the time taken for much shorter lengths of on-street diversions in Manchester and Birmingham. In these circumstances **tie** ought to have instructed Parsons Brinckerhoff ("PB") to commence design a year earlier to ensure that the diversion of utilities was completed before the infrastructure works commenced. Alternatively, once it was apparent that there was slippage in the programme of diverting utilities, **tie** ought to have delayed the procurement process for the Infraco contract and should not have signed that contract until the diversion of utilities had been completed. **tie**'s failure to take either course of action and its insistence upon concluding the Infraco contract before the utilities had been diverted was a serious failure in its management of the project.

Identification of utilities

- 8.24** I have noted in paragraph 8.3 above that the records of the location of utilities were known to be incomplete and inaccurate but those records were nonetheless what had to form the starting point for identifying the work that had to be done. By August 2002, available plans had been obtained from utility companies, and the information that they contained was collated to produce a set of composite utility plans [[CEC01692684](#), pages 0009–0011, paragraph 2.1]. The poor quality of the records obtained was subject to frequent comment [see, eg, Mr Bell [TRl00000109_C](#), page 0011; Report to MUDFA Sub-Committee on 12 March 2007, [CEC01694523](#)].
- 8.25** As it was known that the records were not complete, consideration was given to means by which a better picture of the location and volume of utilities might be obtained. Ground-penetrating radar ("GPR") is a technology that makes it possible to survey apparatus buried under the roads without disturbing the surface. It was known that it is not 100 per cent accurate, as the multiple layers of apparatus that may exist beneath the road surface, particularly in a city centre, make it difficult to analyse the data and predict accurately which utilities exist and where they are [Mr Chandler [TRl00000027_C](#), pages 0084–0085, paragraph 332]. Inaccuracies are more likely with smaller elements of apparatus [Mr Malkin [PHT00000031](#), page 139; Mr Chandler [PHT00000020](#), page 133; Mr Reynolds [PHT00000019](#), pages 157–158] and may depend also on the material that the utility apparatus is made of, and the type and moisture content of soil containing the apparatus [Mr Barclay [TRl00000024_C](#), page 0039, paragraph 119].
- 8.26** The known limitations of records of utilities were such that at the outset there was an intention to conduct a survey of the entire on-street section of the network, but this intention was abandoned because of "programme and budget constraints" [Technical Note by Halcrow, dated 4 April 2006 (the "Technical Note"), [PBH00004905](#), page 0006, paragraph 4.1]. The programme concern was that the survey would take nine months and that this could not be accommodated within the intended timescales for the MUDFA works. As to the cost, the full survey was estimated to cost in excess of £2 million, whereas the reduced scope survey that replaced it cost just £220,000. The change in cost gives an indication of just how reduced the scope of the alternative was. It considered only areas of severe congestion such as junctions, major services that would generate greater cost and areas where there was very restricted land

space. Although these would be areas of sensitivity where it could be difficult to accommodate the changes, they were not necessarily areas where there was most likely to be unrecorded apparatus, and no account was taken of what would happen if unrecorded apparatus were to be discovered in other areas.

8.27 Where surveys were carried out, the surveyors investigated the utilities using three different methods. There was an initial study of the drawings, followed, in the case of cables, by induction of a current into the cables that could be tracked at the surface, and finally the repeated use of GPR at each location to identify apparatus at different depths [ibid](#), pages 0007–0008, paragraph 4.6]. The outcome of these surveys was recorded as follows:

- "Water and gas apparatus is relatively accurate
- Others utility apparatus showing high levels of positioning inaccuracy between plans and survey
- All utilities – significant volume of additional apparatus identified
- High number of chambers, tunnels and other underground structures identified" [ibid](#), page 0008, paragraph 4.9].

8.28 In general, these findings confirmed that the records were not accurate. The Technical Note made the following further conclusions.

- Because utility design to date had proceeded on the basis of the composite plan produced on the basis of the contents of the records kept by utility companies, it carried a significant risk of abortive design work, including negotiations with those companies.
- The presence of significant apparatus not identified on plans raised severe risk on the MUDFA scope of works and programme [ibid](#), page 0009].

8.29 It also expressed the view that the decision to restrict the extent of the surveys was an acceptance of the risks of discovery of unknown apparatus. I do not think that there had been any express, or even conscious, acceptance of this risk but as the works progressed it was certainly the case that the prediction that there would be unknown apparatus was borne out.

8.30 I consider that it was a clear error to reduce the scope of the survey and that this should have been obvious to everyone at the time – particularly in view of the warning in the Technical Note and also in view of the experience with other UK tram projects. It was appreciated that the records were not reliable, which meant that it should have been obvious that unexpected apparatus, underground chambers and other obstructions would be encountered as well as apparatus in positions other than those expected. It would have been obvious also that if this occurred during the infrastructure works it would give rise to delay and additional cost. This should have been apparent to **tie** before Schedule Part 4 ("SP4") to the Infraco contract was concluded in early 2008 and that proceeding on the basis of a restricted survey increased the risk of encountering unexpected conditions underground, resulting in delay and in additional costs. There does not appear to have been any attempt to compare these costs and these delays with the consequences of having the more extensive survey carried out. This was a material failing.

8.31 Following the results of the limited survey exercise, consideration was given to the need for trial pits/slit trenches to verify the apparatus in the ground and for surveys being carried out to identify voids under the roads. It had been originally envisaged

that in addition to surveys System Design Services ("SDS") would instruct trial pits to confirm the results of the surveys and to inform the design. In March 2006, SDS produced a survey programme that included provision for utilities trial pits to be undertaken between August and October 2006 [TIE00201989, page 0008, line 289]. The minutes of a meeting on 1 November 2006, however, noted that although SDS was to forward a schedule of trial pits that it required in order to complete design, **tie** and SDS would discuss and agree how the trial pits would be procured, eg through the engagement of the utilities contractor under MUDFA or by another route [TIE00677359, page 0004, item 5.4]. A set of drawings for trial pits prepared by SDS and sent by **tie** to AMIS in late November 2006 showed 77 possible trial pits between Haymarket and Newhaven [TIE00207331; TIE00207334; TIE00207333]. A separate summary document appears to suggest that it was proposed to proceed with only 23 of these trial pits [TIE00207336]. In March 2007, SDS said that the advice from its designers was that trial pits were not required and it would not, therefore, be carrying out any of the trial pits that were originally planned [CECo1663114, page 0003, item 2.16]. Consistent with that position, a surveys programme produced by SDS in March 2007 contained no provision for utilities trial pits [CECo1686232]. Within **tie** there was a view that this was a tactic to avoid doing work at the time and instead do it later when there might be additional payment [email from Mr Dent to Mr Barclay, 28 March 2007, CEC01638353]. The System Design Services contract ("SDS contract") did not, however, expressly require SDS to instruct or undertake trial pits for utilities, and it took the view that it was not required to instruct or pay for trial pits to be undertaken.

- 8.32** In late 2007 and early 2008, **tie** eventually instructed AMIS to carry out the works on trial pits but the delay in settling this matter meant that they were carried out later than had been planned. This meant that although trial pits were carried out, they were not, in general, carried out until after utility IFC design drawings had been issued, and shortly before the MUDFA diversion works were to be carried out. That meant that the results of the trial hole investigations (including, in particular, the discovery of unknown utilities and underground obstructions) were not known until shortly before the diversion works took place, which caused delay while the design was revised, and agreed with the utility companies, to take account of unknown utilities etc.
- 8.33** Mr Barclay gave evidence that more surveys and trial holes were undertaken on the Tram project than on other projects he had worked on [PHT00000031, page 41]. However, there was evidence from a number of other witnesses that more trial pits should have been dug [Mr Chandler PHT00000020, pages 129–135 and 137; Mr Casserly PHT00000022, pages 79–81; Mr Malkin TRI00000056_C, page 0035; PHT00000031, pages 141–142].
- 8.34** Clearly, at this stage I have the benefit of knowledge of the problems that arose from unidentified utilities. Nonetheless, having regard to the known problems with records of utilities, the importance within the procurement strategy of completing utility works before infrastructure works started and the short timescale that would be afforded to the utility works, I consider that it ought to have been apparent that if the trial pits were not dug timeously, the result would be delay and expense. It was an error not to proceed with the pits as originally planned, and having more would have provided SDS, **tie** and AMIS with more accurate and complete information. As was noted in paragraph 8.30 above, the responsibility for this omission rests with **tie**.
- 8.35** In early 2007 a decision was taken to undertake a trial site for the MUDFA construction phase at Casino Square, Leith. Mr Barclay gave evidence that that location was chosen as it was a non-critical area with relatively few utilities, low

stakeholder engagement and low profile and would allow a start to be made there while SDS focused on producing utility design for the more critical areas, ie the main arterial roads [TR100000024_C, page 0024, paragraph 72]. Mr Malkin explained that there was some ambiguity about the meaning of "trial holes". Trial holes were dug to support MUDFA works but were also dug to make sure that the apparatus in the area had been positively identified and that the (diversion) works to be done were fully understood [PHT00000031, pages 132–134]. Work on the trial site was started in early April 2007 and trial holes were dug as part of the MUDFA works [CEC01638569, page 0009]. Shortly prior to commencement of the excavations Adien undertook a GPR survey of the area. Although four items of utilities apparatus were detected by the survey, 17 items of apparatus were discovered when the trial site was excavated. The unknown apparatus, which was not shown on the approved for construction ("AFC") drawings, included six pipes, one cable, two ducts with cables in them and two drains. Moreover, the 90 mm gas main was not at the location shown on the survey [tie emails dated 5 April 2007 (CEC01639398) with spreadsheet listing the anticipated and discovered, apparatus (CEC01639399)]. By letter dated 5 April 2007, tie wrote to SDS expressing concern in relation to the unidentified apparatus and the location accuracy of known utility assets. In response to these concerns expressed by tie, by email dated 10 April 2007, Adien reported that its site procedures had not been fully followed at the trial site by one of its team of surveyors. Accordingly, Adien decided to undertake, at its own expense, site walkover surveys in the other sites that that team had surveyed, in order to provide confidence that the trial site error was a single error and had not been repeated at other sites [TIE00184030]. See also Adien's feedback report [PBH00010316]. The outcome of the trial site meant that not only was it established that the records of the utility companies were inaccurate, but that it would not be possible to rely on GPR surveys to uncover the true position.

- 8.36 In my view, the experience at Casino Square should have alerted tie in May 2007 to the consequences for the programme of MUDFA of the failure to dig slit trenches or trial pits at the pre-construction phase and of the unreliability of the information about the nature and extent of the work that would be required to divert utilities along the route of the tram. tie failed to appreciate that it was probable that there would be significant delay in completing the diversion of utilities, which, in turn, would result in delay in the award of the Infraco contract if the procurement strategy were to be maintained. Alternatively, if tie did appreciate the implications for the procurement strategy of these findings, it failed to take appropriate action, such as re-programming MUDFA and delaying the award of the Infraco contract. In either event, it indicates tie's failings as the company responsible for procuring and delivering the project on behalf of CEC. At that time there was concern that the newly elected Scottish National Party ("SNP") Government wished to cancel the project, and it may be that tie was reluctant to take any action that would delay the award of the Infraco contract due to fear that such action might result in the cancellation of the project. However, any such concern by tie was irrelevant to its obligation to procure and deliver the project in accordance with the procurement strategy, and in that respect to ensure that councillors at CEC were made aware of the likely delays in the completion of the project.

Design of the utility works

8.37 Clause 2.4 of MUDFA stated:

"Notwithstanding that the SDS Provider shall be responsible for the design and specification of the MUDFA works ... the MUDFA Contractor shall be responsible for its input into the design and specification of the MUDFA Works or any part thereof ..." [CAR00000300, Part 1, page 0035, paragraph 2.4.]

8.38 The responsibility of SDS for the design and specification of the MUDFA works was not mirrored by the obligations of PB in terms of its contract with **tie**. The schedule of services to be provided by PB in terms of the SDS contract contained a short paragraph on "Utilities", which provided that SDS was to "provide assistance to **tie** with the management of an advanced utilities diversion programme". This was stated to include:

- "assessing the need for and acquiring relevant data relating to the presence and location of all buried and above ground utility services;
- agreeing the need for and extent of diversions;
- undertaking critical design and developing a strategy for all utilities diversions to minimise diversion requirements and out-turn costs;
- ... preparing C4 cost schedules;
- preparation of documentation (including the contract terms) associated with the proposal to appoint a single service agreement with a specialist contractor to carry out advanced utility diversions;
- activities required to support the utilities diversion process including, but not limited to, traffic management plans/traffic regulation orders, site meetings and all necessary re-designs;
- management of unidentified diversions and design re-work/modifications on an as required basis;
- on-site attendance on an as-required basis; and
- attendance at all meetings on an as-required basis." [CEC00839054, pages 0091–0092, schedule 1 (scope of services), paragraph 3.2.1.]

8.39 Where any necessary works to the utilities were to be undertaken by Infraco, rather than the MUDFA contractor, SDS also had specific responsibility "for the determination and design" of all utility diversions **libid**, page 0092, paragraph 3.2.2]. Thus the responsibility for the design of all utility diversions rested with PB, as the SDS provider, whether the MUDFA contractor or Infraco was responsible for undertaking the necessary work.

8.40 Schedule 12 to the SDS contract specified the functional requirements that PB had to meet in respect of civil engineering works. The final paragraph of the Schedule titled "Utilities" was in the following terms:

"Wherever possible, the Edinburgh Tram Network shall be designed such that there is no requirement to divert existing public utilities. Where this is not achievable, then diversionary works shall as far as possible be undertaken as part of an 'advanced works' programme with the relevant public utility organisation." **libid**, page 0319, paragraph 2.6.]

This design principle was intended to limit the diversion of public utilities to those locations where diversionary works could not be avoided.

Initial delay in designs

- 8.41** Mr Malkin said that the principal difficulty for AMIS during the pre-construction phase was the delay in receiving utility design from SDS and that design, once available, did not contain the necessary details to allow AMIS to properly plan and purchase materials and fittings to support the construction phase. He said that the non-availability of detailed utility drawings virtually eradicated the benefits of carrying out the pre-construction services phase and resulted in the commencement of the main MUDFA works being delayed, compounded the overall programme and led to out-of-sequence working based on drawing availability, which consequently required additional resources and service support, and increased cost [[TR100000056_C](#), pages 0007–0010].
- 8.42** There was awareness within **tie** of the design problems. A progress report by Mr Harper for a meeting of the Design, Procurement and Delivery Sub-Committee on 8 November 2006 noted that there was concern about the impact that the timing of the delivery of utility diversion design would have on the implementation of MUDFA works. It was noted that AMIS had written to **tie** indicating that the quality of design was far below what it would have expected at that stage and indicating that that might have an impact on its ability to deliver its first programme. Concern was also expressed about the risk of an increase in the project estimate as a result of Scottish Power's request for five additional feasibility studies in specified areas [[CECo1803371](#), pages 0014–0015].

Difficulties in obtaining input and approval from utility companies

- 8.43** In order to complete the design, it was necessary that the utility whose apparatus was being moved agreed to what was proposed. If the utility in question did not agree to the change, the design would have to be altered and the process to obtain approval would have to start again. If the design thus amended was objectionable to another utility, a further round of design and approval would take place, and so on until agreement was reached. It is immediately apparent that this was labour intensive and a recipe for delay. Even if this was carried out just once for each alteration to a utility, this would be very time-consuming. In practice it was more difficult as, at the same time that the utilities design was being developed, changes were being made to the infrastructure design that required consequential changes to the utilities diversions. When this occurred, even if the process for utility design had been brought to a conclusion, it would have to start again.
- 8.44** The input from the utility companies was clearly critical to the process. It was necessary that they consider the designs as they were developed and provide a note of their views. In practice, the teams within the utility companies with the task of responding to these requests were not resourced to be in a position to respond within the required timescale. The design programme had been prepared on the basis that they would reply within 20 days but, by February 2009, SDS was allowing 40 days. The position was not helped by the iterative process for obtaining approval described above or by the necessity of seeking approval afresh when the scope of work required to the utilities was changed to accommodate changes to the infrastructure design. In that situation, utility companies that had been through a number of iterations would be told that it was necessary to start again.
- 8.45** In considering this situation, it might be thought that the burden of responding to these requests was simply a price that the utility companies should have to bear for being able to place their business assets in the roads. I consider that there is

force to this argument, and I return to it below. However, even taking this approach and accepting that an iterative process is to some extent inevitable, it would be reasonable for the infrastructure design to be clear at the outset such that all parties were aware of what had to be moved.

Consequences of late designs

- 8.46** Mr Malkin said that, in early 2007, it was apparent that the SDS utility design drawings were going to be significantly late and, with AMIS having already mobilised its project management team, consideration was given to a proposal whereby it would be tasked to carry out project works. Ms Craggs was concerned that this proposal might not be the best option as AMIS had been procured on the basis of its reputation for moving utilities and it might not be the most suitable contractor to undertake advanced works packages such as at Ingliston Park and Ride and excavation works for the depot at Gogar. She was also concerned that awarding these advanced works packages to AMIS might breach procurement legislation [[TR100000029](#), pages 0103–0104, paragraph 288]. Nevertheless **tie** agreed to the proposal and AMIS undertook the bulk excavation works at the depot and the diversion of a 600 mm water main using resources and expertise that would otherwise have been sitting underutilised [Mr Malkin [TR100000056_C](#), page 0019; Mr Bell [TR100000109_C](#), pages 0020 and 0145].
- 8.47** At a meeting between **tie** and AMIS in March 2007 it was agreed that, as a consequence of late designs and associated data, a phased transition would take place rather than the distinct completion of the pre-construction services phase before the construction services phase, which would result in the pre-construction phase being completed in parallel with the construction phase, as detailed utility design became available [[CECo1630357](#), page 0002, paragraph 3].
- 8.48** By letter emailed on 20 June 2007, AMIS advised **tie** that delay and disruption caused by late provision of designs and information had resulted in a reduction in its turnover of £6.1 million and loss of profit and overhead recovery to date of £530,000. It considered that the information that had been provided meant that revision 05 of the MUDFA programme was “untenable” and it was concerned that the loss would continue to accumulate unless it was provided with sufficient designs and information to seek to recover the schedule [[CECo1636546](#); [CECo1636547](#)]. It repeated its concerns in a letter of 28 June 2007 [[CECo1691617](#)].
- 8.49** In a strongly worded letter to **tie** dated 28 February 2007, SDS expressed concerns at being asked again to programme the production of utilities design to re-align the deliverables for the MUDFA programme [[CECo1800436](#)]. Its concern was in part that this would require further input from the utility companies, with the problems noted above. It was also concerned that **tie** appeared to be developing an early programme of MUDFA works for the road sections that was out of sequence with the development of finalised roads infrastructure design and OLE design on which it should have been based. Its concern was that **tie** had no regard for the consequences of this. It was also concerned that delays by CEC in deciding the preferred road designs following the charrette process meant that **tie**'s programme would require MUDFA works to be undertaken before the apparatus re-design was completed. It enumerated five consequences that it said would inevitably follow from the approach taken by **tie**. These were:

“(i) Delay to Statutory Utility Companies' approval of SDS' Detailed Design submissions.

- (ii) A very negative response from the Statutory Utility Companies when they then discover that they had been requested to formally approve or they have already approved SDS' apparatus diversion Detailed Designs submissions only for them to change later and require re-approval. This may well impact on their willingness to approve our subsequent Detailed Designs submissions or our AFC submissions.
- (iii) The potential for costly re-work by MUDFA in the event that apparatus that they had already diverted using SDS' AFC drawings referred to above, proves to be too shallow or in the incorrect location for the final Detailed Design alignment and road layout once issued.
- (iv) The potential for MUDFA to claim standing time from **tie** whilst SDS' updated designs are reapproved by the Statutory Utility Companies.
- (v) A programme mismatch between **tie**'s programme for execution of MUDFA works and SDS' ability to deliver updated IFC drawings to MUDFA." [libid](#), page 0002.]

8.50 Both the nature of the works that were to be carried out and contractual structures put in place created a number of interfaces between the various parties: **tie**, SDS, AMIS, the utility companies and CEC. There were various interactions, flows of information and approvals. This imposed requirements for co-ordination, communication and management. The responsibility for this rested on **tie**, and it is apparent that it did not adequately manage the process with the result that there was considerable delay and consequent expense.

Timing of MUDFA works

- 8.51** A report to the Utilities Sub-Committee on 4 April 2007 noted that AMIS had issued a draft MUDFA programme revision 04 for comment, which showed the main MUDFA works starting on 2 July 2007 (being three months later than the previous programme, which was noted to be driven by design and work order requirements). The revised programme showed the main MUDFA works for phase 1a (Edinburgh Airport to Newhaven) being completed by early January 2009, which was six months later than shown on the previous programme (revision 03) [[CEC01638569](#), pages 0009–0010]. By mid-May, revision 05 had been agreed, which showed an end date for the phase 1a works of November 2008 [[CEC01566088](#), page 0002, paragraph 2.1].
- 8.52** At this time, in light of concerns about the initiation of the utility diversion programme, **tie** decided to implement AMIS's proposal of a risk and trade-off (RATs) programme [letter dated 26 April 2007, [CEC01691204](#)]. Mr Barclay explained that in areas where there were few utilities and only simple utility diversions were required (eg at the trial site at Casino Square), AMIS excavated trial holes and then produced initial, or feasibility, design for diverting the utilities which was passed to SDS for checking and approval. While that was an attempt to fast-track design in areas in which only simple diversions were required, it quickly became clear that it would not be feasible to proceed by that method as the main works were carried out, which involved more complex diversions [Mr Barclay [PHT00000031](#), pages 66–67; [TRI00000024_C](#), page 0025, paragraph 74].
- 8.53** In addition to all these difficulties arising out of design, the MUDFA works became subject to an external delay. As was noted in Chapter 3 (Involvement of the Scottish Ministers), an election to the Scottish Parliament took place on 3 May 2007, following which an SNP administration was formed. Mr Swinney asked the Auditor General for

Scotland to undertake a review of the project and the Edinburgh Airport Rail Link ("EARL") project. Pending completion of that review Transport Scotland ordered that, with a few key exceptions, utilities diversion work be halted [Audit Scotland Report, [CEC00785541](#), page 0020, paragraph 67]. Any contribution that this might have made to the delay in completion of utilities works would, however, have been minimal. The delay in the issue of IFC utility design meant that it was unlikely that AMIS would have been able to progress meaningfully the MUDFA works at that time [Mr Gallagher [TRl00000037_C](#), pages 0121–0122, paragraph 362; Mr Barclay [PHT00000031](#), pages 67–68; Mr Casserly [TRl00000111_C](#), pages 0010 and 0021].

- 8.54** For completeness, it may be noted that, following the publication of the Audit Scotland Report, Mr Swinney publicly expressed concern about the utilities diversion works for the Tram project. The following day, on 21 June 2007, Mr Gallagher wrote to Mr Swinney, seeking to provide reassurance in relation to the utilities works [[CEC01677601](#)]. The letter stated that although Mr Gallagher agreed with Mr Swinney that utilities were a major concern, the MUDFA programme had the highest focus within **tie** and that Mr Gallagher was confident that **tie** could manage the MUDFA programme within the budget of £60 million. The letter made no mention of the difficulties and delays with the MUDFA works noted above, and in my view it was misleading. Mr Gallagher was – or should have been – aware of the problems.

MUDFA works in the period to contract close

- 8.55** The Inquiry heard evidence that the easier sections of the works were undertaken first, with the more difficult sections to be undertaken later in the programme. Mr Casserly, for example, gave evidence that it was anticipated that there were elements of the utility diversions, particularly around Ocean Terminal, which would be easier to do as they were on privately owned land, the owner (Forth Ports) had good records of the utilities in the area and there were expected to be fewer utilities in those areas. These works were, therefore, carried out first, commencing at Ocean Drive, Leith (section 1A) in July 2007, while IFC utility design was awaited from SDS for the other areas [[PHT00000022](#), page 62. See also Mr Barclay [PHT00000031](#), pages 98–99].
- 8.56** In view of both the state of the records of apparatus and the limitations on the surveys carried out, it was not surprising that, once the works were started, utilities were uncovered that had not been expected. When this happened, MUDFA required AMIS to take steps to identify the owner of the apparatus and, as instructed by **tie**, to apply for and obtain all approvals as might be required to allow works to be carried out in respect of the apparatus in such a way as to minimise disruption to the programme [[CAR00000300](#), page 0042, clause 3.12]. Similarly, if adverse physical conditions or artificial obstructions were encountered, **tie** required to give written instructions to AMIS on how the adverse physical conditions or artificial obstructions were to be dealt with [[libid](#), pages 0055–0056, clause 10]. Clearly, the effect of finding unrecorded apparatus was that the scope of works increased. Even before the works had started, in a letter dated 7 February 2007, AMIS noted that although a total of 24,662 linear metres of diversions had been anticipated at the tender stage, the anticipated total was now 38,967 linear metres – an increase of 58 per cent [[CEC01831536](#), page 0003]. Moreover, Mr Casserly gave evidence that although it was always known that there would be unexpected utilities, the problem turned out to be worse than was expected, and that that had become apparent by the end of 2007 [[PHT00000022](#), page 64].

- 8.57** In this period the major concern remained the late submission of SDS detailed utility designs [[CEC01831536](#)]. Even one month after the works started, AMIS's monthly progress report for August 2007 noted its main concern as being the lack of IFC utility design drawings (with approximately 285 drawings being behind schedule for work ordering) and other materials essential to progress the works [[CEC01683946](#), pages 0005, 0007–0008, 0010 and 0013]. The same concern was voiced in the Progress Reports for September 2007 [[CEC01684924](#), pages 0004, 0007–0009, 0012 and 0017], October 2007 [[CEC01527921](#)] and November 2007 [[CEC01523817](#), pages 0004 and 0011]. There are no progress reports after that date as **tie** advised that it would take over that role [Mr Malkin [TRl0000056_C](#), page 0016].
- 8.58** The works in this period also exposed the difficulties in working with the utility companies. The smooth operation of the MUDFA works was dependent on co-operation from the utility companies and the response from them was described by Mr Reynolds, of PB, in an email of 28 September 2007 to Mr Gallagher, as “patchy” [[CEC01714281](#)]. Agreements between **tie**, CEC and the utility companies required the utility companies to provide the successful bidder for the SDS contract (PB) with detailed information before the award of MUDFA to enable PB to complete the utilities diversion designs. He said that although information had been provided within the required timeframe by a number of utility companies, in several cases it had not been provided to the expected level of detail. In particular, BT Openreach had repeatedly failed to meet the required sectional completion dates, to the extent that several packages were still outstanding long after MUDFA was awarded, and this had resulted in serious delay to all subsequent milestones, including final delivery of the IFC utility drawings. He said that once composite drawings had been prepared by SDS they were circulated for review and approval to each of the utility companies and, although the programme had been based on a four-week period for such approval, in practice, four weeks had proved to be too short a period for Scottish Water, with the result that final IFC milestones had slipped further. He said that problems with approval of SDS designs had also arisen due to the delay to the conclusion of an agreement between **tie** and SGN that meant it had not been possible for SDS to secure final approval. Responsibility for managing the interaction with the utility companies had been retained by **tie**, and Mr Reynolds' weekly report dated 28 September 2007 noted that **tie** had been reminded of this and had therefore been applying increasing pressure to both Scottish Water and BT [[PBH00029122](#), page 0001, paragraph 3.2].
- 8.59** Further difficulties arose as a result of changes to the design of the Infraco works. An example of such works was that utilities had been moved based on the original thickness for the track slab, but the thickness of that slab had subsequently increased after the appointment of the Infraco contractor. Rather than readjusting the utilities, a decision was taken that the Infraco contractor would deal with those utilities that might require adjustment [Mr Casserly [PHT00000022](#), pages 65–66; [TRl00000111_C](#), page 0004].
- 8.60** Mr Chandler gave evidence that, quite often, the more complex utility diversions were left for resolution at a later date. That was because the advice and agreement of utility companies for what was to be done with these utilities either had not been asked for or had not been provided. SDS considered that these were matters for **tie** to resolve. In addition, the utility design had not been finalised in a number of locations because the location and design for OLE had still to be finalised such that it was not clear where to put the diverted utilities so as to avoid conflict [Mr Chandler [TRl00000027_C](#), pages 0081, 0116 and 0159, paragraphs 318, 476 and 648–649 respectively]. The result of

these decisions was that when the MUDFA contractor completed its works there were utilities still in the ground that would require to be moved before the Infraco contractor could undertake its work. Both SDS and **tie** were aware of that position.

- 8.61** Revision 06 of the MUDFA programme was adopted in November 2007 [[CEC01520590](#)]. The letter sending this to **tie** noted that, of 1,250 IFC utility drawings, 157 had been provided for completed and current worksites and 17 had been provided for review purposes. The remaining 1,076 had been assessed on the basis of first-generation designs dated August 2006 and prior to their issue by **tie** to AMIS in October 2006 had not been developed technically. An email from Mr Hickman in **tie** dated 12 December 2007 identified a number of areas in which there was a conflict between the completion dates in MUDFA revision 06 and the commencement of the Infraco works [[CEC01452538](#)]. It was suggested that in the off-street sections the conflict could be mitigated by transferring the remaining utilities scope to the Infraco contractor. The effect of leaving works to be done with the infrastructure works merely moved the problems into the future. By way of illustration, the opening statement from Mr Walker at the Mar Hall mediation noted that in a 700-metre section of works at Shandwick Place, 302 utilities had not been diverted despite the MUDFA contractor having undertaken work in that section. The remaining works had been left for the Infraco contractor to attend to as they were considered too difficult [Mr Walker [TR100000072_C](#), page 0083, paragraph 151].
- 8.62** By May 2008, when the parties were in a position to sign the Infraco contract, there were already delays in the MUDFA works. There were a number of areas where MUDFA was the early start constraint for Infraco. Mr Malkin of AMIS gave evidence that, around March 2008, he was aware that MUDFA programme revision 06 would require to be revised as a result of the progress achieved, the extent of ongoing changes and the late provision of design and design-related information. He was of the view that a more realistic end date for the MUDFA works was around March 2009. He explained that the level of confidence in the MUDFA programme was decreasing as a result of understanding the complexities of the city-centre works and the dependence on supporting organisations to provide the prerequisite details to support the works [[TR100000056_C](#), pages 0041 and 0046–0048]. There was widespread knowledge within **tie** also that the objective of having MUDFA works complete prior to Infraco works commencing would not be achieved. Mr Barclay said that by the first quarter of 2008 he was aware that the MUDFA works were not going to finish within the timescales envisaged. Mr Bell said that he was aware of difficulties and that there would be overlap with the Infraco works [[PHT00000024](#), pages 178–180; [TR100000109_C](#), pages 0056, 0062–0063 and 0067]. Mr Gallagher said that he was aware that the MUDFA works would not be completed in their entirety before the Infraco works commenced but he considered that they would not impact on those works [[PHT00000037](#), pages 122–124]. As will be noted in Chapter 12 (Contract Close), however, the difficulties and delays with the MUDFA works and the work that had been left to be dealt with during the Infraco works were not apparent in the reports prepared for financial close.
- 8.63** One of the pricing assumptions for the Infraco contract was that the utilities diversions were to be completed in accordance with the requirements of the Infraco programme, save for utilities diversions to be carried out by the Infraco contractor pursuant to the expenditure of the provisional sums noted in Appendix B [Pricing Assumption 24, SP4, [USB00000032](#), page 0008]. Pricing Assumption 32 – that programming assumptions in Schedule part 15 of the Infraco contract would remain true in all respects – was also material, as the programming assumptions included

an assumption that diversion of utilities would have been completed for each of the sectors by specified dates and there would be no slippage in the MUDFA programme [[USB00000081](#), pages 0002 and 0005, paragraphs 3.1 and 9.1.3]. If these pricing assumptions were not true, that would give rise to a Notified Departure. In addition, clause 22 of the Infraco contract provided that unidentified utilities uncovered by the Infraco contractor would amount to a **tie** change or compensation event [[CEC00036952](#), Part 1, pages 0088–0090].

MUDFA works in the period after contract close

8.64 As the work continued after contract close, so did the problems. According to Carillion, these problems included traffic management constraints, incomplete design, existing utilities that were unforeseen, congested and/or at shallower depths than permitted, unforeseen/unknown underground obstructions and technical queries that remained unanswered and insufficient work available on site to deploy the entire workforce. This will be discussed in paragraph 8.67 below [[CEC01140099](#); [CEC01162082](#)]. Many of the same factors were identified within **tie** as being causes of the delay. A paper produced by Mr McEwan [email dated 28 July 2009 ([CEC00762213](#)) with attached paper ([CEC00762214](#))] referred to the following factors:

- traffic management;
- the re-alignment of the tram at Haymarket;
- unexpected buried structures;
- the discovery of former graveyards in Constitution Street and Elm Row;
- the design approval process;
- the extent and number of unexpected utilities;
- additional works required by utility companies;
- increased scope of the works;
- the condition and extent of existing basement structures extending out from buildings below the road; and
- imposed embargos.

8.65 Mr Bell of **tie** also made reference to the unknown and unexpected utilities and obstructions, traffic management issues, embargos and delays with design but also considered there was some inconsistent performance from the contractors [[PHT00000024](#), page 191]. Work was further delayed when, in the second half of 2008, an Infraco/SDS design safety audit resulted in the whole Haymarket area being re-designed, with the need to re-divert previously diverted utilities, and additional works along large parts of the route.

8.66 At the Tram Project Board ("TPB") meeting in July 2008, Ms Clark reported that the team was still working to get MUDFA finished by the end of 2008 [[CEC01053601](#), page 0006, paragraph 2.5]. Mr Gallagher blamed the delay on poor logistics and management rather than design problems and said that the TPB should not be unduly worried about progress. It seems to me that this flew in the face of the evidence that had existed for some time. On any view, what followed indicated that the time slippage was not controlled and is another indication of Mr Gallagher's poor management that appears to have been driven by unrealistic optimism, as was apparent in his proposed solution to design delay being to be "right first time". As was noted in Chapter 6 (Design (to May 2008)), that philosophy failed to appreciate the

iterative nature of design and the interdependence of the design of different sections of the route. By October 2008, Carillion was forecasting that works would not be complete until November 2009 [CEC01140099]. That the delays could not be made good was apparent when, after agreement of the MUDFA revision 7.9 programme, by letter dated 24 March 2009, **tie** formally granted an extension of time for substantial completion of the works to 1 April 2009 and the longstop date for the assessment of liquidated damages in terms of clause 45 of MUDFA was revised to 3 August 2009 [CAR00000560]. By letter dated 30 April 2009, **tie** sent MUDFA programme revision 08 to BSC. This anticipated completion of the MUDFA works by 17 December 2009 [CEC00322635, page 0002]. The papers for the TPB on 10 February 2010 included a report to Transport Scotland that noted that utilities (including telecoms) were programmed to be completed by September 2010 [CEC00474418, page 0049]. The report to Transport Scotland included in the TPB papers for the following month noted that the forecast date for the completion of utilities (including telecoms) had slipped to December 2010 [TIE00894384, page 0048]. Despite the consistent trend of these reports, a report by the Director of City Development to CEC's Tram Sub-Committee on 22 March 2010 giving an update on the MUDFA works said that they would be complete by September 2010 [CEC01891483].

- 8.67** In October 2008, Carillion noted that the unexpected utilities and the delay in design meant that it was unable to deploy its resources in an efficient manner. It claimed that there was not sufficient work for its staff. It also claimed that the result of this was that it had demobilised 35 operatives and was likely to demobilise a further 30. Moreover, the combined effect of the Christmas embargo on undertaking work at certain locations, the threat of extending the embargo to Leith Walk in December 2008 and the lack of IFC designs to enable work to proceed on sites unaffected by the embargo meant that Carillion would have little option other than to demobilise the majority of its 250 resources due to lack of available work fronts between early November 2008 and late January 2009 [CEC01140099]. Carillion noted its concern that, having demobilised these resources, there was no guarantee that they would be available in future.
- 8.68** As early as January 2009 there was a view within **tie** that attempts should be made to restrict the scope of Carillion's work. In an email dated 28 January 2009 [CEC01145982; CEC01145983] Mr McEwan recommended that **tie** look to cut back to an "irreducible minimum" the amount of work that **tie** could expect Carillion to carry out, with works being transferred from Carillion to the Infracore contractor.
- 8.69** It was apparent that Carillion was also unhappy with the contract. During the works, on a number of occasions arguments were advanced as to why it would be appropriate to change the basis on which it was paid under the contract. In particular, it sought to move away from the rates and prices agreed in MUDFA to payment on a cost plus basis (ie where it would be paid the actual costs that it incurred plus a management fee). Mr Malkin gave evidence that the rates and prices tendered by AMIS had assumed that AMIS would be provided with detailed drawings and work orders to enable it to plan, execute and value the works efficiently and that AMIS considered that the inability of **tie** and SDS to provide AMIS with all of the work ordering information to which it was entitled under MUDFA resulted in the entire contract premise being unworkable [TR100000056_C, pages 0030 and 0039]. This was, however, resisted by **tie** [Mr Barclay PHT00000031, pages 69–72]. Nevertheless, **tie** did accept that delay and disruption between October 2007 and September 2008 had arisen as a result of the number and extent of unidentified services encountered, design delivery, resolution of technical queries and traffic management

arrangements and that there was a contractual entitlement as a result of these factors. Consequently, on 19 and 23 March 2009, **tie** and Carillion entered into a settlement agreement [[CAR00000243](#)] in terms of which **tie** agreed to pay Carillion £1.2 million (comprising £1,050,000 in respect of delay and disruption between October 2007 and 30 September 2008 and £150,000 for measurement items). This was immediately before the extension of time referred to in paragraph 8.66 above. Within **tie** a view had formed that Carillion was losing money on MUDFA [Mr Bell [TRl00000109_C](#), pages 0115 and 0117]. Mr Barclay explained his view that AMIS had based its tender on a certain rate for its workforce, but found that to carry out the work at the time that it was required it had to use sub-contractors who charged rates higher than those set out in MUDFA [Mr Casserly [TRl00000111_C](#), page 0050; Mr Malkin [TRl00000056_C](#), page 0014].

- 8.70** A presentation to the TPB on 6 May 2009 noted that, for performance, quality and cost reasons, it was proposed to close the Carillion contract, with the preferred option being to remove the entire utility diversion works at section 1A between Newhaven and Tower Place bridge, and all other outstanding works as at 31 July 2009, from the Carillion scope, and to award these to suitable contractors following competitive tender [[CEC01026346](#); [CEC00633071](#), page 0026]. It was envisaged that the management of the outstanding MUDFA works would take place in conjunction with the infrastructure works, "ensuring optimal synchronisation of the overall programme aims". It was considered that the transfer of works to other contractors would result in a reduced delivery and construction period and a cost saving.
- 8.71** In September 2009, Carillion made a claim for losses suffered as a result of delay and disruption from September 2008. With more than 1,600 technical queries and 3,700 change items raised to date, Carillion anticipated a final account value in excess of £70 million. The document stated that **tie** had repeatedly failed to follow the work order procedure set out under MUDFA whereby, prior to starting the works, AMIS ought to have received a fully compliant design (other than unforeseen obstructions) for which there would be an agreed price and programme finalised by a works order confirmation notice [[CEC00790177](#), pages 0002–0003].
- 8.72** By the time of the TPB meeting on 21 October 2009, commercial discussions with Carillion were under way regarding its exit from the project. On 4 December 2009, **tie** and Carillion entered into an agreement bringing MUDFA to an early end [[CAR00000145](#); see also the unsigned agreement, [CAR00000429](#), page 0008 onwards, for more legible versions of the schedules. Although neither of these versions of the agreement bears a date, the later agreement referred to in paragraph 8.74 below indicates that it was signed on 4 December 2009.]. Under the agreement Carillion was relieved of any responsibility for carrying out the remaining works under MUDFA and, as at 4 December 2009, was treated as having completed all of the works required of it (with the exception of the works detailed in Appendix 1 of the agreement). The defects correction period under MUDFA was extended to 3 December 2011 [[CAR00000145](#), page 0005, clause 13]. Farrans and Clancy Dowcra were appointed to undertake the remaining utilities diversion works.
- 8.73** The minutes of the TPB meeting on 21 October 2010 noted that the utilities works in the Airport to Haymarket section were complete. The utilities works in the Haymarket to Newhaven section were complete save for some telecoms cabling and transfers, testing/commissioning/abandonments of transferred services and the Baltic Street diversions (1,500 metres) [[CEC00014175](#), pages 0009–0010].

8.74 On 10 November 2010, **tie** and Carillion entered into a further minute of agreement settling outstanding claims between them [[TIE00094413](#)]. Under this second agreement **tie** agreed to pay Carillion a further, and final, amount of £5,824,000 plus any applicable VAT (which amount was in respect of both utilities work carried out by Carillion and Carillion's claim for delay and disruption from September 2008 onwards). This amount reflected agreement of Carillion's final account in the amount of £62,500,000. An email dated 19 November 2010 from **tie** attached a spreadsheet giving a breakdown of that amount [[TIE00094459](#); [TIE00094460](#)]. An amount of £56,676,756 had previously been paid, resulting in an outstanding balance of £5,823,243 (£62,500,000 – £56,676,756). **tie** reserved its right to claim against Carillion for future defects (ie excluding defects that were notified by **tie** to Carillion, or known to **tie**, prior to the date of the agreement) [[TIE00094413](#), page 0002, clause 5.1].

After Mar Hall

- 8.75** As will be considered in Chapter 19 (Mediation and Settlement), the agreement ultimately reached at the conclusion of the Mar Hall mediation between **tie** and Bilfinger Berger, Siemens and CAF was that Bilfinger Berger Siemens ("BBS") would complete the tram line from the Airport to St Andrew Square/York Place. Significantly, even at this stage it was a stipulation in the Heads of Terms following the mediation that BSC would take none of the risk of all the utility diversion works required to complete the on-street works between Haymarket and St Andrew Square/York Place [[CEC02084685](#), page 0003, paragraph 5.4]. Although this was a continuation of the position that had existed up to that date, much of the remainder of the approach to the utilities was to change. For the remainder of the works there were to be further investigations, a new governance structure, a new way of working, a new contractor and a new contract.
- 8.76** Probably the key change that was made following Mar Hall was to the relationship between the utilities works and the infrastructure works. Whereas a core concept within MUDFA had been that the works to utilities would be completed in advance of the infrastructure works and the roads reinstated, so that the Infraco contractor would have a "clear field" in which to work, the approach after Mar Hall was that a "bow wave" approach would be adopted. This entailed that the utilities works would be done just ahead of the infrastructure works. The utilities contractor went in just before BSC, excavated down to formation level and resolved the utility conflicts before BSC then came on site to undertake the infrastructure works. This removed the need to reinstate the road surface and then to re-excavate for the main works. BSC agreed to change its approach to allow multi-working on the various sites, ie with the utility and Infraco contractors working with and around each other [Mr C Smith [TR10000143_C](#), pages 0072–0073].
- 8.77** After the mediation, McNicholas Construction Services Limited ("McNicholas") was appointed to carry out the remaining utility works. It was appointed under the New Engineering Contract standard form engineering contract rather than a bespoke contract as had been used before. It was to be paid on a cost-reimbursable basis rather than in accordance with an agreed schedule of rates [[CEC01889514](#), page 0003]. This was the basis on which Carillion had sought to be paid. Although this form of contract had been selected before Turner & Townsend was involved, Mr Weatherley said that the advantage of it was that it was not necessary to agree the cost of each item of additional works as it was required so that the contractor was able to respond quickly, thereby minimising the impact of utilities works on the Infraco contract [[TR10000103](#), pages 0031–0032, paragraph 51].

- 8.78** As noted in Chapter 20 (Post-Mar Hall), there was a general change to the way in which the project was managed, with the removal of **tie**, the introduction of Turner & Townsend as project managers, and the commencement of new governance arrangements. In relation specifically to the utilities works, a weekly utilities meeting was established to discuss and agree utilities issues. In addition, a utilities project manager was appointed, who acted like a clerk of works. He had a roving role to move up and down the site; problems discovered on the ground were immediately brought to his attention and there was a short line of communication from the utilities project manager to Mr C Smith to enable issues to be resolved or recorded quickly [Mr C Smith [PHT00000053](#), pages 138–146].
- 8.79** Mr Weatherley explained that a representative from each of the utility companies was co-located with the on-street works team, including experienced project managers, commercial managers and McNicholas, to identify what the best solution would be to the utility diversions where conflicts arose [[PHT00000046](#), page 86; [TR100000103](#), pages 0028 and 0030, paragraphs 44 and 48]. He gave evidence that when Turner & Townsend was mobilised there remained a significant quantity of unresolved legacy design issues with Scottish Water and unresolved utility clashes with the proposed tram works [[libid](#), page 0024, paragraph 35].
- 8.80** A report to CEC on 25 August 2011 noted that further investigations in relation to utilities had been instructed on key sections of the on-street works between Haymarket and York Place. These were intended, in particular, to identify conflicts arising as a result of the finalised design, including the locations for OLE poles [[TRS00011725](#), pages 0002–0003]. These further investigations had identified approximately 550 potential utilities conflicts (although it was not believed that all of those lay on the critical path of the tram). Mr Weatherley said that Turner & Townsend undertook a desk-top exercise, and dug slit trenches, to try to understand the likely scale of the risk from utilities [[TR100000103](#), page 0028 and 0030, paragraphs 44 and 48]. The first location that was excavated was at Haymarket, and that uncovered a number of unknown utilities. This influenced Turner & Townsend's decision to undertake quite extensive surveys elsewhere in the on-street section. The full extent of utilities-related issues and conflicts only became clear, however, as the on-street excavations took place. Where conflicts were identified it was not always the utility works that were changed. Some of the infrastructure works were re-designed to avoid clashes with utilities.
- 8.81** As was noted in paragraph 8.80 above, as investigations continued, a more complete picture emerged of the utilities work that remained to be done. The minutes of the joint project forum on 18 October 2011 noted that, as a result of the digging of test trenches, an increase in the number of potential conflicts from 550 to 895 had been identified [[CEC01890987](#), page 0007, paragraph 6.2]. By November, the minutes noted that the number of clashes was 1,127 [[CEC01890994](#), page 0006, paragraph 4.1]. The numbers of conflicts that are quoted from time to time are not easy to reconcile. In the progress report from Turner & Townsend in November 2011 it was noted that there were currently 1,128 utility conflicts, of which 811 were "live" [[CEC02085662](#), page 0013]. The Turner & Townsend progress report for 9 November to 8 December 2011 noted that the total number of known utility conflicts remained at approximately 820, but that a total of 1,645 utility issues had been identified [[CEC01891191](#), page 0003]. These issues included unverified potential clashes and legacy utility issues, largely associated with Scottish Water.

- 8.82** The scope of work that remained to be done on utilities after Mar Hall cannot be reconciled with various statements in project reports, at meetings of the TPB and otherwise that the MUDFA works were largely complete. Mr Foerder suggested that assuming that the reports were not deliberately inaccurate, it suggests that **tie** did not at any stage have a grasp of the full scope, cost, timescale or impact of the utility diversions required [TR100000118, pages 0043–0044, paragraph 9.7]. I agree with this assessment.
- 8.83** In relation to the utilities work that was required in September 2011, in July 2014 Turner & Townsend produced a draft preliminary report that identified a fundamental difference of opinion between **tie** and BSC over the definition of a “utility” and what “utility free” meant [WED00000103, page 0056]. The view taken by **tie** was that something should be considered a utility only if it was live and had been provided by a utility company (ie Scottish Power, SGN, Scottish Water or BT) and certain communications companies. This excluded existing street lighting, power and data supplies to bus stops etc. and legacy ducting. In contrast, BSC had defined utilities as including both “live” and “dead” services, as provided by the utility companies and communications companies, and including street lighting, power and data supplies to bus stops, along with all other “live” power and communication feeds [ibid, pages 0056–0057, paragraph 4.9.1]. Which of these two views was taken would have a material impact on the scope of works to be carried out, and I find it remarkable that the difference of opinion emerged only at this very late stage.
- 8.84** Despite these problems, in the period after Mar Hall the necessary work was carried out more smoothly, with less confrontation with the contractor and within the required timescale. Mr Foerder said that the new approach led to better planning of resources and fewer abortive works [TR100000118, page 0116, paragraph 21.3.4]. Although this was very different from what had happened during MUDFA, not everything changed. As will be discussed in paragraphs 20.92–20.93 below, the estimate of the cost to complete utilities works was £2.91 million, of which £1.1 million was for legacy works in Leith Walk [WED00000092, page 0001], but Mr C Smith considered that the information provided by **tie** in that regard was unreliable. In the post-Mar Hall budget £5 million was allocated to utilities risks [TR100000153, page 0020]. The final account for the utility works completed after Mar Hall exceeded £20 million [ibid, page 0065].
- 8.85** With the benefit of hindsight, the “bow wave” approach appears to have much to recommend it over the initial approach, but I think it would be inappropriate simply on that basis to reach a judgement that it should have been the approach used from the outset. As was noted in paragraph 8.76 above, the “bow wave” approach required a large degree of co-operation between utility contractors, infrastructure contractors, designers, utility companies and the employer – and that did not exist prior to Mar Hall. In my view, therefore, the critical changes made were those that brought about a way of working that was flexible, responsive, co-operative and agile. It is clearly a process in which a number of different parties have valid interests, all of which must be accommodated. The original way of seeking a consensus was cumbersome and unwieldy and where there is any significant extent of works to be carried out in a city centre, it will pose a substantial obstacle. This was made much worse by the absence of a clear statement as to where design responsibility lay and the delays in design that affected the project generally.
- 8.86** Clarifying where the design responsibilities lie is a matter of proper drafting of the contracts. I have considered the issues that led to problems with design generally, and what might have been done to address them, in Chapter 6 (Design (to May

2008)) and Chapter 7 (Design Following Novation and Contract Close). In relation to providing more co-operation from the utility companies, I consider that the code of practice under the 1991 Act should be updated to include such an obligation where major transport projects are undertaken. The utility companies may object that this imposes a burden and cost to them in relation to transport projects that are not specifically in their interest. Although that may be true, I consider that the imposition of a more onerous duty to co-operate and to participate in meetings to have matters resolved can be seen as part of the price that is to be paid for the otherwise free use of the roads to accommodate their business assets. Whether the costs are placed on the utilities or on the promoter of transport schemes the reality is that they will ultimately be borne by the public in the form of increased utility charges or council tax on the one hand, or increased costs of public transport projects on the other. I readily accept that an argument can be made that these costs should initially be said to arise from the transport project such that they should be allocated to the promoters. Ultimately, however, the primary function of roads is to permit passage and my view is that this should be given priority in situations where it is necessary to balance the interests of transport projects and the interests of utility suppliers.

- 8.87** The issue of whether it was the MUDFA works or the Infraco design issues that had the greatest impact on the Infraco works does not admit of an answer. Clearly, both had an impact. Not all the delays in the MUDFA works were attributable to AMIS/Carillion, however. This is most clearly demonstrated by the fact that they were granted extensions of time under the contract to complete their works [[CAR00000022](#); [CAR00000398](#); [CAR00000163](#)]. In addition, in a letter dated 9 April 2008 in recognition of the issues that had adversely affected AMIS's contract up to 30 September 2007, **tie** agreed to pay AMIS an additional £991,142.95 [[CAR00000074](#)].

Chapter 9

Tendering of the Infraco Contract to the Appointment of Preferred Bidder in October 2007

Introduction

- 9.1 As was discussed in Chapter 5, the procurement strategy for the Edinburgh Tram project (the "project") included undertaking design and utility diversions in advance of the infrastructure works, with a view to "de-risking" those works and obtaining a fixed price for the infrastructure contract ("Infraco contract"). The procurement strategy envisaged that when the Infraco contract was signed, design would be complete and design risk would be transferred to the Infraco contractor by novation of the design contract. In considering the question of the appointment of a contractor for the Infraco contract I have adopted a staged approach, commencing with the period up to the appointment of the preferred bidder in October 2007. The stages that followed were:
- the period from October to December 2007, including the meeting in Wiesbaden, Germany;
 - contract negotiations between January and May 2008; and
 - contract close.
- 9.2 This chapter and the ones that follow consider these stages in turn.

Initial proposals and responses

- 9.3 On 6 October 2005, **tie** Limited ("**tie**") published in the Official Journal of the European Union ("OJEU") a Prior Information Notice dated 4 October 2005 in respect of intention to seek tenders for the Infraco contract [[CEC01792891](#)]. In advance of the publication of a Contract Notice it sought experienced tramway infrastructure contractors and system integrators to enter into discussions with **tie** in relation to the procurement process for the Infraco works "for the purposes of subsequently being able to structure the proposed procurement to achieve efficiency in process and outcome" [*ibid*, page 0001, paragraph 11.9]. The proposed start date for the Infraco works was 31 March 2007.
- 9.4 On 31 January 2006, **tie** published a contract notice in the OJEU in respect of the proposed Infraco contract [[CEC00208568](#)]. It was expected that the Infraco works would have a duration of 36 months, from the award of the Infraco contract until the commencement of tram operations.
- 9.5 Mr McFadzen was the project director at Bilfinger Berger ("**BB**") with responsibilities for business development, bid management and, ultimately, project management. He proposed to his employers and to Bilfinger Berger Germany that **BB** should bid for the Tram project on the basis of the original procurement strategy [[TR10000058_C](#), page 0004, paragraph 14]. The strategy included the completion of the design by System Design Services ("**SDS**") contractors before novation; and **BB** understood that design would be completed, and all necessary statutory approvals and consents obtained, prior to the award of the Infraco contract. In addition, **tie** would procure the utility diversion works and complete them before the start of the Infraco works [[PHT00000034](#), pages 5–6]. **tie**'s procurement strategy meant that only small pieces of re-design and improvements to the design would be required after the award of the contract. This provided for certainty and was the "big selling point" for **BB** [[TR10000058_C](#), page 0004, paragraphs 14–15; [PHT00000034](#), pages 5–6, 9]. In the

event, however, there were many gaps in the design information that was provided to the Infraco bidders [[PHT00000034](#), pages 8–10] and it became apparent that **tie** had failed to implement its strategy in respect of design and prior approvals. Part of the difficulty related to the degree to which the Employer's Requirements were developing during the tendering process. In similar projects the Employer's Requirements would normally be well developed before the start of the procurement process, but in the project the Employer's Requirements had not been sufficiently well developed to go to tender, with the result that BB submitted a "heavily qualified tender" [[TR100000058_C](#), page 0005, paragraph 18] that contained many qualifications, some of which remained throughout the procurement process and were included in Schedule Part 4 to the Infraco contract ("SP4"), which is discussed more fully in Chapter 11 (Contract Negotiations) [[PHT00000034](#), pages 10–11].

- 9.6 On 6 March 2006, **tie** produced a Memorandum of Information and Pre-Qualification Questionnaire in respect of the Infraco contract [[CEC01781572](#)]. Pre-qualifying candidates were requested to submit a completed pre-qualification questionnaire by 31 March 2006 (later extended to 14 July 2006). It was originally anticipated that:
- **tie** would issue documentation containing an invitation to negotiate on 25 April 2006;
 - tenders would be returned by 1 September 2006;
 - parties would be invited to submit a "best and final" offer in the first quarter of 2007;
 - the Infraco contract would be awarded on 1 July 2007; and
 - the Infraco works would be completed in 2010 [*ibid.*, page 0011].
- 9.7 BB pre-qualified as a civil works contractor in March 2006 (and, in July 2006, pre-qualified again as part of a joint venture with Siemens) [Mr Walker [TR100000072_C](#), page 0003, paragraph 2]. The above timetable was not achieved. As will be noted in Chapter 14 (CEC: January–May 2008), the Infraco contract was not signed until 14 May 2008.
- 9.8 An Office of Government Commerce ("OGC") readiness review of the project in May 2006 recommended that the procurement strategy be reviewed in light of market feedback [[CEC01793454](#)]. In particular, it was noted that some of the pre-qualified bidders (for both the Infraco contract and the tram vehicle supply and maintenance contract (the "Tramco contract")) had expressed concern at the requirements to accept novation of sub-contractors and that there were reports that potential Infraco contractors might not want to take on designers or might charge a premium for full novation of the SDS contract. It was noted to be important to retain at least three (and two as an absolute minimum) bidders as far into the process as possible in order to maintain competitive pressure [*ibid.*, page 0004].
- 9.9 In May 2006, Mr Harper joined **tie** as interim Tram Project Director ("TPD"), following the departure of Mr Kendall, who had devised the procurement strategy. Mr Harper confirmed that the procurement strategy was reviewed following the OGC review and that it was decided to continue with it. While he regarded the procurement strategy as unnecessarily complex, it was a "constraint" within which he required to work (official notices having already been published setting out the proposed procurement and the System Design Services contract ("SDS contract") having already been let). When he joined **tie** it was made clear to him that his role was to drive the project forward, to make progress and to change – and improve – the project's reputation. He was only involved with the project on an interim basis and, if he had been engaged on a more long-term basis, it is possible that he would have considered reviewing the whole procurement process (albeit that that might not have

been possible and might have led to penalties, claims from unsuccessful bidders and delay) [TR100000043_C, pages 0003–0006, 0013–0015, 0027, paragraphs 8–9, 15, 17–19, 44–51 and 95].

9.10 In June 2006, Mr Gallagher, the Chairman of **tie**, and Mr Howell, **tie**'s Chief Executive, met representatives of Turner & Townsend and of Scott Wilson Railways and invited them to comment on the project's progress and to offer advice on what required to be done to ensure its success. In a letter dated 15 June 2006, Turner & Townsend made various comments, including in relation to the procurement of the Infraco contract. In particular, it was noted that the Infraco contract had been advertised with only three potentially realistic organisations likely to progress to a tender list. That was an unexpected outcome of the publication of the OJEU notices, with many of the UK's largest civil engineering contractors having chosen not to make a submission. The industry's reaction to the procurement route, which transferred significant risk and liability to the contractor, was that that had not been an attractive one when compared with the opportunities for contractors to undertake schools, health and roads projects. Turner & Townsend also expressed concern that one of the contractor teams could withdraw, leaving an inadequate tender list [WED00000085, pages 0001–0002]. Scott Wilson Railways expressed similar concerns in a letter to **tie** dated 22 June 2006, including that the proposed novation of the tram and design contracts to the Infraco contractor were two key areas in which it was believed that an inappropriate risk allocation had led to some of the UK's major civil engineering contractors not being interested in tendering for the Infraco contract. It was noted that the current response to the Infraco contract of three interested parties could quickly reduce to only two potential bidders, thereby threatening the credibility of the procurement process and the viability of the project [CEC01778078, page 0002]. This concern became a reality when Amec withdrew its bid for the Infraco contract by 8 November 2006. The reason given for that withdrawal was corporate restructuring, the effect of which was that Amec no longer had the capability to provide all the skills necessary to deliver a tram system. While it was considered preferable to have three bidders, it was noted that the increased risks to the likelihood of obtaining a competitive bid would be mitigated by obtaining and closely scrutinising the details of bidders' price proposals and benchmarking prices against prices obtained for comparable tram networks in Liverpool and Dublin [CEC01803371, page 0015]. In the event, the Liverpool tram scheme did not proceed. When he joined **tie** as TPD in January 2007, Mr Crosse would have preferred at least three bidders, but he was not surprised that there were so few because the market was not wholly confident that the project would go ahead. Bidding is an expensive process and if there was any question about funding then bidders would not bid [TR100000031_C, page 0030, paragraph 92].

9.11 In August 2006, Mr Gilbert joined **tie** as the Commercial Director of the project with responsibility for the award of the Infraco contract. At that time there was an expectation within **tie** that there would be a level of design that sufficiently defined the shape and form of the scheme to provide enough information to enable bidders to price the scheme with limited assumptions, caveats and risk [TR100000038_C, page 0006, paragraph 15]. In addition, the intention was that detailed design would be substantially complete when the Infraco contract was signed *libid*, pages 0018–0019, paragraph 49]. That was consistent with the draft Final Business Case ("FBC") dated November 2006, which stated that it was expected that the overall design work to the point of detailed design would be 100 per cent complete when the Infraco contract was signed and that **tie** was seeking to complete the key elements of detailed design prior to selecting the successful Infraco bidder in the summer of 2007 [CEC01821403, page 0085, paragraph 7.53].

- 9.12** A paper prepared for the meeting of the Tram Project Board ("TPB") in August 2006 noted concern over design delay and its effect on the risk transfer objectives of the procurement strategy. Steps had been taken to address these issues. A meeting had been held with Parsons Brinckerhoff's ("PB's") senior UK management and a protocol had been agreed for supporting delivery of designs for the Infraco invitation to negotiate ("ITN"). The design and consent information required for the Infraco ITN would be identified and prioritised, agreed with the bidders, and then delivered to an agreed programme. The information required by bidders to minimise their risk premium levels would be identified and programmes developed for delivering that information progressively during the bid period [CECo1688881, page 0004, paragraph 3]. It was noted that in order to maintain the Infraco procurement programme the procurement would require to be conducted as an "ongoing negotiation", with interim submissions being obtained from bidders for evaluation before delivery of final bids within the project programme. Given concerns in respect of the potentially unaffordable capital expenditure cost of the Tram project, a further value engineering ("VE") exercise would require to be undertaken in October, after completion of a project estimate update *libid*, page 0005, paragraph 4].
- 9.13** A further OGC readiness review was carried out between 26 and 28 September 2006 [CECo1629382] and a follow-up review on 21 and 22 November 2006 [CECo1791014]. As part of its review the OGC team was asked to comment on the readiness of **tie** to issue the ITN documentation to pre-qualified bidders on 3 October 2006, against the background that the issue of documentation would be phased, with the documentation being issued for the principal sections initially and a further issue of design information at the end of October. The review team noted that there were advantages and disadvantages in issuing the ITN documentation on 3 October 2006 and concluded that, on balance, the documentation should be issued on that date as planned.

Invitations to negotiate

- 9.14** On 3 October 2006, **tie** issued the ITN to the pre-qualified bidders [CECo1794929]. Tender submissions were required by 9 January 2007. The documents comprising the ITN were contained in 21 CDs and a set of hard-copy drawings. The drawings provided to bidders were preliminary design drawings (report to the TPB Design, Procurement and Delivery Sub-Committee on 8 November 2006, [CECo1803371, page 0011, paragraph 2.1].
- 9.15** By letter dated 13 October 2006, the consortium of Bilfinger Berger UK Limited and Siemens plc, known as Bilfinger Berger Siemens or Bilfinger Siemens Consortium ("BBS"), sought a continuation of the tender period by three months, given the complexity and magnitude of the tender [CECo1795260; see also BBS's letter dated 16 October 2006, [CECo1795314]. On 23 October 2006, BBS provided **tie** with initial feedback on the tender documentation, listing 14 points that had originally been intended as internal comments [CECo1795714]. In summary, these points included concerns about the early stage of the design, the existence of definite and significant gaps in the supplied drawings, the absence of details of the proposed track bed/slab, the potential influence on the final design caused by unresolved planning requirements and the influence of third parties. Moreover, significant issues were raised regarding drawings provided for bridges and other structures and it was said to be questionable whether the design, based on the drawings supplied, was sufficiently advanced to enable a robust and credible price to be prepared. These concerns were followed by further issues about the quality of the information provided by **tie** to BBS. In an email dated 25 October 2006 [CECo1823109] BBS

sent **tie** a list of inconsistencies [[CEC01823110](#)] in the tender documents supplied to it, including inconsistencies between the hard-copy set of documents, the electronic CD set, the drawing list attached with the documents and the Employer's Requirements. The list identified 24 specific structures for which no drawings had been supplied, and added 2 additional categories entitled 'Miscellaneous Retaining Walls' and 'Additional Structures'. Mr Walker, Managing Director of BB, referred to these inconsistencies in the tender documents and considered that the administration of the tendering data was in disarray. Moreover none of the information provided by **tie** to BBS was consistent, so it was impossible to price. He stated that the design process at that stage was "woefully behind" and that **tie** did not appear to understand what the impact of that would be [[TR100000072_C](#), page 0006, paragraph 8]. Mr Walker's assessment of the situation at that stage was reasonable, on the basis of the information available to him. In this respect he was supported by Mr McFadzen's evidence to the effect that, by November 2006, BB had formed the view that design was "a bit of a shambles", not only in relation to unclear numbering of the drawings but also in relation to the state of completion of design [[PHT00000034](#), pages 13–14].

- 9.16** The concerns about the inadequacy of the information in the ITN were not confined to BBS. They were shared by employees of **tie**. Ms McGregor and Mr Dawson were concerned that, as a result of various outstanding issues that required to be addressed, **tie** might receive low and heavily qualified bids [[CEC01797138](#)]. Ms Craggs, a solicitor employed by Dundas & Wilson and seconded to **tie** as Director of Approvals and Consents, expressed concerns relating to the quality of the ITN and the ability to get a robust price [[CEC01797628](#)]. She considered that the documentation going to the tenderers was not fit for purpose. The design was not sufficiently advanced to give tenderers a clear indication of what they were being asked to bid against. She suggested on several occasions that the project be paused to allow the design to catch up and to enable the process to award the Infraco contract to start on a proper footing. Although she thought that Mr Harper acknowledged the validity of her concerns, the response that she received from Mr Harper, Ms Clark and Mr Gilbert was that **tie** had to keep to the programme, despite the status of design, in order to achieve the planned, and publicly announced, commencement date for operating the trams [[PHT00000016](#), pages 105–109 and 155–158; [TR100000029](#), page 0024, paragraph 59]. Ms Craggs was an impressive witness, whose evidence I was able to accept as credible and reliable.
- 9.17** By the end of 2006, considerable difficulties and delays existed in relation to design, which are noted in Chapter 6 (Design (to May 2008)). Nevertheless, **tie** did not consider delaying the tendering process because it thought that the issue could be resolved by re-programming and by addressing the design problems [Mr Harper [TR100000043_C](#), pages 0015 and 0029, paragraphs 51 and 102]. Mr Gilbert gave evidence that while it was not ideal, or usual, to seek initial bids based on preliminary design (with bids being updated later, as more information became available), **tie** wished to move the project forward because of emerging concerns that it might not go ahead, and that a lot of time could have been lost while waiting for more detailed design to become available before obtaining bids [[TR100000038_C](#), page 0020, paragraphs 51–52].
- 9.18** Mr Crosse opined that pausing the programme to allow design to be completed was not a realistic option. The deadlines for the project had been made public and stated in the business case upon which the project had been approved. If deadlines had been missed, that would have affected the credibility of the organisations involved,

the economic benefits contained in the business case and the affordability of the project. While, in an ideal world, all the design would have been completed before the award of the Infraco contract and SDS novation, that did not usually happen in practice and, in the Tram project, the design was never going to be perfectly complete by then. Instead, **tie**'s aim was to have design sufficiently advanced in order that BBS felt sufficiently comfortable with the risk to set a price and accept SDS novation. There was no need to pause the programme; what was needed was for the "gridlocked" design to be unlocked to enable design to be progressed [TR100000031_C, pages 0007–0008, paragraphs 15 and 18]. I consider that Mr Crosse's reliance upon what usually occurred in practice in other projects failed to take account of the fact that the project had a different procurement strategy from other similar ones. This failure became apparent when he gave oral evidence. In any event, the impression created by **tie**'s reluctance to pause the process to enable design to catch up and to proceed with the negotiations with the bidders on a proper footing was influenced by a desire to adhere to a published programme, which was no longer achievable, for the purpose of ensuring that the project proceeded despite political opposition and irrespective of the additional cost to the public purse that would inevitably result. Moreover, Mr Crosse's reliance upon the effect of any delay upon the economic benefits contained in the business case and the affordability of the project failed to recognise that proceeding with negotiations where the ITN was not fit for purpose and would not result in a robust price would also affect the affordability of the project and the ability to realise the economic benefits stated in the business case. I consider that in adhering to a programme that was incapable of being delivered **tie** was reckless and placed its own interests ahead of the public interest, despite the fact that it was a company wholly owned by City of Edinburgh Council ("CEC") and dependent on public funds.

Submission of proposals

- 9.19** On 9 January 2007, **tie** issued Supplemental Instructions to Tenderers, which required them to return as much as possible of the tender submission on 12 January 2007, with any outstanding, amended or updated tender information to be submitted as part of consolidated proposals on 16 April 2007 [CEC01824070]. Between 12 January and 16 April 2007, **tie** would provide tenderers with further information, including updated Employer's Requirements, significant development to the preliminary design, updated traffic modelling, the current programme for the Multi-Utilities Diversion Framework Agreement ("MUDFA") works and detailed design for key structures. Detailed design from SDS would be released after appointment of the preferred bidder, at which point the preferred bidder would undertake due diligence on price- and risk-critical items in the SDS design [*ibid.*, page 0004]. **tie** intended to appoint the preferred bidder in July 2007 and to award the Infraco contract in October 2007 [*ibid.*, pages 0006–0007].
- 9.20** On 12 January 2007, in response to **tie**'s requirements set out in the Supplemental Instructions and the ITN as amended, proposals were submitted by two infrastructure bidders, namely BBS [CEC01533655] and Tramlines [a consortium formed by Laing O'Rourke, Grantrail and Bombardier]. BBS submitted a price of £295,846,555, consisting of £243,697,218 for phase 1a and £52,149,337 for phase 1b [CEC01818715]. As noted below, BBS's tender was heavily qualified. The qualifications included, but were not restricted to, references to lack of design information and the consequences of that. In particular there were the following qualifications:

"Due to unavailability of design information and the uncertainty of the final delivered solution all prices are based on similar technical solutions for Tram

systems, out with the UK. The prices quoted, whilst as accurate as possible, are therefore indicative and do not form an offer which can be accepted." [CEC01533655, page 0003, paragraph 3.]

"Due to the current design status a detailed evaluation of risk cannot be undertaken. In the meantime we have allowed for a notional allowance of 10% on Civil and 6% on Systems and Track within our proposal." [ibid, page 0003, paragraph 5.]

"Quantities, rates and programme durations are subject to adjustment as detailed design information is issued sufficient to allow these to be accurately assessed." [ibid, page 0004 paragraph 4.]

"All overhead, overground and underground services including service chambers, service covers etc., will have been removed or diverted prior to our works." [ibid, page 0004 paragraph 16.]

- 9.21** Mr McFadzen explained the approach adopted by BBS in submitting its proposals. The tender was heavily qualified because of the status of design. BBS lacked a "huge amount" of information that it needed to produce a firm price [TR100000058_C, page 0010, paragraph 35]. Accordingly, the tender included a large list of qualifications and clarifications, some of which were maintained throughout the award process, ultimately becoming part of the pricing schedule in the Infraco contract (ie SP4 [USB00000032]). He explained that this was unusual because normally the employer would buy out the qualifications during the course of the discussions leading to conclusion of the contract [PHT00000034, pages 16–17]. In his statement he said that where a provisional sum was included in the tender as a result of incomplete design, it did not matter whether it was realistic; the overriding consideration was that BBS was in a competitive situation. Accordingly, BBS would insert the lowest possible sum even if that was not realistic. To illustrate this approach Mr McFadzen cited a hypothetical example of pricing a bridge with outline information only. If BBS thought that a realistic price was £500,000, it would use £250,000 as a provisional sum [TR100000058_C, page 0010, paragraph 33]. He qualified this in his oral evidence to say that as contract close grew nearer and **tie** was testing the bid the prices grew more realistic. I consider the practical effect of this provisional pricing in Chapter 10 (Events between October and December 2007).
- 9.22** Mr McFadzen considered that, by January 2007, **tie**'s procurement programme was becoming more and more unachievable as a result of the delays with design and MUDFA. He did not consider it possible that design would be completed by October 2007 to enable the Infraco contract to be awarded at that time. There was no recovery plan for the design or for the utilities contract. No arrangements, such as additional payment or instructions, were in place to accelerate progress on these matters. He made individuals within **tie** (in particular, Mr Harper and Mr Gilbert) aware of his concerns at various meetings. He considered that the response from **tie** was slightly "heads in the sand", with **tie** seeking to give reassurance that it would be all right, that BBS should not worry and that it should just get on with the procurement process [PHT00000034, pages 18–20]. He considered that the proposed contract was bespoke and did not appear to be very well thought out. It was very unusual that a contract for a project of this magnitude was not following a standard model contract (such as the NEC, FIDIC or ICE forms) [TR100000058_C, page 0006, paragraph 21].

- 9.23** Numerous witnesses supported the evidence of Mr McFadzen that is set out in paragraphs 9.21–9.22. Mr Walker also confirmed that incomplete information provided to tenderers necessitated the submission of highly qualified tenders. For example, although the Supplemental Instructions to Tenderers referred to the detailed design of structures, there was none. Even at the stage of signature of the contract, the final design was absent. He considered that the tender process was started too early in relation to the progress of design. When BBS received the Supplemental Instructions to Tenderers in January 2007 he considered it likely that the procurement programme would continue to drift. He was of the view that **tie**'s procurement programme was unrealistic and not achievable and thought that the tender should be delayed for approximately a year to enable the design to be completed. Mr Walker advised **tie** representatives of his views to that effect [[PHT00000035](#), page 12; [TR100000072_C](#), pages 0008–0009, paragraph 15].
- 9.24** Mr Flynn, Director of Major Projects at Siemens plc, gave evidence that the BBS bid was quite transparent in identifying a large number of clarifications, exclusions and assumptions necessitated by missing information, especially in relation to design [[PHT00000045](#), page 25]. He stated that for comparable "build-only" contracts (cf. "design-and-build" contracts), the client would provide a complete design for the whole scheme, against which bidders could bid. That was not the case for the project, where the design and scope information provided during the bid phase was incomplete and immature. The issues presented by the immature status of the design and scope were compounded by the fact that **tie** wished to fix the price for the contract. That was inconsistent with the approach of commercial organisations such as Siemens, who wish to limit their liabilities and risk in situations in which scope, schedule and interfaces are volatile, as was the case with the project. He went on to explain that, typically, where a client does not know the specifics of what they wish to build, the client usually takes a different approach to pricing, such as by adopting a "target cost" or "emerging cost" approach. With a "target cost" approach, parties aim for a target price and agree an incentive arrangement around scope, schedule and cost that acknowledges the immaturity of scope and design. An emerging cost approach is, essentially, a "cost-plus" contract [[TR100000151_C](#), page 0004, paragraphs 16 and 18]. Mr Dawson confirmed that:
- "if the scope is not fixed then bidders are unable to provide a fixed price unless they include additional risk monies, which then causes affordability issues"
[[TR100000032_C](#), page 0011, paragraph 21(2)].
- 9.25** As noted in paragraph 9.19 above, the tender process required the submission of consolidated proposals on 16 April 2007, based upon the additional information listed. BBS submitted its consolidated proposals to **tie** on 8 May but it is apparent that, prior to that date, similar concerns to those noted above continued to exist about the procurement programme and achievement of the procurement strategy. These were expressed in a variety of ways. In a document dated 8 February 2007, **tie** responded to queries raised by Transport Scotland on the proposals received from the Infraco bidders [[ADS00017](#)]. The nature of the queries raised can be ascertained from **tie**'s responses. For present purposes it is sufficient to note that they included issues relating to programme compliance, contractual issues and novation. In addressing concerns about programme compliance **tie** considered that both bidders' programmes were achievable. Factors that created a risk to programme compliance with the objective of delivering the tram network into service by December 2010 included "[d]isruption to work on site due to unexpected ground conditions, antiquities, unplanned events in Edinburgh etc" and "[b]uildability problems with

designs" [\[ibid, page 0002\]](#). To address the risks associated with unexpected ground conditions, **tie** would undertake extensive surveys in advance of works and provide all known data and records to bidders before their programmes were finalised. As will be noted in paragraph 9.47 below, this did not occur. In particular, interpretative reports of surveys of ground conditions were never provided to BBS. Contractual issues arose because both bidders had made substantial amendments to the proposed terms and conditions of the Infraco contract in order to protect their risk position pending receipt of more detailed design information and the completion of due diligence. It was noted that there had been a nervousness on the part of both bidders in respect of the nature of the output, depth and delivery of buildable designs to programme by SDS. The state of design was clearly relevant to the procurement strategy of novating the designer to the Infraco contractor. If that was to be achieved, the SDS contractors' performance, and their performance in the perception of the bidders, would require to improve and the bidders would require to undertake due diligence on the designs. **tie** recognised that critical design must be completed well before contract award if the strategy of novation was to be achieved in accordance with the procurement strategy [\[ibid, pages 0003–0006\]](#).

9.26 On 22 February 2007, a programme prioritisation session was held, chaired by Mr Crawley, Director of Engineering Assurance and Approvals at **tie**. The objective of the meeting was to define "an achievable and aligned programme for the Tram Project" [\[PBH00021529, page 0001\]](#). The meeting resulted in Mr Crosse proposing a five-month delay to the award of the Infraco contract, while maintaining a commitment to having an operational tram system by Christmas 2010, modified to delivering trams in trial running rather than in revenue-earning service [\[ibid, page 0002\]](#). Ms Craggs attended that meeting but it is clear that she continued to have concerns in relation to the procurement, which had been exacerbated by events at an internal meeting prior to a meeting with bidders. She expressed her concerns in an email to Mr Gilbert dated 1 March 2007. These included a concern that **tie** was deviating from the procurement strategy and an expression of the need for a plan on how to deal with bidders, including an informed and consistent approach. She also considered that:

"there appears to be no management of the next drop of information nor a coherent plan of what we are trying to achieve. I just feel we are losing our way with this" [\[CEC01793907\]](#).

9.27 In her evidence to the Inquiry Ms Craggs explained that she was concerned that **tie** appeared to be losing control of the process to award the Infraco contract. **tie** had responded to a bidder's concerns by making changes to the planned process – for example, by accepting the risk of obtaining consents, which was a risk borne by SDS and ultimately Infraco under the intended procurement strategy. It was unclear whether such departures from the planned award process were notified to the other bidder [\[PHT00000016, pages 164–166; TRI00000029, page 0024, paragraph 59\]](#).

9.28 On 3 April 2007, **tie** received Transport Scotland's comments on the draft FBC [\[TRS00004144; TRS00004145\]](#). Its main comments on procurement related to the risks and consequences of failing to achieve the planned convergence and closure within the required timescales, many of which risks related to the progress of design and possibly interfacing utility design to core infrastructure. Transport Scotland observed that it was clear that the programme was tight, and it raised various specific issues relating to programme in the following observations:

- "... the programme provided describes only a 'Best Case' scenario with no real feasible mitigation of delay or additional time for any secondary works required.

This is a very critical programme issue and if the key early milestones cannot be achieved the delay will be extended to months.

- The programme with its dates and planned work flow for the SDS Design, INFRACO and MUDFA works is based on a large number of assumptions of ... 'right first time and on-time delivery.' Edinburgh Tram Network Project is a unique project in Scotland. Therefore the assumptions and preconditions appear optimistic.
- The programme shows that the entire Detailed Design for this project will be completed in October 2007 – is this realistic?
- The procurement process for the INFRACO contract is running parallel to the design stage. The award of the INFRACO contract is scheduled for October 2007 and the commencement of the main construction works will be in December 2007, is this realistic?
- The construction works of the first line (line 1a) will be completed in July 2010 (early finish date assumes no delays and right first time).
- In summary the overall durations for the construction works and procurement look reasonable. The durations for design, procurement, approvals and commissioning however look very compressed. The lack of float or mitigation opportunities and 'right first time' planning would appear optimistic." *ibid*, pages 0005–0006 and 0009–0010.]

9.29 As later transpired, the concerns about **tie**'s ability to achieve the optimistic and unrealistic programme became a reality.

9.30 In emails addressed, or copied, to **tie** dated 22 October 2006 and 21 November 2006 [[CECo1759177](#); [CECo1759176](#) respectively], Mr Harries, a highly respected chartered engineer with considerable experience in light rail and tram systems and the project engineer for Transdev Edinburgh Tram Limited ("Transdev"), expressed concerns about the quality of the documentation in the ITN. Transdev had been retained by **tie** as the proposed operator of the Edinburgh Tram Network, by reason of its experience and expertise in light rail operations. In his email dated 22 October addressed to Mr Richards, of Transport Edinburgh Limited, and copied to Ms Clark and Mr Harper, of **tie**, Mr Harries commented on the Employer's Requirements that had been sent to Infraco and expressed frustration that a significant number of his earlier comments had been ignored. As for the quality of the information provided to Infraco, he commented: "If these really are the documents that have been sent out to Infraco, They (sic) are a very poor reflection on us all!" [[CECo1759177](#)]. In his later email addressed to Ms Clark and copied to Mr Gilbert and Mr Richards concerning the ITN second release he expressed disappointment that this release had so many errors and considered that there had been insufficient validation by **tie**, resulting in increased project cost and risk. Such comments are indicative of a chaotic and disorganised approach at the commencement of negotiations, which one might expect to have been addressed following the receipt of these emails. That does not appear to have happened. An email dated 25 April 2007 from Mr Harries noted that Transdev had reviewed the latest Infraco procurement release and were concerned that, yet again, very poor-quality information had been released to Infraco bidders, with insufficient checks having taken place prior to its release [[CECo1630498](#), pages 0003–0005]. A table summarising the key issues included comments that:

- the documentation had not been checked prior to its issue to Infraco, and ownership of the documentation within **tie** was not clear;

- there were many instances of internal conflicts within the package and inappropriate duplication of information;
- the complete range of elements that made up the total project were unevenly described;
- there was an inconsistent and variable level of details from different authors within the package, which reflected a lack of overall editorial ownership and understanding; and
- the release to Infraco bidders was still not aligned with what the SDS contractors were doing, with the result that the novation risk would fall on **tie**.

9.31 In his evidence Mr Harries explained that while **tie** was being driven by programme requirements to release information in relation to the Infraco contract to bidders, issuing documents of that standard introduced future cost and risk (because aligning the documents at a later date was likely to result in contract changes and claims by the contractor) [[PHT00000016](#), pages 13–14].

9.32 **tie**'s reaction to these concerns was explained by Mr Crosse. He remembered receiving the email from Mr Harries and that it was a concern, particularly in view of his expertise. Mr Crosse and Mr Gilbert took the decision to provide the information to the Infraco bidders at that time in order that **tie** could keep to its procurement programme even although the design information provided to it was a "work in progress" [[PHT00000021](#), pages 93–96]. I gained the impression that Mr Crosse failed to appreciate that the quality of the design information to be provided to bidders was more critical in this project than in "design-and-build" schemes such as those in Nottingham or Croydon or the Midland Metro. He seemed to take comfort from the fact that the amount of information provided to bidders was much greater than in other schemes. Such an approach was a fundamental error. It is surprising that Mr Crosse and Mr Gilbert adopted what appears to have been a slavish adherence to the project programme despite the concerns expressed by Mr Harries, and at a time when **tie** appears to have largely conducted the procurement process itself, without the benefit of legal advice from its solicitors (DLA) [Mr Fitchie [TR100000102_C](#), page 0011, paragraph 2.22]. That approach clearly exposed **tie** to the increased risk of contractors' claims and additional costs mentioned by Mr Harries in his evidence.

Submission of consolidated proposals

9.33 On 8 May 2007, BB and Siemens entered into a formal consortium agreement [[TIE00079228](#)] and, by letter erroneously dated 8 May 2006, the consortium (BBS) submitted consolidated proposals [[CEC01656123](#)]. The bid price for the whole project (ie phases 1a and 1b) was £268.5 million [[CEC00573745](#), page 0002], but the consolidated proposals were not final ones because BBS did not have sufficient and complete information. It had growing concerns in relation to design, approvals, third-party agreements, the conditions of the contract and delays to MUDFA [Mr McFadzen [PHT00000034](#), pages 21–23].

9.34 BBS continued to have concerns about the design, the programme and the quality of the available information. These concerns were never resolved and, indeed, they increased as difficulties arose in obtaining consents and approvals from CEC. It was becoming more and more apparent to BBS that design would not be complete before the award of the Infraco contract. **tie** was aware that BBS's bid was based upon all approvals and consents being in place at the time of SDS novation, MUDFA diversions being complete in sections before BBS started the Infraco work there, and all SDS design detail being complete before the award of the Infraco contract [[CEC01654151](#), page 0002, clause 32.3; [CEC01611490](#), page 0003, item 6].

Value engineering

- 9.35** VE is a process routinely carried out in construction contracts. In broad terms it is a process whereby the parties involved in the works consider whether there is a cheaper means by which the objectives of the contract can be met. It is normal for clients and contractors to seek VE opportunities to achieve savings on the cost of a project. Such opportunities vary according to the individual project but, for example, might relate to the method of construction or changes to the form of specific structures, resulting in lower costs. The two bidders for the Infraco contract had identified a number of opportunities for cost savings and improvements. The difference in the treatment of VE savings in this project from that adopted in other projects was that all the savings were to accrue to **tie**, with no share being payable to the contractor [Mr Walker [PHT00000035](#), page 39; Mr McFadzen [PHT00000034](#), page 42; [TR100000058_C](#), page 0014, paragraph 47]. A report by Mr Gilbert in early June 2007 noted that by May (presumably, following receipt of the bidders' consolidated proposals) it was evident that forecast capital costs still exceeded available funding and that further savings were required. A series of VE workshops was, therefore, arranged with each of the Infraco bidders to discuss savings to close the funding gap. The first workshop with BBS was on 1 June [[CEC01658322](#), page 0004, paragraph 1]. Notes of a meeting of some members of the **tie** management team on 6 June 2007 stated that a list of VE opportunities had been considered, categorised into "easy", "medium" and "difficult" according to the likelihood of achieving them, and given a pro-rated anticipated result of 80 per cent, 50 per cent and 20 per cent respectively. The total value of opportunities considered, before applying the pro-ration, was £72 million [[CEC01629344](#), pages 0002–0003]. In its response to the queries from Transport Scotland mentioned in paragraph 9.25 above, **tie** explained that the total value of opportunities was £32 million after factoring for the level of difficulty in implementation, of which £22 million represented the "easy" category of savings [[ADS00017](#), page 0010]. The target savings from VE at that time was £14 million (of which £4 million had already been "banked") [[CEC01629344](#), page 0002]. A further **tie** report noted that a total saving of over £1.8 million was indicated from the reviews with BBS to date, with further savings yet to be quantified [[CEC01644202](#), page 0002]. Minutes of the meeting of the TPB on 14 June 2007 noted that although the VE process had identified a large number of potential savings, it was recognised that not all of them would be achievable. Nevertheless Mr Crosse "was confident that VE savings in the range of £20m–£30m would be attainable" [[CEC01565576](#), page 0008, paragraph 6.2].
- 9.36** As with the ITN, there were concerns about the VE exercise. Emails between Transdev, Technical Support Services and **tie** in July 2007 reporting on meetings with the bidders to discuss VE savings in respect of structures noted disorganisation within **tie** (in particular, between the design and procurement teams), which was stated to be "embarrassing" for all concerned and led to concerns that the bidders were losing confidence in **tie** [[CEC01627545](#)].
- 9.37** Moreover, while acknowledging that VE is a normal part of projects, Mr McFadzen did not consider that the VE savings being sought by **tie** were achievable, with some of them being at the extreme end of what could be done. At one stage the VE "pot" was said to be £22 million, which he considered to be completely impossible. In his opinion the "mechanics" of the VE process were not really being progressed and would have required CEC, as approval authority, to have agreed to the re-design of certain structures. He cited the example of the possible re-design of the viaduct at Edinburgh Park station reducing the number of its spans from seven to one or two,

saving £1.4 million, but this just did not happen. He considered that the VE savings being sought by **tie** were a “fantasy” and were being used as a form of “financial engineering” so that **tie** could “manipulate” the figures in order to report to CEC that the cost of the project was within the available budget [[PHT00000034](#), pages 39–41, 43–45 and 156–158].

9.38 Mr Walker gave evidence to a similar effect. Although he appeared to express a different view from Mr McFadzen about the feasibility of achieving significant VE savings, it became clear that there was no real difference between them on this issue because, for a significant number of the suggested savings, no allowance had been made for the time required for re-design. Re-design could take several months and would cause further delay to the construction programme, where the design was already late. The cost of the delays caused by re-design to accommodate changes would exceed any claimed savings [[PHT00000035](#), pages 34–36]. Both at the tender stage and during the subsequent contractual negotiations he had the impression that **tie** appeared to have a maximum price for the project, which included, but was not restricted to, the cost of the infrastructure works, to ensure that **tie** would obtain CEC’s approval to proceed with it. He described this as a “gateway” price. BBS was unaware of that price but the Draft Agreement relating to the Selection for Appointment as Preferred Bidder contained the following clause:

“4.3 **tie** shall not be obliged to, but at its sole discretion may, award a contract to the [Preferred Bidder] where

4.3.1 The estimated infrastructure works cost for Phase 1a as finalised during the Preferred Bidder Period exceeds or is forecast to exceed £218.5 million inclusive of the Infraco Contract Price” [[CEC01497399](#), page 0008].

9.39 Mr Walker considered that **tie** was trying to “manipulate” the numbers in order to get the price through this “gateway” [[PHT00000035](#), page 20]. His evidence in this respect is supported by the terms of SP4 relating to price, as explained in Mr McFadzen’s evidence. Although the construction works price was £238,607,664, subject to certain pricing assumptions that will be considered in Chapter 11 (Contract Negotiations), Appendix A1 of SP4 analyses that figure in a table, which is reproduced in Table 9.1.

Table 9.1: Construction Works Price Analysis

A1 Construction Works Price Analysis		
Lump Sum Firm and Fixed Price		£231,797,342
Deduct Identified Value Engineering	Taken To Firm Price (See Appendix C)	£9,965,006
Firm Price		£221,832,336
Deduct Further Value Engineering	(see Appendix D)	£2,670,000
Sub Total		£219,162,336
Add Defined Provisional Sums	(see Appendix B)	£11,434,316
Add Undefined Provisional Sums	(see Appendix B)	£8,011,012
Construction Works Price		£238,607,664

Source: Infraco Contract, Schedule Part 4: Pricing [[USB00000032](#), page 0015]

9.40 As can be seen from Table 9.1, that analysis results in achieving a price of £219,162,336 when VE savings are deducted and provisional sums are excluded, apparently achieving **tie**'s objective of a target price in the region of £219 million excluding provisional sums. Mr McFadzen explained that VE savings had to be delivered to achieve the construction works price of £238,607,664 and, as **tie** was aware, the nearer one approached the start of construction work the harder it would be to achieve such savings. The VE savings in Table 9.1 were unlikely to be achieved and represented financial engineering. If VE savings were not achieved they would be added back into the contract price in full and BBS would also be recompensed up to a maximum figure of £25,000 per VE saving for considering each potential saving [TR100000058_C, page 0049, paragraphs 171–172; PHT00000034, pages 152–158]. I found the evidence of Mr McFadzen and Mr Walker compelling and, taking it with the evidence of the conduct of **tie** personnel leading up to December 2007 considered in Chapter 10 (Events between October and December 2007), I accept that **tie** was engaged in a financial-engineering exercise to illustrate a target price of approximately £219 million for the Infraco contract for phase 1a so as to achieve the "gateway" price required to obtain CEC's consent for the project. I also accept that the "Identified Value Engineering" savings of £9.9 million and the further VE savings of £2.6 million (set out in Appendix A1 of SP4) [USB00000032, page 0015] were necessary to make the project appear affordable within the envelope of £219 million, but it is doubtful whether they were ever achievable. In or before April 2008, prior to contract signature, Mr Reynolds, the Project Director for PB, was concerned about the presentation of the Infraco deal to CEC. In his weekly internal report dated 28 March 2008 [PBH00036973, page 0001, paragraph 1.1] he noted that **tie**'s "price on the table" assumed VE savings approximating £12 million, but its construction programme did not reflect the design required to deliver the savings. As was noted in paragraph 9.38 above, Mr Walker considered that the cost of the delay to the construction programme necessitated by the need for re-design to achieve the VE savings would exceed any such savings (PHT00000035, pages 34–36). It appears that Mr Reynolds was expressing similar views in his internal report. More significantly, he warned his employers, in the following terms, about the need to take steps against future accusation of deception:

"I do not believe the major stakeholders, including CEC are aware of the position and we must ensure that the Novation Agreement is worded such that it protects PB from any accusations of deception which could be levelled at **tie** in future."
[PBH00036973, page 0001, paragraph 1.1.]

9.41 For his part, Mr Gallagher denied that there was a practice within **tie** of adjusting the risk allowances or VE figures to ensure that the project came below a target, or pre-determined, figure [PHT00000037, pages 44–46]. From my observations in the preceding paragraphs it will be apparent that I reject that evidence. I also consider this issue in Chapter 10 (Events between October and December 2007) and Chapter 11 (Contract Negotiations) in the context of Mr Gallagher's email dated 25 October 2007 [CEC01453723], the discussions at Wiesbaden and the contract negotiations thereafter. Mr Gallagher's denial of the existence of such a practice might be explained as indicating a lack of awareness of it. However, in view of the fact that he was the Executive Chairman of **tie**, and having regard to other evidence tending to show that he took an active interest in the detail of negotiations, including his involvement in the negotiations leading up to and including the meeting at Wiesbaden, I consider that he was aware of this practice. Accordingly, I am forced to the conclusion that his evidence on this matter was untrue.

Revised procurement programme

- 9.42** By summer 2007, Mr Gilbert recognised that a number of factors had contributed to delay in the work to award the Infraco contract. These included the need for more time to deliver VE savings and negotiated reductions to provide an affordable scheme, as well as delay in the issue of price-critical design information to bidders. A review of the bids received in January 2007 had identified that VE savings and negotiated reductions would be required in order to deliver phase 1a within **tie**'s budget. There had also been a review of the procurement programme to bring about a full alignment of the procurement and design programmes in such a way that minimised the impact on project completion. Proposed changes to the programme included:
- commencing due diligence on designs earlier in the process than previously planned;
 - iterative bid updates based on price-critical emerging detailed design; and
 - commencing bidder due diligence on detailed designs at the end of August, when the likely successful bidder was known.
- 9.43** It was proposed to award the Infraco contract in January 2008. Mr Gilbert presented a Revised Procurement Programme to the meeting of the TPB on 12 July 2007 [[CEC01565576](#), pages 0056–0061]. At that meeting Mr Gallagher had highlighted that “a line on the design may have to be drawn prior to full completion to allow Infraco pricing and VE savings to be firmed up” [[CEC01018359](#), page 0005, paragraph 3.2] and in his evidence he explained that this was a recognition that 100 per cent of the design was not going to be complete before contract close. The plan was to “get a final price, firm up what we know and agree a process for what we don't know” [[TRl00000037_C](#), page 0046, paragraph 155]. This decision was taken against the background that there were significant running costs for both **tie** and BBS in delay (**tie**'s running costs, for example, being approximately £1 million a month) and having regard to the possible political ramifications of another missed deadline [[libid](#), page 0046, paragraphs 155–156]. Mr Crosse accepted that this was a departure from the strategy in the draft FBC in December 2006 to have a final design priced by the infrastructure contractor and that it was also an express acknowledgement, for the first time, that a non-final design would be priced by the contractor [[PHT00000021](#), pages 111–112]. Concentrating on the running costs associated with delay without balancing these against the likely financial consequences of departing from the procurement strategy, and permitting bidders to tender on the basis of an incomplete design as if it were a fixed design, is not a fair assessment upon which to commit substantial sums of public money. The Inquiry has seen no evidence that any attempt was made to undertake such a balancing exercise. I consider that any decision to depart from the procurement strategy could affect the risks, cost and economic benefits claimed for the project in the business case, and its ultimate affordability. As such, any departure from the procurement strategy ought to have been reported to councillors to enable them to take an informed strategic decision about all options relating to the future of the project, including whether they wished to maintain the original procurement strategy (eg by pausing the work to award the Infraco contract to allow design and the utility diversions to be completed) or, indeed, whether they wished to proceed with the project at all.
- 9.44** By letter dated 19 July 2007, Mr Gilbert enclosed a document advising BBS of the steps that **tie** proposed to take to support the Infraco procurement programme. Although bids had been received in January 2007 and updated in May, the programme for making a recommendation on the selected Infraco and Tramco bidders had been

delayed because of delays to design and political uncertainty over the future of the project following the outcome of the election to the Scottish Parliament. **tie**'s strategy included novating the SDS contract and the Tramco contract to Infraco to create a single point of delivery, and de-risking of the price for the works by getting sufficient design done in advance of the Infraco recommendation so that risk pricing by bidders for scope and performance was minimised. The intention was to conclude tender evaluations and negotiations by 28 August to enable **tie** to put a conditional contract award recommendation to the TPB by 25 September. To deliver these objectives **tie** had to receive bids that satisfied various conditions listed. In particular, bids must not contain significant pricing uncertainty and risk allowances and they had to include a clear and agreed basis for adjustment in respect of various matters, notably:

- significant areas of design uncertainty (eg roads, pavings and drainage);
- significant quantity changes arising from completion of detailed design;
- significant changes arising from completion of due diligence on agreed critical design items; and
- VE items not fully incorporated into updated bids [[CECo1627004](#), pages 0002–0003].

9.45 Mr McFadzen explained that the letter and enclosure were part of the negotiating process and that, around this time, there was a developing thought that parties had to reach a stage at which, whatever the state of the design information, it would be fixed at a particular point and would form the basis of the contract. BBS would be paid for any additional costs arising from changes to the design after it was fixed. The fixed design was called the Base Date Design Information and was incorporated into SP4 to the Infraco contract [[TRl00000058_C](#), page 0016, paragraph 55].

Submission of updated proposals

9.46 On 7 August 2007, by letter erroneously dated 2006, BBS submitted updated proposals, with a revised tender sum of £254.5 million for phases 1a and 1b [[CECo1604676](#), page 0002; Mr McFadzen [PHT00000034](#), page 30]. The updated proposals included a schedule of clarifications containing numerous qualifications and conditions [[CECo1491869](#)]. The following provisions are relevant to issues of consents, design, site conditions and availability of a clear site for the Infraco works:

- "1.5 Planning Consents and Building Fixing Consents will be in place prior to commencement of Works in the areas subject to the Consents.
- 1.6 Our programme and price assumes [sic] that Services; overhead, overground and underground, will all [be] diverted or protected by MUDFA/others to enable us to start works as indicated on our programme.
- 1.8 Our programme and price assume that TRO's and all other statutory approvals are in place to enable a construction start, with full access to the site, on 7 January 2008 or such other date as may be agreed.
- 2.4 Our Tender is based on the SDS providing approved for construction Design information in time to enable us to procure resources, plan our works and execute construction in accordance with our programme.
- 7.1 In the absence of a Geotechnical Interpretative Report, we have not allowed for any risk in respect of Ground Conditions, foreseen or unforeseen. This includes risk relating to the presence of sub-surface voids and measures

required to deal with ground water levels not allowed for in the current SDS design." [\[ibid, pages 0001–0006.\]](#)

- 9.47** The above conditions illustrate that BBS was concerned about the state of site preparation and the level of available information. It is clear that the tender was based upon the existence of planning and building fixing consents as well as Traffic Regulation Orders and all other statutory consents, and upon the diversion of all services to give BBS access to a clear site to enable it to undertake the civil engineering works without hindrance. The design information was required to enable BBS to procure materials in time to start construction works in accordance with its programme. Failure to adhere to the programme would result in the contractor incurring losses. The context of condition 7.1 is that normally a contractor would assume the risk of ground conditions where adequate geotechnical reports had been provided to the contractor to assess the likely conditions to be encountered. BBS was not satisfied with the information provided and was unwilling to take any of the risks associated with ground conditions, whether such risks were foreseen or unforeseen. **tie** never provided BBS with adequate interpretative reports on ground conditions along the construction route [Mr McFadzen [PHT00000034](#), pages 32–37]. In 2007, by letter erroneously dated 24 August 2006, BBS advised **tie** that its revised price for phases 1a and 1b was £263.1 million, with a price of £217.2 million for phase 1a and £45.9 million for phase 1b. The schedule of clarifications mentioned above was stated to remain effective unless specifically amended [[TIE00087652](#)].
- 9.48** The failure to progress design to meet the above conditions continued to feature in meetings and correspondence. For example, in an email dated 16 August 2007, Mr Dawson, the Procurement Manager for **tie** between August 2006 and March 2008, noted his concern that, although there might be firm rates for many items, other issues affected **tie**'s ability to select a preferred bidder. These included the extent of unresolved design or specification issues, and the timescale for execution, meaning that the variable elements of bids might be greater than **tie** would like, which would also make it difficult to identify any "clear water" between the Infraco bidders [[CEC01649266](#)]. In his evidence Mr Dawson explained that, with unresolved design or specification issues, bidders are unable to provide a firm or fixed price. If large elements are provisional then it is unclear which bidder really has the lower price [[TR100000032_C](#), page 0019, paragraph 35(1)]. The minutes of the meeting of the TPB on 26 September 2007 noted that SDS had produced approximately 58 per cent to 60 per cent of the detailed design [[CEC01357124](#), Part 1, page 0007, paragraph 3.20]. Mr Walker gave evidence that, following a presentation by PB on 20 September 2007, he was dismayed that design was even further behind than BBS had been led to believe. He stated that, around that time, he made **tie** aware of his view that the Infraco tendering process should be put on hold for a year to allow the design and the MUDFA works to be progressed to a suitable state at the time of the Infraco bidders' due diligence and at the time of contract close. The response from Mr Crosse was that **tie** had various mitigation plans that it was putting in place and would speed up the design so that BBS had it [[PHT00000035](#), pages 18–19]. Mr McFadzen also gave evidence that the presentation on design on 20 September 2007 confirmed that the SDS contractors were not making great progress on design, which increased BBS's concerns that the design would not be completed, as promised, when BBS took on the SDS contract [[TR100000058_C](#), page 0018, paragraph 63]. At this time it is apparent that, during the period between the nomination of the preferred Infraco bidder and contract award, **tie** was intent on securing a price that was within **tie**'s budget of £219 million for the Infraco works in phase 1a [[CEC01602752](#); [CEC01602753](#)]. This remained its negotiating objective prior

to the meeting in Wiesbaden. However, the contract that was ultimately signed failed to achieve **tie**'s objective. I doubt whether it was ever achievable within the timescale, given the incomplete state of design and the delays in the utility diversion works.

9.49 A further OGC review of the Tram project took place in late September/early October and a report was produced on 9 October 2007, erroneously dated 2006 [[CEC01562064](#)]. The report noted that the timeliness of project delivery was of concern. Both bidders had raised a concern that the planned preferred bidder period, which would include due diligence on the designs and the novated contracts, was tight. There was already a requirement for an overlap between the due diligence process and the mobilisation phase. The review team had seen a draft of the Infraco preferred bidder agreement, which included a list of activities and agreements that required to be finalised during the preferred bidder period and the areas of uncertainty of scope and price that required to be finalised. The review team believed that it would be very challenging to finalise these matters by the target date at the level of quality expected, and it recommended that the preferred bidder was appointed as soon as possible and that the programme during the preferred bidder period be monitored closely at a senior level. It was recommended that **tie** should actively consider:

- the levels of certainty required to meet the CEC approval process and how that would be achieved;
- the implications of contract signature not being achieved by the target date of 28 January 2008; and
- the necessary consequences of any areas that could not be finalised by contract signature and novation and how (and when) full certainty would be established.

Appointment of BBS as preferred bidder

9.50 On 15 October 2007, at a joint meeting of the TPB, the **tie** Board and the Legal Affairs Committee, it was recommended that BBS should be selected as preferred bidder. Both bidders' pricing was based on preliminary design and included approximately 30 per cent of provisional sums, mainly for structures and highways. These were noted to be the key price-critical items. Bidders had been able to price the other items without detailed design having been achieved. The TPB and the **tie** Board endorsed the recommendation of the preferred bidder for the Infraco contract [[CEC01357124](#), Part 1, pages 0011–0012, paragraphs 3.1, 3.3 and 8.1]. Mr Gilbert gave evidence that the two bids received by **tie** were very close in price but that key factors in the selection of BBS as the preferred bidder were its proposed track form and the benefit of the track form's constructability within a street environment [[TR100000038_C](#), page 0007, paragraph 16]. A report dated 24 October 2007 by Mr Gilbert on the evaluation of the Infraco bids noted that it was a common feature of both bids that they were subject to exclusions, qualifications and assumptions relating to incomplete design, unforeseen ground conditions, utility diversions not carried out under MUDFA and Picardy Place (where the design remained subject to debate) [[CEC01453691](#), page 0021].

9.51 On 22 October 2007, **tie** appointed BBS as the preferred bidder for the Infraco contract. The preferred bidder price for phase 1a was £208.7 million, although that was subject to variation upon resolution of the issues mentioned below [[libid](#), page 0022 (NB: in this document BBS is referred to as "Wallace" and Tramlines is referred to as "Bruce")]. **tie** and BBS agreed that a number of matters ("PB Finalisation Issues") in the Draft Deal, the Infraco contract, the SDS contract and the Tramco contract had to be resolved before **tie** sought CEC's approval to enter into the Infraco contract

[[CECo1497399](#), page 0006, clause 3.1; [CECo1600796](#)]. In short, they were that:

- the final design was not complete;
- the MUDFA works to divert utilities along the swept path of the route were not complete;
- the status of the third-party Agreements was unclear; and
- the pricing was not complete [Mr Walker [TR100000072_C](#), pages 0013–0014, paragraph 21].

9.52 During the period between the appointment of the preferred bidder and the award of the Infraco contract, **tie** intended to firm up provisional elements of the bidder's price, and to realise VE savings, in order to deliver a price for the Infraco works within the available budgets of £219 million for phase 1a and £55 million for phase 1b [Appendix 6.1 of the preferred bidder agreement [CECo1443700](#)]. Despite negotiations over a seven-month period after BBS was appointed the preferred bidder, none of the issues was capable of being resolved. The MUDFA works were still ongoing, the design continued to be developed and the third-party agreements had still not been finalised.

Conclusions

- 9.53** BBS had initially bid for the Infraco contract on the understanding that all approvals and consents would be obtained before the Infraco contract was awarded and the MUDFA works would be completed in sections before the Infraco works commenced there.
- 9.54** **tie** proceeded with the work to award the Infraco contract despite knowing that there were significant delays with design and the MUDFA works.
- 9.55** It was – or ought to have been – obvious to executive officers within **tie** that the delays with the design and the MUDFA works were likely to jeopardise the objectives of the procurement strategy of seeking to de-risk the Infraco contract and of obtaining a fixed price for the Infraco works, with design risk being transferred to the Infraco contractor.
- 9.56** As the delays in design and the MUDFA works became increasingly clear to it during 2007, BBS took steps (through maintaining the qualifications and exclusions in its bids) to ensure that the risk of design and MUDFA delay remained with **tie**.
- 9.57** The negotiations between the parties concluding with the signing of the Infraco contract are considered in Chapter 10 (Events between October and December 2007) and Chapter 11 (Contract Negotiations).

Chapter 10

Events between October and December 2007

Introduction

10.1 Before turning to the substance of the evidence available to the Inquiry, it is appropriate to make a few comments about certain witnesses.

(i) Mr Hofsaess is resident in Germany. As observed in paragraph 2.57 the Inquiry was unable to compel him to co-operate with the Inquiry by giving evidence in person or by way of video link. However, he did provide voluntarily responses to a set of questions provided to him. There are, however, areas in which he has not fully addressed the question put to him or, in his answer, has raised matters that would have justified further questions. These are matters that could have been addressed had he given evidence in person or by video link, but could not be explored using the response method.

(ii) Mr Gallagher was not a satisfactory witness. He had a poor recollection of matters even where they concerned key areas rather than matters of detail. At times it was difficult for me to accept that his unsatisfactory answers were truly the result of poor recollection of events; rather, there were instances where it appeared that he was fabricating evidence or was not being candid in his responses. By way of illustration, he was adamant that no meeting of City of Edinburgh Council ("CEC") was planned for 20 December 2007 to approve the project and make the decision to proceed [see, eg, [PHT00000037](#), page 77]. He said that the existence of such a meeting was invented by **tie** Limited ("**tie**") to put pressure on the consortium, consisting of Bilfinger Berger UK Limited and Siemens plc ("BBS"), to make progress in negotiations.¹⁵ There is, however, ample contemporaneous documentary evidence that there was such a meeting and that it had been planned since the time of the draft Final Business Case ("FBC").

More significantly, I considered that his answers were often evasive and his evidence at times incredible [see, eg, [ibid](#), pages 35–46]. In later paragraphs of this chapter I will deal more fully with the assessment of his evidence relating to particular issues considered at that stage. In assessing his evidence I took into account the medical reports supplied by Mr Gallagher indicating that he would not be able to cope with giving evidence in public but could do so in a more private setting. To that end a commission was arranged to take his evidence in private at a hotel in Kilmarnock. Mr Gallagher was accompanied by his daughter, who is a solicitor, and the only people present when he gave evidence apart from his daughter were myself, senior counsel to the Inquiry and the solicitor to the Inquiry together with the shorthand writers recording his evidence. His evidence extended into the afternoon and Mr Gallagher and his daughter took the opportunity to be alone during the lunch break. At no stage in the proceedings did Mr Gallagher or his daughter indicate that his health issues were affecting his ability to understand and respond to questions from senior counsel.

(iii) Mr Gilbert was also an unsatisfactory witness. He held a key position with responsibility for award of the infrastructure contract ("Infraco contract"). I fully take into account the fact that he was being asked about the events of some 10 years before, which might have posed difficulties. However, he had had the benefit of having sight of relevant documents that had been provided to him when he was

¹⁵ References in documents and in this Report to BBS are references to the consortium.

asked for his statement, and Counsel to the Inquiry referred him to documents during the course of his oral evidence. Despite this, it was striking how often he responded to questions by saying that he could not remember or could not recall. No other witness to the Inquiry has been so afflicted by memory lapse. I formed the impression that he did not really wish to assist the Inquiry and saw this approach as a means of avoiding answering difficult questions.

- 10.2** Following the changes to the role of Transport Scotland and confirmation by the Scottish Ministers that the project would proceed, work continued on the selection of the contractor to undertake the infrastructure works. The effect of the Scottish Ministers' decision not to proceed with the Edinburgh Airport Rail Link ("EARL") project, however, had knock-on effects within **tie**. As congestion charging was not proceeding and the Stirling–Alloa–Kincardine ("SAK") railway project had been taken from it, **tie** had only one project remaining. Mr Gallagher therefore began to assume more responsibility. Mr Crosse said that, as a result, he felt a loss of power and independence in his role as Tram Project Director ("TPD") [[PHT00000021](#), page 9]. This was a surprising thing for Mr Gallagher to do at this stage, as he did not have the degree of experience in transport projects that Mr Crosse had. Mr Crosse did not think that there was a loss of experience when Mr Gallagher took over responsibility but, in view of their respective experience, this was clearly the effect. A number of the personnel who had been working on the EARL project were reassigned to work on the Edinburgh Tram project. Mr Bell was an employee of **tie** and had been Project Director for EARL. Once it was clear that his role there was to be redundant he was moved to the Tram project. Mr Crosse had wanted to manage the Edinburgh Tram project (the "project") to conclusion and had made this known [[ibid](#), page 11]. Nonetheless, the decision was made to replace him with Mr Bell at the end of January 2008. Mr Crosse left at that time. When Mr Bell took up the post, he was the fourth TPD in 30 months, following on from Mr Kendall, Mr Harper and Mr Crosse.
- 10.3** In late 2007, the intention remained that the contracts for the delivery of the tram vehicles and for carrying out the infrastructure works could be entered into in January 2008 and, in order to achieve this, CEC would decide to approve the second version of the Final Business Case ("FBCv2") and authorise **tie** to enter into the contracts at a meeting on 20 December 2007. This timetable could not be maintained unless a final price for the proposed Infraco contract could be determined before the Council meeting. As was noted in Chapter 9 (Tendering of the Infraco Contract to the Appointment of Preferred Bidder in October 2007), the Tram Project Board ("TPB") had approved the selection of the consortium as preferred bidders at the meeting on 15 October 2007 [[CEC01357124](#), Part 1, page 0011] and this was formalised in an agreement between **tie** and the consortium on 22 October 2007 [[CEC00569119](#)]. However, the assessment of best and final offers from each of the bidders had been carried out while the design was only approximately 58–60 per cent complete [minutes of meetings of TPB of 26 September 2007 and 15 October 2007 [[CEC01357124](#), Parts 1–3; Mr Crosse [PHT00000021](#), page 121]. The result was that the bids had been prepared on the basis of the preliminary rather than the final design, and 30 per cent of the price from the preferred bidder consisted of "provisional sums" [[CEC01357124](#), Part 1, page 0011; [PHT00000021](#), page 122]. The effect of the state of design also meant that the bidders had amended the proposed contract terms and conditions to protect their risk position pending receipt of more design information and completion of due diligence [[TRS00003667](#), page 0003].

10.4 As there was a concern as to the element of the bid that was made up of “provisional sums”, it is useful here to consider what that term means. It does not have an entirely fixed meaning, but has been described as follows:

“The term ‘provisional sum’ is generally well understood in the construction industry. It is used in pricing construction contracts to refer either to work which is truly provisional, in the sense that it may or may not be carried out at all, or to work whose content is undefined, so that the parties decide not to try to price it accurately when they enter into their contract. A provisional sum is usually included as a round figure guess. It is included mathematically in the original contract price but the parties do not expect the initial round figure to be paid without adjustment. The contract usually provides expressly how it is to be dealt with. A common clause in substance provides for the provisional sum to be omitted and an appropriate valuation of the work actually carried out to be substituted for it. In this general sense, the term ‘provisional sum’ is close to a term of art but its precise meaning and effect depends on the terms of the individual contract.” [May LJ in *Midland Expressway Limited v Carillion Construction Limited* [2006] EWCA Civ 936; (2006) 107 Con LR 235, quoted in Hudson, *Building and Engineering Contracts*, 13th edition, paragraphs 9–079.]

10.5 Although I note that Mr Crosse did not consider that this large element of provisional pricing presented a difficulty in evaluating and comparing the competing bids [PHT00000021, page 123], I find this surprising. It meant that almost a third of the price quoted by each of the bidders was something to which they would not commit and was little better than a “round-figure guess”. To have such a large element of the price remain uncertain was clearly at odds with the intention to have a fixed price for the works that was a key element of the procurement strategy outlined in the draft Final Business Case (“FBC”). To put the 30 per cent provisional component of the bids in context, in purely financial terms there was a 4 per cent difference between the two bids for the Infraco works pre-normalisation and just a 2 per cent difference after it [TRS00003667, page 0002].¹⁶ This meant that any decision as to which contractor to appoint was based on price was highly artificial. Unsurprisingly, **tie** sought to have this element of the price firmed up once the preferred bidder had been appointed. The consortium was, however, resistant to providing more fixed prices. In order to consider its reasons for this, it is necessary to review the stage reached on the design work at the end of 2007.

10.6 As noted above, the prices for the best and final offers prior to choosing the preferred bidder had been provided on the basis of preliminary design. By the time that the decision as to preferred bidder was made, the design was only about 60 per cent complete, and it had not progressed much by the end of the year. A progress report for a meeting of the TPB on 7 December 2007 [CEC01023764, page 0012] noted that just 66 per cent of phase 1a detailed design was complete and that it was expected that about 75 per cent would be complete when the Infraco contract was awarded in January 2008. This can be contrasted with the earlier expectation as to how much design would be complete. In this regard, there were some differences in the evidence or the emphasis placed upon it by some of the witnesses and it is notable that the intention changed over time. In the draft Interim Outline Business Case produced in May 2005 [CEC01875336, Parts 1–7] and the draft Outline Business Case produced in March 2006 [CEC00380898], the intention had been that the design

¹⁶ “Normalisation” was the process by which adjustments were made to the bids to reflect the fact that they contained different assumptions, qualifications and omissions. By correcting for these, it was hoped that there would be a level playing field for the comparison of bids.

work would be 60–70 per cent complete at the time that the Infraco contract was signed. However, the position as stated in the draft FBC from December 2006 that was submitted to CEC for approval was:

"It is expected that the overall design work to Detailed Design will be 100% complete when the Infraco contract is signed. However by identifying key risk areas and prioritising SDS activities, tie is seeking to complete the key elements of the Detailed Design prior to selecting the successful Infraco bidder in summer 2007. This will enable Infraco bidders to firm up their bids based on the emerging Detailed Design and thereby reduce the scope and design risk allowances that they would otherwise include." [CEC01821403, page 0085, paragraph 7.53.]

- 10.7** Mr Gallagher noted that if design was to be 100 per cent complete at contract award, it followed that it would be less complete when the contractors were asked to provide their final price [PHT00000037, page 8]. He said that the consortium's claims that it believed that the design would be complete were part of its negotiating strategy [TR100000037_C, page 0076, paragraph 247] but accepted that tie had given rise to an expectation on the part of the bidders that a full design would be available. When asked about this he replied by saying only that there should have been a better definition of what was meant by "full design" [PHT00000037, page 16]. The expectation was apparent in the evidence of Dr Enenkel, who said that it had been assumed that tie would "complete the design ... and provide full pricing detail to BSC" [TR100000161_C, page 0018, paragraph 9].
- 10.8** Mr Crosse said that he considered the reference to design being 100 per cent complete was misleading [PHT00000021, page 39] and that it was difficult to say how much work tie anticipated would be complete at contract award [TR100000031_C, page 0010, paragraph 24]. He said that 100 per cent complete was an "idealised concept" (see paragraphs 5.83 and 6.59 above for discussion of this in different contexts) and that the tie management team was aware that design would not be 100 per cent complete [PHT00000021, page 45]. He noted that some elements would always be designed by the contractor and in this regard referred to the apparatus that would be installed by Siemens *ibid*, page 41], but accepted that the civil engineering works, including structures such as bridges, should be complete *ibid*, pages 41–43]. In relation to the big areas of design, he considered that in the preliminary designs available to the bidders sufficient information was available to enable them to price "within a few per cent on those designs" [TR100000031_C, page 0014, paragraph 40]. He stated:
- "Ian Kendall's idea was that the design would be completely finished and handed over to bidders – but that's not how it usually works in practice. Bidders don't get a complete package of design." *ibid*, page 0023, paragraph 69.]
- 10.9** He also said:
- "Ian Kendall's concept, in which design would be fully completed before Infraco was let, was an idealised concept." *ibid*, page 0026, paragraph 77.]
- 10.10** The references to "Ian Kendall's idea" and "Ian Kendall's concept" are misleading. They are references to the procurement strategy for the project contained in the draft FBC that had been approved by CEC in December 2006. It is apparent that Mr Crosse did not think it workable or appropriate. Clearly, there would be room for differences of opinion, but this appeared to be a conscious disregard of the agreed strategy without the matter being the subject of a formal decision or it being notified to CEC. Even if it was thought that the strategy was not realistic, it was realistic to expect CEC to be given clear notification of the change.

- 10.11** The difficulties that arose in advancing the designs were well known to the TPB throughout 2007 and are considered in Chapter 9 on procurement up to the appointment of preferred bidder. It is significant for what followed that, at the July 2007 meeting of the TPB, Mr Gallagher said:
- “a line on the design may have to be drawn prior to full completion to allow Infracore pricing and VE [value engineering] savings to be firmed up” [CEC01018359, page 0005].
- 10.12** Mr Gallagher said that in making his comment he intended to have a baseline from which **tie** and the consortium could have a discussion on price [PHT00000037, page 18]. Mr Crosse understood the comment to mean that a reference point should be fixed against which both the bidders could price [PHT00000021, page 111]. It was the first express recognition that, rather than have the contractors price a concluded design, they would be asked to price an incomplete one [*ibid.*, page 112]. Two things flow from this. The first is that it appears to be a realisation at the TPB that the design would not be in the state that had been hoped, for the purpose of getting prices from the consortium, and that there would therefore be a departure from the procurement strategy. The second issue that arises is that, if the design that was to be priced was known not to be the final version, it would follow that either there would have to be a mechanism for adjusting the price as the design developed or the consortium would require to put in a price in advance of the final design, based on the risk that additional costs would arise as the design evolved. Mr Gallagher did not give a clear answer on what he had in mind in this regard [PHT00000037, pages 20–22]. I have the clear impression that it was a matter to which neither he nor anyone else involved had properly directed their minds. However, there is no record of the consortium being told, prior to December 2007, to price the design as it existed at a particular point and that it was intended that the bidders should take on the risk arising from the incomplete design and price accordingly. At the time, there was no express consideration of whether the bidders would be able or willing to do so.
- 10.13** In this regard, Mr Crosse expressed the view that, as at December 2007, more design had been completed than had typically been the case at similar stages on previous tram schemes [TR100000031_C, pages 0038–0039, paragraphs 112 and 116]. That statement is misleading, however, as other schemes adopted procurement strategies whereby the contractor would be responsible for the design. Mr Gallagher recognised that in other projects where bids were obtained purely on the basis of an outline design, the employer’s role in design would end at that point [PHT00000037, pages 15–16]. Where that is the case, it is inevitable that the designs will be less developed at the stage of seeking bids than was the case for the strategy adopted in Edinburgh. Mr Crosse also recognised this [PHT00000021, page 114], but considered that the Inquiry was becoming “slaves to semantics” in focusing on what was meant by 100 per cent complete design [*ibid.*, page 113]. I do not agree. It is clear that the incomplete design had a material effect upon the pricing of the contract and on the extent to which **tie** could achieve the degree of price certainty sought by CEC to ensure that the project would be delivered within its budget.
- 10.14** Both Mr Crosse and Mr Gallagher considered that BB and Siemens *ought* to be able to price on the basis of the information that they had. Mr Crosse pointed out that the consortium’s claims, in January 2008, that design was not complete could be seen as just a ploy to negotiate increases in the contract price [TR100000031_C, page 0025, paragraph 76], and the same could perhaps be said of the reluctance to fix prices in late 2007. Whether or not this was correct, by December 2007 it was apparent that little progress had been made and that the consortium was not willing

to do so. Eventually this was accepted by Mr Gallagher when giving his evidence to the Inquiry [PHT00000037, page 48]. I consider that it is clear that the design was incomplete to a material extent, that it was less complete than had been anticipated in the procurement strategy set out in the draft FBC in December 2006, and that the consortium was not willing to assume the risk of fixing prices on the basis of such incomplete designs.

- 10.15** It was clear that the witnesses from the consortium companies relied on the incompleteness of design as a reason for the state of the bid. Mr Walker, of BB, said that the problem was that they had no information or drawings for 40 per cent of the project [PHT00000035, pages 31–32]. Mr Gilbert accepted that this would have a cost consequence, because the consortium would price according to the risk that it was being asked to undertake. From the standpoint of the consortium, however, the objection was more fundamental; it was not willing to assume that risk, even in return for a payment. Mr McFadzen said that, by November 2007, the designs were not as well developed as was needed to price and assess commercial risk [PHT00000034, pages 51–52]. He said that giving a fixed price on the basis of incomplete designs would mean that the consortium bore the whole risk of any increases in cost arising in the course of completion of the designs. He said that to take the risk for all the matters for which there was no information would be “commercial suicide” [ibid, page 65]. Mr Flynn, the Director of Major Projects for Siemens, recognised **tie**'s desire for a fixed price, but said that Siemens was clear throughout that, in the absence of a completed design, there was not going to be a fully fixed price [PHT00000045, page 32]. He said that the desire for a fixed price was not acceptable to organisations, such as Siemens, who wished to limit their liabilities and risk [TR100000151_C, page 0004, paragraph 18].

Final Business Case

- 10.16** The result of all the above factors was that, at the start of December 2007, there was still no firm price. Before turning to the actions taken to address this, to keep matters in broadly chronological order it is necessary to consider the terms of the FBC. In Chapter 22 (Governance) and Chapter 23 (OGC and Audit Scotland), I note that the intention had been to adopt the PRjects IN Controlled Environments (“PRINCE2”) method. In that method, the business case is a document that is critical to identifying what the project should deliver and what the costs will be. It is intended to be a “living” document that is updated to reflect changing situations that arise as a project develops. In this context, it performed the additional functions of informing councillors of the details of the project and providing a factual basis on which a decision could be taken as to whether or not to proceed. Two versions of the FBC were prepared in 2007. FBCv1, dated 3 October 2007 [CECo1649235, Parts 1–11], and FBCv2, dated 7 December 2007 [CECo1395434, Parts 1–11]. I have focused here on FBCv2 as it was the last version to be produced and was available to members of CEC when they were asked to vote on the project. It recorded that responsibility for delivering the project had been given to the TPB by CEC through Transport Edinburgh Limited (“TEL”) [ibid, Part 2, page 0024, paragraph 1.110], and no mention was made of **tie** in this context. Notwithstanding this statement, FBCv2 was prepared by employees of and consultants retained by **tie**.
- 10.17** In discussing the FBC in this chapter, I may appear to repeat observations made in Chapter 5 (Procurement Strategy). While acknowledging that such repetition may occur, I consider making these observations to be worthwhile in the different contexts under examination. The FBC ran to 209 pages. There was nothing in it to indicate what had changed from the draft version provided in November 2006. A

large part of it consisted of arguments for the project generally rather than details of the position that had been reached in relation to costs, risk, contracts and other issues that had been developing materially since the draft. It may be said that if CEC was to make a decision to commit to the project, it was appropriate that the whole of the project data be set out. It might have been appropriate that councillors should have all information, but the manner in which it had been provided meant that a lot of it duplicated information that had already been given. It seems to me that, bearing in mind the decision that councillors required to make in December 2007, they would have been better served had they been referred to information that had already been provided, followed by a statement of data on key issues and any areas in which there had been changes. This would have enabled them to concentrate on the price, the procurement strategy and the treatment of contracting risks. I accept that Mr McGougan said at the meeting of the TPB in September 2007 that, in view of the change in Council administration, it was necessary to "sell" the project. It remains the case, however, that this had already been undertaken over many years, and the purpose of the approval was to ensure that the financial case had been made. I do not consider that this is a point that can be made only with the advantage of hindsight. Had anyone asked what councillors needed to know in order to take the decision in December 2007, they would not readily have found it in the FBC. This is all the more important when regard is had to the number of items of business that the meeting of the full Council was to consider on 20 December 2007. The minutes of the meeting [CEC02083446] ran to 43 pages and considered 41 items. The consideration of the FBC was item 14, which appears on pages 0018–0021 of the minute. There are 13 paragraphs to the motion that was moved in relation to the project.

- 10.18** Apart from the difficulty in accessing the most relevant information within it, FBCv2 contained a number of inaccurate and misleading statements. It is therefore useful to look at its contents in relation to some of the key issues that existed in early December 2007.

State of contracts

- 10.19** Relevant paragraphs from FBCv2 are quoted below and are followed by my critique of them.

"1.3 ... a. The procurement of the principal contracts has reached a stage where all material terms are agreed, including the capital, operational and maintenance costs;

"[...] 1.4 After an intensive and lengthy competitive procurement process, the capital and maintenance costs of the scheme have now been finalised at a level slightly below the DFBC estimate." [CEC01395434, Part 1, page 0007.]

- 10.20** In fact, there was no agreement as to the costs for the contract for the infrastructure work. Far from such costs being "finalised", as noted in paragraph 1.4 of FBCv2 (above), intensive efforts were still under way to agree the price. Below, I consider negotiations later in December 2007 and the extent to which there was agreement by the time of CEC's meeting but, taking these statements at face value on the date of the report, they are incorrect.

Estimates of cost

10.21 "1.4 ... Based on firm rates and prices received from the bidders for system construction, vehicle supply and maintenance, the capital cost for Phase 1a, the tram line from Edinburgh Airport to Newhaven, is forecast at £498m.

"... 1.65 Building on the detailed cost estimates prepared in November 2006, and incorporating the firm rates and prices received from bidders in 2007, the updated project cost estimates reflect the agreed scope for Phase 1a and a programme for delivery of Phase 1a by the first Quarter 2011. If the option for Phase 1b was exercised within the window of opportunity to March 2009, it could commence revenue service in 2012.

	Concurrent construction	Sequential construction
Phase 1a	£498m	£498m
Phase 1b	£82m	£87m
Phase 1 in total	£580m	£585m

"... 1.73 On 27th June the Scottish Government confirmed support for up to £500m funding for the Edinburgh Tram scheme. In January 2006, CEC made an in-principle commitment to make a contribution of £45m towards the capital cost of Phase 1, to be deployed initially on Phase 1a. Therefore, the benchmark total funding package is currently £545m. The updated cost estimates above reflect that Phase 1a, at a cost of £498m, is affordable within this level of funding, with 14% headroom over and above the 15% risk allowance provided for in the cost estimate.

"... 10.4 The tender processes for the Tramco and Infraco contracts are close to completion and disclosure in this FBCv2 must respect the commercial sensitivity of the tender process. Reference to cost estimates is restricted to totals only and certain other sensitive commercial terms are described in summary terms only. The full detail of the submitted and negotiated bids has been discussed with Council officials and has been subject to the project governance and approvals processes. The cost estimates set out in this section reflect the terms of the anticipated preferred bids for the Infraco and Tramco projects.

"... 10.9 The 'updated estimate' was reflected in the DFBC, as follows:

Phase 1 in total	£592m
Phase 1a only	£500m
Phase 1b incremental cost	£92m

"10.10 The estimated total inflated cost of Phase 1 had increased by approximately 4%, compared to the estimates reported in January 2006, reflecting clarification with regard to scope, progress on design and the inflationary effect of an extension to the target opening date.

"10.11 Based on the estimating methodology used, the level of certainty and confidence associated with the updated estimate was considered to be relatively high. Nearly 98% of the costs were estimated based on rates and prices from firm bids received, known rates applied to quantities or based on market rates applied to quantities derived from Preliminary Design. The level of confidence was reinforced by the benchmarking exercises completed and the relatively high allowance for risk

included in the estimate, as explained below." [\[ibid\]](#), Part 1, pages 0007, 0016–0017 and Part 8, pages 0160–0161.]

- 10.22** The same issue that was highlighted above arises here: there was no finalised agreement for firm prices for the Infraco contract. There was not even agreement as to the rates for that contract, although rates had been agreed for the Multi-Utilities Diversion Framework Agreement ("MUDFA").
- 10.23** The manner in which the estimate of £498 million as the total cost is presented gives the clear impression that it has been built up in some detail from the underlying contracts. When the issue was considered in the evidence to the Inquiry, it was apparent that this was not the case. However, the same figure had been stated in the first version of the FBC ("FBCv1"), which had been prepared months earlier, in October [\[CEC01649235\]](#), Part 1, page 0016, paragraph 1.65]. As this is an important issue, it is useful to set out the relevant evidence of Mr Gallagher in full.

"Q. The Inquiry may hear evidence in due course from Neil Renilson to the effect that you had said to him in a meeting: we can't possibly put out a figure in excess of 500 million, let's make it 480 million, it starts with a 4. And you said: 'Watch me. Well, not 480 million. What we're saying is we need to have something that starts with a 4. GBP490 million is too bloody obvious. Let's make it 498'. What's your comment on that?

A. My comment is that we had to – we had a discussion at the time about what we felt the final number should be. And I wanted to signal a number less than 500 million. Neil's advice was funnily enough to go with a range, which I think – I think I have already said that I think I would have went with a range. I wouldn't have went with a final number. So I would agree with Neil.

Q. What do you mean when you said there in your answer: we were having a discussion as to what the final number should be. [sic]

A. Well, it was a number that was going to go into the public domain. That's all we're talking about here.

Q. And essentially that was something that you just chose?

A. No, it was something that there was a range of options available to us, and we had to decide what we felt was our target budget number was going to be.

Q. So how did you choose benefit [sic] [between] the various options that were available to you?

A. I think that there was a range of outcomes, and I have to couch this in – I can't remember. I think there was a range of outcomes put forward to us by the team, and I think there was a discussion at the Board. It wasn't my decision. It was a discussion at the Board. And there was various input from various Board members, and the Board collectively decided what the final number would be.

Q. Mr Renilson is saying it was entirely your decision that it had to start with a 4, and he said –

A. No, it couldn't have been my decision. It would have been the Board's decision.

- Q. What you're saying in your answers here, it seems, it wasn't something that was decided from an objective analysis of the numbers. There was an element of choice as to what this number would be?
- A. I would disagree with you and say it wasn't decided by an objective analysis of numbers. It was. But there was an element of choice between an allocation of where you felt your final negotiations were going to be, and also what the element of risk that you wanted to be. I felt that by going with a number which was less than 500, it would help in the negotiations with the Infraco and the other tenders that were underway [sic], because it helped set a kind of lower ceiling number, and that was the rationale. But at the same time I was conscious of the fact that I wanted to be able to achieve, or the company wanted to be able to achieve a successful outcome to the negotiations. And if you're saying, why was 498 the number, it was probably the balance between these two complete – competing objectives.
- Q. If you say it was – the number of 498 was put on it, that was what was chosen, that seems to imply that it was also known that that could go over. Just because you had chosen that figure, doesn't mean that was what it was going to cost?
- A. No. And I think what we said at the time, and I think when I was communicating that, that this was the target number. There was funds available for – to build the network, which was fixed. We were going to do all we could to try and minimise the cost, because at that time I was hoping that if possible, we could get below that number, because the original proposal for the tram network was to build tramline 1a and tramline 1b. Now we were only talking about 1a, and my hope would have been that if the construction had went well, then there may have been a political appetite to have found some additional funds to be able to build the full network that was envisaged.
- Q. Once you had announced the figure of 498, or fixed on that in the Version 1 of the Final Business Case in October, it was essentially necessary that you brought the final Final Business Case in at that figure or less?
- A. No. I think – I think what would – what would have been the case would have been that if the negotiations had moved, we would have to accurately report to the Board, or the Board would have to accurately report to the City of Edinburgh how the final negotiations ended up.
- Q. Was there not a practice of adjusting the risk allowances or value engineering figures to ensure that it always came below the figure?
- A. No.
- Q. Because it came in exactly as £498 million again in the December Final Business Case?
- A. No. There was no – if the final number would have had to have been 510, if it had to have been 470, it would have been the number that was the number. If it was relatively close to what we had said before, and there was no reason to change the number, then that's what we would have done. But no, there was no predetermined that we were going to design the numbers to achieve the same output. It was based on what the analysis was at that time." [PHT00000037, pages 40–45.]

10.24 In relation to the cost estimate of £498.1 million in paragraph 10.36 of FBCv2, Mr Renilson gave the following evidence

"Q. In your statement, if we take a look at this for a moment, please, at page 66, could we enlarge paragraph 204, please. [sic]

A. Yes.

Q. We see here you set out: 'Regarding the issue of GBP498 million I remember very clearly attending a heavyweight meeting in one of the rooms at Citypoint in 2007. I recall there were no politicians present, but that David Mackay and Willie Gallagher amongst others were there. I recall that the latest cost advice was somewhere well above GBP500 million, GBP530 million–GBP540 million or thereabouts. I recall Willie Gallagher saying words to the effect of we can't possibly put that out because that sounds like an absolutely huge increase. Let's take it down, let's make it, say, GBP480 million. That figure doesn't sound nearly so bad, it starts with a four. Someone said that he could not do that and his response was, watch me, well, all right, not GBP480 million. What we are saying is we need to have something that starts with four. GBP499 million is too bloody obvious, let's make it GBP498 million. A discussion ensued. That's where the GBP498 million came from. This was not Gallagher acting alone, most of those present either agreed, or acquiesced.'

I presume you would include yourself in that?

A. Correct.

Q. I have to suggest to you that what the position was at that meeting was that there were a range of costs available, running from somewhere down to about GBP480 million all the way up to GBP530 million. And it was necessary to exercise judgment on various factors to determine which figure within the range should be put forward.

A. Absolutely.

Q. It was a question of trying to decide, rather than taking the top end figure, say GBP530 million, where it would be put, and there was a collective exercise of judgment?

A. Correct.

Q. That came to be that the correct figure was GBP498 million?

A. Correct.

Q. And it wasn't a situation that we just want to squeeze it down beneath GBP500 million?

A. Yes. Well, it wasn't just that situation. It was important. It was deemed important by all present that the figure started with a 4. Well, as verbalised by Willie. But it was where do we settle? It could have been, as you say – I can't remember the specific figures, but quite possibly somewhere between 480 and 530." [PHT00000040, pages 106–108.]

10.25 It is very obvious that what Mr Gallagher said about the figure of £498.1 million being a "target number" is wholly inconsistent with the way in which it was presented in the FBC. There, it is presented as a cost derived from empirical data and not the figure that management "felt" should be given. The discrepancy between the impression

created in the FBC and the means by which the figure came to be included in it for price is even more marked when one considers an email dated 25 October 2007, which Mr Gallagher sent in reply to an email from Mr McEwan [CEC01453723]. Mr McEwan's email was forwarding a copy of a proposed presentation on VE. VE was a means by which it was hoped that savings could be made on the contract price without compromising the functioning of the works. In his email reply Mr Gallagher stated:

"Let no one be [in] any doubt, we will be going back [to the Council] with a number of £498m for Phase 1(a). Get cracking on whatever needs to be done." **[ibid]**

- 10.26** When asked about this, Mr Gallagher maintained that this was simply him indicating what the budget was. He explained that it was necessary to set a target to avoid increases in costs and to avoid the impression that it was acceptable for costs to increase **[PHT00000037, pages 39–40]**. I reject this explanation of the email. While I accept that setting a maximum price would put pressure on everyone to avoid cost increases, that is not what the email says. It is plainly making a statement that the sum that will be taken to the Council is £498 million. It is not a coincidence that this is the figure that had been contained in the draft FBC.
- 10.27** As a generality I did not think that either Mr Gallagher or Mr Renilson were witnesses of credit. However, on this matter I preferred the evidence of Mr Renilson to that of Mr Gallagher where there were discrepancies between them, not least because Mr Renilson accepted that he had agreed or acquiesced in Mr Gallagher's proposal to quote a fixed figure of £498 million. I considered that his evidence to that extent was a statement against interest and that it was improbable that he would have fabricated evidence that implicated himself. Putting the evidence quoted above in the context of the email and the draft FBC, it is clear that, although a range of possible figures was justified by the material available at the time, that range was not given and instead an essentially arbitrary figure was chosen for effect. Months before the negotiation on price, Mr Gallagher had made up his mind what price he would report to CEC, and there was a fixed intention that that arbitrary figure was then to be repeated for the FBC. With the uncertainties that existed at the time in relation to pricing, there could be no criticism if only a range had been quoted, and this would have been the most appropriate way to communicate the reality of the situation. Equally, it could be seen as legitimate and as being in the interests of the project to choose a figure within the range as a target or an aspiration. However, simply to choose the figure that the Board "felt" was correct and to present it as a figure derived from "firm rates and prices" was highly misleading.

Procurement strategy

- 10.28** "7.7 **tie**'s Procurement Strategy has resulted in it taking a greater degree of control over the process during the early 'development' phase, compared to what the public sector has done on other projects. This has resulted in **tie** progressing the overall project sufficiently in advance of seeking bids from Infraco bidders such that it was able to offer the private sector Infraco and Tramco bidders a better defined basis on which to bid and a less onerous risk allocation (and in particular reducing the extent of design and approval uncertainty at bid stage). Therefore the private sector were able to price their bids with a greater degree of accuracy and certainty than has been achieved on other projects. In this way, **tie** believes it has significantly reduced the cost of the overall project, having considerably de-risked certain of the elements of the project that fall to the private sector to deliver. This is shown by the minimal risk allowance included in the Infraco and Tramco bids.

"... 7.9 The objectives of the Procurement Strategy are summarised as follows:

- Transfer design, construction and maintenance performance risks to the private sector
- Minimise the risk premium (and/or exclusions of liability) that bidders for a design, construct and maintain contract normally include. Usually at tender stage bidders would not have a design with key consents proven to meet the contract performance obligations and hence they would usually add risk premiums for this.
- Mitigation of utilities diversion risk (ie potential impact of delays to utilities diversion programme on Infraco works).
- Gain the early involvement of the operator to mitigate risks on takeover of the operation Tram Network

"... 7.13 In summary the key attributes of the strategy are:

- Separate procurement of utilities works to enable completion of the utilities diversions before commencement of infrastructure works, thus reducing risk to the construction phase and avoiding the risk premiums that would otherwise be included if this work was included with the Infraco package;

"... 7.100 The principal attributes of the procurement approach for this contract are:

- Lump sum price for delivery into service of the tram system. Thereafter lump sum payment each period for maintenance works, subject to performance adjustment;

"... 7.111 The key benefits of the Infraco procurement strategy are primarily through the award of a single turnkey fixed price contract and in the novation of the SDS and Tramco contracts and the transfer of risks to the Infraco. The benefits include [...]

- Full design risk passed to Infraco post contract award, including critically the deliverability of the design;" [CEC01395434, Part 5, pages 0097–0099 and Part 6, pages 0113–0116.]

10.29 The statements concerning implementation of the strategy are misleading. The design had not been progressed as intended, a consequence of which was that the bids had not been priced with a "less onerous risk allocation" [*ibid.*, Part 5, page 0098, paragraph 7.7]. There was a significant element of the works for which the consortium would not give a firm price. It could certainly not be said that there was minimal risk allowance within the bids, or that risk premium had been minimised. As matters then stood, **tie** was not in a position to say that it would be in position to conclude a "single turnkey fixed price contract" [*ibid.*, Part 6, page 0115, paragraph 7.111] as they could not get firm prices. Overall, it must have been apparent to **tie**, TEL and the TPB on 7 December that the procurement strategy had not worked and was being departed from, and yet they represented in the FBC that it was still being implemented. As is evident from the consideration below, the position was even worse by the time of CEC's meeting on 20 December. By then, it was clear that the price for the Infraco works had not been fixed and the transfer of risk of design had not been achieved.

Work on design

10.30 "7.51 ... The Infraco bidders have prepared their bids on the basis of the emerging SDS designs and the successful bidder is required, following a process of due diligence of the design, to adopt the SDS provider's design as at the date of Infraco contract signature. Variations to this design can be introduced with the agreement of **tie**, but at the risk of the Infraco unless they represent changes to **tie**'s Employer's Requirements (ERs), which are at cost to the public sector.

"... 7.53 The original assumption was that overall design work to Detailed Design would be 100% complete when the Infraco contract is signed. Due to a number of delays, largely outwith **tie**'s control, this is now not achievable. However, by identifying key risk areas and prioritising SDS activities, **tie** is completing several key elements of the Detailed Design in time to inform the Infraco bids on price-critical items. This has enabled the Infraco bidders to firm up their bids based on the emerging Detailed Design and thereby reduce the provisional scope allowances and design risk allowances that they would otherwise have included.

"... 7.60 Following novation of SDS, after completion of the design due diligence process at Financial Close, the design risks pass to Infraco (although **tie** will retain a collateral warranty over the work of the SDS provider), but without the disadvantage of substantial risk premiums applied by Infraco bidders where design works are executed post contract award. Therefore, **tie**'s approach will provide the benefits of having a designer involved in the project from an early stage, whilst retaining substantial risk transfer to the private sector.

"... 7.61 In more detail the key delivered benefits of the SDS strategy are as follows:

- Delivery of preliminary design and key elements of the detailed design has resulted in a reduction in risk pricing in the Infraco tenders [...]
- Early design of utilities has enabled commencement and completion before commencement of Infraco works, which again reduces overall programme duration;
- Reduction in risks associated with utilities diversion – early completion of utilities diversions will result in a reduced likelihood that utilities works will disrupt progress of the main infrastructure works. It has also reduced pricing premiums because utilities diversion cost is a risk that the private sector has found difficult to assess and then manage;" [ibid](#), Part 5, pages 0105–0107.]

- 10.31** It is noteworthy that the FBC gives no intimation of just how much of the detailed design was still outstanding. As this was material for the purposes of the implementation of the procurement strategy, this is a striking omission.
- 10.32** As noted above, the statement that there had been a reduction in risk pricing as a result of the design being prepared is not borne out by the facts. While it is correct that the design process was ongoing and it was hoped that the price could be firmed up, this text, particularly when read with the passages above about the procurement strategy, does not give an accurate account of the extent to which there was a departure from the procurement strategy in relation to completion of design. At the date of the FBC, as **tie** was aware, the consortium was indicating that it could not firm up its price and blamed this on the absence of design.
- 10.33** It is not clear what is meant by the section referring to transfer of design risks. The reference to provision of a collateral warranty tends to indicate that it means the responsibility for ensuring that the design was correct and workable. If that is so, the statement that the risk passes to Infraco is not quite correct. Prior to novation, the risk of that lay with Parsons Brinckerhoff ("PB") under the contract for the provision of the System Design Services ("SDS contract"). After novation, the ultimate responsibility still lay with PB, but the obligation would be owed to the consortium, which, in turn, would owe obligations to **tie**. It was never the case that that risk lay with **tie**.

10.34 "Design risk" or similar expressions such as "design completion risk" or "risk of design completion" were not always used in a consistent way, either at the time or in evidence to the Inquiry. They could be used to refer to the cost of completing the designs or to the increase in the construction costs arising from changes to the designs that had to be made to reach the stage of completed design. The first risk arose because, by December 2007, it was clear that, at the time the Infraco contract was to be signed, the design work that it was intended would be undertaken by PB to **tie** would not be complete. Had the work been done before signature of the Infraco contract, it would have been paid for by **tie** under the SDS contract. There was an issue as to who would pay for the work that would have to be undertaken after the Infraco contract was signed and the SDS contract was novated to the consortium. The second issue arose because a completed design was not available in December 2007 and it was at least possible that the design as finalised would cost more to construct than was apparent from the design as it stood in December 2007. The lack of consistent use and understanding is likely to have contributed to the confusion apparent in the period up to signature of the contract as to transfer of the risks that existed in relation to design.

MUDFA

10.35 "7.78 The physical diversion of utilities commenced in July 2007 and is scheduled to end in winter 2008. This will result in the majority of utilities diversion works being completed prior to commencement of 'on street' works by Infraco. This means that potential conflicts between the utilities and infrastructure works will be minimised and any remaining time overlap can be managed so as to avoid programme conflicts on the ground. To date work has commenced on some of the most congested sections, such as Leith Walk, and it is expected to be complete on cost and programme.

"... 7.82 Key risks remaining with the public sector [for MUDFA] are as follows: [...]"

- **Price risks** – MUDFA is essentially a re-measurement contract and there are a number of areas in which there is a risk of price increase including extension of time, unforeseen obstructions and work which was unquantifiable at the time of tendering, but is reasonably foreseeable. These risks are managed in a number of ways:
 - The use of prime cost sums in the bill of quantities to make a provision for foreseeable but unquantifiable work;
 - The use of provisional items in the bill of quantities. These work in a similar way to prime cost sums, but are used where there is more doubt about whether or not the work in question will be required; and
 - Contractor incentivisation scheme in the MUDFA contract under which the contractor shares benefits arising from efficient delivery. This helps to ensure that it is in the contractor's interest as well as **tie**'s that the contract outturn cost be minimised." *ibid*, Part 5, pages 0109–0110.]

10.36 Avoiding the situation in which MUDFA works interfered with and caused additional costs to the infrastructure works had always been an important part of the procurement strategy. However, the Inquiry had evidence from Mr Rumney that the proposed timescale was obviously unrealistic. This ought to have been apparent. It meant that the sort of conflicts that the strategy sought to avoid would inevitably become a reality. As a result, the FBC did not accurately represent the situation.

Risk

10.37 "1.82 These arrangements provide early involvement of the tram system operator, risk transfer to the private sector at an affordable level, a shorter overall programme and a single point of responsibility for the delivery of the operating tram system and subsequent maintenance." [libid](#), Part 1, page 0019.]

10.38 There is a theme throughout the FBC that risk was transferred to the private-sector entities with whom contracts had been or would be concluded. This was something of significance to councillors when they considered the project. In view of the importance placed on this within the FBC, which, in turn, recognised its importance to CEC, it would be expected that achieving this risk transfer would be a priority. As the evidence as to what happened from December until contract close demonstrates, this was not the case.

"1.85 As the project moves towards physical construction, the following are the most significant risks which could impact on the delivery of the project on time and within the capital cost estimates (including risk allowances):

- **Utility diversions – tie** will manage the interface between utility diversions and the follow-on works by Infraco. A significant delay in the hand over of worksites to the Infraco could result in significant financial penalties to the extent these are not met by the MUDFA contractor's liability limits. For this reason, a prompt start to these works was made in 2007, including advance works at the Gogar depot site. This allowed some of the delay, caused by the review of the project following the May election, to be absorbed. The current programme is fully aligned with the preferred Infraco bidder's programme of works and progress to date has been excellent with no major issues encountered so far;
- **Changes to scope or specification** – A great deal of care has been taken in defining the scope and specification of the tram project throughout the Parliamentary process and during design development, with input from TEL and Transdev and extensive consultation with CEC and TS. However, significant unforeseen changes to scope and specification could have a very significant impact on the deliverability of the project. Similarly, any changes introduced by stakeholders that are over and above the approved scope will increase the project estimate. Effective management of the consideration of changes through the Governance processes implemented for the project will be vital to mitigate this risk; and
- **Obtaining consents and approvals** – Responsibility for the preparation and application for most necessary consents and approvals has been passed to the SDS provider and this risk will pass to the Infraco at the point of novation. However, **tie** and the other stakeholders must continue to ensure there are clear strategies and effective processes to deliver all consents and approvals including planning approvals and Traffic Regulation Orders (TROs)." [libid](#), Part 1, pages 0019–0020.]

10.39 As was noted in paragraph 10.36 above, Mr Rumney explained that it should have been apparent that the MUDFA works would take longer than planned and that there would be a consequent impact on the Infraco works. The statement in the FBC gives the impression that part of the cost impact might be borne by the MUDFA contractor – the reference to their liability limits. This was not an accurate statement of the position. There was no penalty to the MUDFA contractor if the works took

longer. Even ahead of conclusion of the Infraco contract, there should have been an understanding within **tie** that there would be a cost consequence for **tie** if this occurred.

"10.29 The contractual structure for the Infraco and Tramco contracts effectively creates one legal relationship, improving risk transfer from the perspective of the Council. The negotiations on the bids submitted during 2007 have resulted in an aggregate capital cost from the anticipated Preferred Bidders, which is in line with the November 2006 estimate.

"10.30 The final aggregate cost remains subject to finalising the terms of the contracts in the period to Financial Close. A risk relating to late cost escalation is normal in these circumstances but the extent of the risk is assessed as minimal. The risk is being managed through the creation of detailed deal packages which confirm the principal agreements reached during the competitive tender stages. The resulting draft deal ensures that the preferred bidder status has legal standing and commits the bidders to the obligations agreed to during negotiations. Additionally, the main price critical design elements have been incorporated, with provisional allowances for final roads, paving and structures designs." [libid](#), Part 8, page 0163.]

10.40 As was noted in paragraph 10.14 above, the negotiations with the consortium at the date of the FBC were incomplete and it was not accurate to say that it had resulted in an aggregate capital cost in line with the November 2006 estimate. Even allowing for the normal risk relating to late cost escalation, the impression created by the above section of FBCv2 is that such risk would be minimal and managed with the result that the final contract price would reflect the estimate mentioned above.

10.41 As far as the infrastructure works were concerned, there was nothing in the evidence of the nature of "detailed deal packages which confirm the principal agreements reached during the competitive tender stages" [libid](#), Part 8, page 0163]. It is also not apparent that the preferred bidder was in any practical way committed to obligations agreed during negotiations. If anything, as Mr Crosse noted, the effect of appointment of the consortium as preferred bidder had been to change the power balance [[PHT00000021](#), page 129] and made it difficult to get firm prices. In addition, although it might be said that the start of MUDFA was prompt, there had been a period of several months when nothing was done pending the outcome of the Scottish Parliament election and a decision of the incoming administration as to whether it would proceed with the project.

"11.14 A number of key areas with potential to delay the project programme (with consequential cost impact) have been identified. The following bullet points outline the risks identified at the DFBC stage and beyond and sets [sic] out their current status and mitigating actions: [...]

- Infraco tenders are unaffordable, bidders withdraw or bids are late requiring delays to the approval process: Affordability risks were being mitigated at the DFBC stage by developing and updating the estimate of capital costs for Phase 1 of the project with independent validation of the estimate by TSS and benchmarking of costs against those of other comparable tram systems. The revised cost estimates in section 10 now fully incorporate the negotiated prices from the Infraco bidders. As the negotiations are nearing completion, this risk is less significant;

"... 11.16 Although the cost estimate is based on the negotiated contracts for Infraco and Tramco, a number of capital costs risks remain.

"... 11.17 Risks have been identified in relation to the progress of Detailed Design and the progression of TROs which could affect the overall programme. **tie** have mitigated these risks as follows:

- Progress of Detailed Design – through a staged release of design information to Infraco bidders, the project maintained the flexibility for Infraco to take a greater role in design development and by applying effective project and contract management to the design process. Further, the acceptance of the SDS design by the Infraco is dependent on the outcome of their due diligence of the design;
- Progression of TRO's – by consultation with CEC on detailed traffic modelling and close alignment of TRO programme with the construction programme. A detailed TRO strategy has been developed by **tie** as set out in section 9." [CEC01395434, Part 8, pages 0171–0173.]

10.42 The comments above in relation to the state of negotiations with the consortium apply here also. The comment that "through a staged release of design information to Infraco bidders, the project maintained the flexibility for Infraco to take a greater role in design development and by applying effective project and contract management to the design process" does not reflect the reality of the reasons for the piecemeal release of information. It was not done to maintain flexibility or to give the bidders a greater role in design development; it was done because there was a failure to have the design ready on time. Efforts to apply effective project and contract management to the design process had failed to have any material effect on the progress of the design as noted above and had been discussed in meetings of the TPB throughout 2007.

"11.46 There is no standard contract for use in tram schemes which embodies a settled approach to responsibility for risk and its financial implications. Bespoke forms of contract have been prepared to meet tram requirements and the proposed risk allocation, and bring consistency to the legal framework on key terms eg dispute resolution. **tie** and its advisors have used experience from previous tram schemes and the proposed risk allocation as a basis for settling contractual provisions where appropriate.

"11.47 In the development of the contracts, **tie** and their advisors have designed risk allocation matrices to reflect the allocation of risks to private sector, public sector and those that are effectively shared. This is in order to construct the contracts, with clarity of those risks which the private sector will take (and allow for within their bids) and those risks which the public sector will need to manage.

"11.48 Set out below are the key risks that **tie** is responsible for managing up to award of Infraco.

- Model development, ticketing and fare strategy;
- Tram priority in highway;
- Land acquisition and compensation;
- Detailed Design development;
- Agreements with heavy rail parties;
- Public utility diversions;
- Consents and approvals;
- Project Management; and
- Programme and Cost Management.

"... 11.54 Risk for the execution of utilities diversions has been transferred under MUDFA. The scope of work has been specified by the utilities and designed by SDS and the risk that these are significantly greater than anticipated are covered by the public sector. **tie** had carried out detailed survey works under SDS to get a view of the quantity of works to be required. Additional survey and trial hole works have now been undertaken by AMIS to obtain greater clarity of both quantity and accuracy of the location. Together with the significant allowances included in the risk register, this approach mitigates the exposure of the public sector.

"11.55 Should MUDFA fail to complete in time to allow Infraco on to the site, then the public sector will be responsible for delay to Infraco works. However, in certain locations, utility diversions will be undertaken by the Infraco contractor, as this provides practical advantages for construction works or traffic management reasons. **tie** is mitigating the risks to programme arising from delays in MUDFA by incentivisation of the MUDFA contractor to complete on time. This risk further minimised by:

- (i) The early involvement of the MUDFA contractor during design development with SDS;
- (ii) The early scheduling of utilities diversion works which are anticipated to be significantly advanced, by the time that the Infraco contract is signed; and
- (iii) Release to Infraco, as staged handovers, of completed sections.

"... 11.59 **Design** – Changes in design which are required by the public sector after the signing of the Infraco contract will be at the risk of the public sector. The progress of detailed design has somewhat mitigated this risk. However, a significant failure in the agreed design will effectively be transferred to the Infraco contractor following novation. Provision of consents for Prior Approvals and Temporary and Permanent TROs by the statutory authorities remains a public sector risk, but provision of the necessary information in the required format and timescales will be at the risk of SDS and/or Infraco." [*ibid.*, Part 9, pages 0178–0181.]

10.43 The use of the term "risk" is often misleading in these paragraphs. What is being considered is the identity of the party to whom a particular responsibility has been allocated. So, paragraph 11.48 sets out the responsibilities of **tie** rather than risks and, in paragraph 11.54, it is not accurate to say that the risk of execution of utilities diversions has been transferred under MUDFA. Although the responsibility for undertaking the work had been passed to Alfred McAlpine Infrastructure Services Limited/Carillion Utility Services Limited under the contract, the financial risk if the works cost more than predicted lay entirely with **tie**. A "risk" refers to the possibility that an uncertain event or situation (known or unknown) will occur. The issue is who will bear the additional burden – financial or otherwise – if the risk eventuates. This same issue is apparent in the risk tables that are referred to in this section of the FBC. Insofar as there is reliance, in paragraph 11.54, on the extent of site investigations to mitigate the risk that the scope of the MUDFA works is significantly greater than anticipated, this is considered in more detail in Chapter 8 (Utilities). Suffice it to note here that I have concluded from the evidence that the investigations were inadequate and failed to identify the scale of the diversions required.

10.44 In similar vein to the above, paragraph 11.55 skirts round the real issue and does not provide a clear statement to the effect that **tie** bears the risk in the event that the MUDFA works are not completed on time and they prejudice the Infraco works.

Quantification of risk and optimism bias

10.45 "10.12 The updated estimates comprised base costs and an allowance for risk and uncertainty. As part of the project estimate update, the Project Risk Register was updated with cost impacts and risks re-assessed. As explained in section 11, a rigorous quantitative risk analysis (QRA) was then applied to the risk and cost impacts to derive a risk allowance for a very high level of confidence (statistically at a 90% confidence level, meaning that there is a 90% chance that costs will come in below the risk-adjusted level).

"10.13 The level of risk allowance, so calculated and included in the estimate at that time, represented 12% of the underlying base cost estimates. This was considered to be a prudent allowance to allow for cost uncertainty at that stage of the project. It reflected the evolution of design and the increasing level of certainty and confidence in the costs of Phase 1 as procurement had progressed through 2006.

"10.14 **tie** continued to comply with the HM Treasury recommendations for the estimation of potential OB and had determined, in consultation with TS, that no allowances for OB were required in addition to the 12% risk allowance above.

"... 10.25 Since November 2006, all of the critical aspects of the project have progressed and revisions made to the cost estimates as necessary. The progress made and the impact on final costs is summarised below.

"... 10.35 A risk contingency sum has been retained in the final cost estimate. The level of contingency reflects the reduced risk attaching to project costs, in the light of the further work described above and, in particular, the conclusion of negotiations on the Infraco and Tramco contracts. This allowance provides an uplift of 15% on the construction period base cost estimates of Phase 1a, calculated using the QRA at this point in time. Added to the balance of the committed funding available for the tram, this allowance currently provides a headroom of 29% over the future Phase 1a costs. This is considered a very reasonable allowance for headroom.

"... 11.40 The Project Risk Register has been developed since the instigation of the project. Each item in the risk register contains a probability of occurrence and the range of minimum, most likely and maximum financial impacts, where appropriate. The financial impacts are over and above costs included in the base estimate. This allows a quantitative risk analysis (QRA), using Monte Carlo simulation, to be undertaken.

"11.41 Analysis showed that a 'very high' confidence that the outturn of the project costs will be derived from the inclusion of risk contingencies as shown below. **tie** has extended this analysis in the period through the current stage of negotiations and conditional award recommendation. **tie** will continue to apply this analysis through to final negotiation and award of the Tramco and Infraco contracts in January and include inputs from the continuing design negotiation and MUDFA progress.

Table 10.4. Risk allowances

Probability	Increase to base cost – DFBC	Increase to base cost estimate for future costs at contract award – FBCv2
Very high confidence – P ₉₀	12%	15%

"11.42 By the time of the DFBC, OB was effectively eradicated, as per the findings explained in the Mott MacDonald Review of Large Public Procurement in the UK. This was in view of greater scheme certainty and the mitigation of factors built into the procurement process, as well as project specific risks and environmental and external risks. Instead of using OB, TS and CEC adopted a very high confidence figure of 90% (P90) in the estimate of risk allowances to cover for specified risk, unspecified risk and OB.

"11.43 There are no proposed increased allowances for OB in addition to the above estimated risk allowances.

"11.44 The level of risk allowance represents a significant proportion of the project estimate value. In addition, there remains £47 million headroom between the project estimate and maximum funding available. This provides comfortable headroom of 29% over base cost estimates for future costs of Phase 1a at Contract Award.

"11.45 The development of the Procurement Strategy was one of the key elements of risk mitigation for the tram project. Risk has been quantified following a detailed assessment process performed by **tie** and its advisors in accordance with industry best practice and experience.

"... 11.60 **Utilities diversion** – As discussed above the risk associated with utilities diversion under the swept path of the tramway remains with the public sector. The risk of the impact of any delays caused by incomplete utility diversions at the time of commencement of on-site work by Infraco will be carried by the public sector (but it is expected that they will be complete in key areas)

"... 12.6 In order to have the depot built and commissioned ready for 1st tram deliveries in December 2009 an advance works contract has been awarded to allow for enabling works and mass excavation prior to Infraco commencement. The first two phases of this work have now been completed – some six weeks ahead of schedule." [**libid**, Parts 8–9, pages 0161–0188.]

- 10.46** In Chapter 21 (Risk and Optimism Bias) there is a detailed consideration of the way in which risk and optimism bias were managed in the project. For present purposes, it is enough to note that the approach to risk was flawed in that no account was taken of the fact that it was apparent by this time that it had not been possible to adhere to the procurement strategy, which had formed the basis on which it was assumed that risks were mitigated.
- 10.47** By email dated 7 December 2007 Mr MacKenzie sent a briefing note to Ms Lindsay from which it appears that the "B team" had concerns about the assumptions underlying the reduction in risk allowance and about potential additional costs [**CEC01400190**; **CEC01400191**]. Officials attending the meeting of the Chief Executive's Internal Planning Group on 11 December 2007 considered the briefing note which was reproduced as Appendix 3 of the papers for the meeting. Following that meeting there were further meetings between representatives of **tie** and CEC officials prior to the CEC meeting on 20 December in which **tie** representatives provided assurances about the adequacy of risk allowances, that the Infraco contract was 97 per cent fixed price and that BBS had accepted design risk. Moreover, representatives of **tie** had revised and approved the draft Report that had been prepared by Mr McGougan and Mr Holmes for the CEC meeting on 20 December. The Report that was submitted to councillors omitted references to the fact that design was only about two-thirds complete and that there was a chronic history of design difficulties. It also failed to mention that there had been delays and difficulties

with the MUDFA works. It also confirmed that the estimate of £498m for Phase 1a inclusive of a risk allowance as reported in October 2007 remained valid after taking into account the latest negotiated position. [CEC02083448, page 0005 paragraph 8.2]. I consider these issues in more detail in Chapter 13 entitled 'Events during 2006 and 2007', in the section from paragraph 13.123 to the end of the chapter. Although the ultimate responsibility for the Report to councillors rested with the authors of the Report **tie** must also bear some responsibility for misleading councillors in so far as the information provided to them was based upon FBCv2 and subsequent assurances given by representatives of **tie** to CEC officials.

Wiesbaden

- 10.48** As mid-December 2007 approached, some progress had been made in firming up the price element of the bid from the consortium. A Contract Cost Report attached to an email from Mr Gilbert to Mr Crosse dated 13 December [CEC00573343 contains both the email and the attachment] indicates that the provisional element of the bid from the consortium had dropped from just under £50 million at preferred bidder stage to a little under £15 million. Despite this, it was apparent that the efforts to have the consortium firm up its price entirely to accord with the procurement strategy were not bearing fruit. It was necessary to have the price finalised in time for CEC's meeting on 20 December, so, with a view to breaking the impasse, the management at **tie** considered that it would be useful to have a meeting between the most senior personnel for **tie** and the members of the consortium. Mr Gallagher explained that the intention of this was to get commitments from the senior representatives of the companies and to get them to agree the required price even if it included a risk premium [TR10000037_C, pages 0075–0076, paragraphs 245–246; PHT00000037, pages 52 and 59]. Mr Crosse stated that the sole objective of the meeting was to get the consortium to fix its price and "to accept most of the risk of design completion" [TR10000031_C, pages 28 and 0037–0038, paragraphs 84 and 111 respectively]. Mr Flynn said that the intention on the part of **tie** appeared to be that it wanted to firm up the price and to get the contract concluded. It sought to escalate the matter within BB and Siemens with a view to getting the contract finalised. He considered that **tie's** priority was the completion of the contract rather than securing a fixed price. The consortium had been clear throughout that there would not be a fixed-price contract [PHT00000045, page 32]. Mr Walker considered that **tie's** objective at the meeting was to get the price down to below the "gateway" or maximum price that it could agree in terms of the business case [TR10000072_C, page 0020, paragraph 31].
- 10.49** A meeting between the parties had already been scheduled for 13 and 14 December, at the headquarters of BB at Wiesbaden, and it was decided that these dates should be used for the meeting of senior personnel. Correspondence regarding pricing continued in the run-up to the meeting, and it is useful to look at that in some detail. By letter dated 11 December 2007 to Mr Walker [CEC01481843], Mr Gallagher referred to the proposed meeting of the parties in Wiesbaden, and said:

"Unless you are able to confirm that, by the end of Thursday's meeting, we will have been able to consider, and agreed the following items then I must state that **tie** will not attend and we will need to revisit the entire preferred bidder programme.

- 1 Price confidence: we ask you to consider fixing your price, save for a very few notable exceptions where for example the design itself is absent.
- 2 Price level: we ask that, having been through the value engineering exercise including the targets agreed at preferred bidder date – your price level and VE

savings are confirmed at a level that enables our project business case target to be met ...”

- 10.50** Although the letter raised issues of price confidence and price level, as well as other matters, in evidence Mr Gallagher said that what he really sought was a fixed price that delivered the scope of what **tie** was seeking to achieve [[PHT00000037](#), page 56].
- 10.51** Mr Walker replied the following day [[CEC00547788](#)], saying that prices could be fixed where design was available. The letter is written on the notepaper of the consortium but signed by him as managing director of BB. I have assumed that it reflects the views of the consortium because there could be no agreement with the consortium unless each of its members consented. In practical terms, the letter identified seven items marked “provisional” in the August price submission, which could be made firm for an increase in price of £8.12 million. The letter also noted, however, that assumptions had been made in respect of pricing and programming certainty. The assumptions in respect of design clarified that the consortium was unable to fix its price where design was absent, and gave typical examples of locations affected. Where design was partial, it had made reasonable assumptions based upon its experience, and Mr Walker expressed only “a high level of confidence in our pricing”. A further assumption was that design must be delivered by System Design Services (“SDS”) in line with the consortium’s delivery programme that had previously been submitted to **tie**.
- 10.52** Mr McFadzen, who had been involved in preparing the calculations in Mr Walker’s letter but who was not at Wiesbaden, considered that the effect of the assumptions was that in situations where there was only partial design, the consortium would have been able to adjust its prices, upwards or downwards, as further information became available [[TR100000058_C](#), page 0026, paragraph 93; [PHT00000034](#), pages 60–61]. He described the letter as being “round one” of the process of buying out risk. Mr Walker considered that where the consortium offered to firm up prices in return for an increase in price of £8.12 million, this was to be a fixed price [[PHT00000035](#), page 33]. It is therefore apparent that there was a lack of common view even within the consortium. I consider that the terms of the letter are quite clear. In exchange for £7.12 million, the consortium was offering to fix the price of six areas for which provisional sums had been included in its August submission. The offer in that regard was unqualified. As regards the seventh item, “Earthworks”, the price could be fixed in exchange for an additional sum of £1 million, subject to the qualification that that price did not include any allowance for replacement of any materials below earthworks outline or for dealing with below-ground obstructions or voids, soft material or any contaminated materials.
- 10.53** Mr Crosse referred to the preferred bidder update addressed to him, which was also dated 12 December 2007 [[CEC01482234](#)]. He considered that the issues raised in it were a smoke screen to avoid addressing the issues raised by **tie** in the letter of the day before. To illustrate this, he drew attention to the issue of building fixings that the consortium raised. This, he said, was a minor matter that all light rail projects had to contend with and that could be resolved in a pragmatic way [[TR100000031_C](#), page 0038, paragraph 112]. He said that, on 12 December, he and Mr Gallagher were close to calling off the meeting planned in Wiesbaden for the next day [[libid](#), page 0038, paragraph 114].
- 10.54** On 13 December 2007, Mr Gallagher responded to Mr Walker [[CEC00547779](#)]. He expressed disappointment and said that Mr Walker’s response to his letter did not give the certainty that was required. Although Mr Gallagher’s letter was sent on the

day on which the parties were to meet in Wiesbaden (13 December), it noted that if a way forward could not be found, Mr Gallagher would recommend to CEC that the project should not proceed. The letter required that the consortium should reply, saying that it would fix its prices in accordance with an attached schedule. Mr Crosse said that these letters were at the heart of a negotiating game [[PHT00000021](#), pages 134 and 171], that the threat to withdraw was a negotiating tactic and that he did not agree that the project should not proceed [[ibid](#), page 133]. However, at the time that these letters were being exchanged with **tie**, BB had said to Siemens that it wished to withdraw from the bid as, in the time between its offer and December 2007, steel prices had increased significantly [[TRl00000294](#), pages 0003–0004, paragraph 4(c)]. Mr Hofsaess was involved in meetings with BB to persuade it not to withdraw. These intentions indicate how difficult matters had become, and the scope for parties' positions to become entrenched. Despite the various threats and concerns in relation to the meeting, it did go ahead.

- 10.55** Prior to the meeting in Wiesbaden, there were meetings within **tie** to discuss the negotiation strategy that was to be adopted. No minutes were taken at these meetings, although attendees would have taken their own notes [Mr Crosse [TRl00000031_C](#), page 0037, paragraph 111]. Documents were produced by Mr Gilbert to brief Mr Gallagher and Mr Crosse [[CEC00573343](#); [TIE00087524](#); [TIE00087525](#); [TIE00035209](#); [TIE00035210](#); [PHT00000021](#), pages 137–138]. These disclose an intention to concede an increase in the price, in return for the consortium accepting the “design development risk” liability [[ibid](#), pages 139–143]. The papers produced by Mr Gilbert suggested that **tie** might have £10 million available, which could be given in return for the transfer of this risk. In this context, Mr Gilbert was clear that it meant the responsibility for absorbing additional construction costs arising from designs that were subsequently completed, and this is borne out by the wording of the documents. Mr Crosse referred to the consortium being asked to accept the risk of small design changes and VE [[TRl00000031_C](#), page 0038, paragraph 113], but this is inconsistent with Mr Gilbert's papers. Even although the document entitled “Infraco Deal Negotiations”, referred to below [[TIE00035210](#)], mentions “detailed design changes”, this was in contrast to “fundamental design changes” and did not require that all changes be “small”. I consider that Mr Crosse is confusing the issue of what was intended in December 2007 with the disputes as to drafting and interpretation that arose later.
- 10.56** Mr Gallagher said that he could not recall the papers produced by Mr Gilbert being discussed with him prior to the meeting [[PHT00000037](#), pages 66–67]. While this is understandable in relation to the VE issues, it makes no sense in relation to the issue of getting firm prices, because the main purpose of the meeting in Wiesbaden was to have a discussion between principals to break the impasse on this issue. That assumed that the principals – and Mr Gallagher, in particular – would have some knowledge about the point that they were attempting to resolve. Moreover, although the email sent by Mr Gilbert to Mr Crosse at 10.12 am on 13 December, enclosing the Infraco Contract Cost Report and the Infraco Deal Parameters, was not copied to Mr Gallagher, Mr Gilbert sent a later email, at 13.02 that day, to Mr Crosse and Mr Gallagher, with an attachment entitled “Infraco Deal Tactic” [[TIE00035209](#); [TIE00035210](#)]. This was a document headed “Infraco Deal Negotiations”, which listed what should be reflected in exchange for Infraco firming up the contract price, including “BBS taking the risk of design development to construction stage, excluding changes to design principles and adding scope”. I have concluded that Mr Gallagher must have been aware of the briefing notes from Mr Gilbert, but that his agenda was to secure an agreement on a figure that could be used to illustrate

that the project would be delivered within the estimated cost of £498 million even although he was aware that the agreed figure would be subject to unquantified and unquantifiable increases as design progressed. This is another example of **tie's** "financial engineering" approach, which was mentioned by Mr McFadzen in the context of the VE target savings sought by **tie**, which were mentioned in Chapter 9 on procurement up to the appointment of preferred bidder in October 2007, and is consistent with Mr Walker's view that Mr Gallagher's goal was to get the price below a "gateway" figure.

- 10.57** Accounts of who was in attendance at the meeting in Wiesbaden varied from person to person. There is general agreement that Mr Gallagher and Mr Crosse represented **tie**, Mr Flynn and Mr Hofsaess attended for Siemens, and Dr Enenkel and Mr Walker attended for BB, and I conclude that these were the persons who were in attendance. Dr Enenkel believed that Mr McFadzen was there [TR100000161_C, page 0016, paragraph 7; PHT00000034, page 128]. However, Mr McFadzen stated that he was not present, although he had been involved in the build-up to that meeting [TR100000058_C, page 0026, paragraph 93]. I have concluded that Mr McFadzen was not there and that Dr Enenkel was mistaken in that regard. Mr Flynn thought that Mr Brückmann had been there with himself and Mr Hofsaess [TR100000151_C, page 0011, paragraph 44; PHT00000045, page 37]. Again, no other witness refers to this, and I conclude that Mr Brückmann did not attend. Both Mr McFadzen and Mr Walker thought that Mr Metzger was there, but this is not referred to by other witnesses. Part of the confusion as to whether other people from BB and Siemens were in attendance may arise from the fact that the meetings were held at the offices of BB and that it had ready access to any of its staff and advisers. Mr Hofsaess recalled only attendance by Mr Gallagher, Mr Flynn, one board member of BB and himself [TR1000000294, page 0003, paragraph 4(a)], which would exclude Dr Enenkel and Mr Crosse.
- 10.58** There was some conflict in the evidence as to whether BB had the benefit of legal advice. Mr McFadzen, Dr Enenkel and Mr Walker thought that the BB legal adviser, Mr Korff, was in attendance, but this was not confirmed by either Mr Gallagher or Mr Crosse. On balance, in this regard I prefer the evidence of the **tie** witnesses, which is consistent with the points noted below in relation to the presence of legal advisers. Although I conclude that Mr Korff did not attend the sessions with **tie**, he would have been available on site and in a position to provide advice. Both Mr Walker and Mr McFadzen thought that Mr Laing of Pinsent Masons was also there, but Mr Laing denied this and no other witness spoke to his having been there.
- 10.59** **tie's** representatives did not take legal advisers with them. This is surprising, particularly as these events were taking place only a couple of months after DLA Piper Scotland LLP ("DLA") had been re-engaged by **tie** after it was recognised that standing that firm down had been a mistake. Both Mr Crosse and Mr Gallagher were asked why they decided not to take a legal adviser with them. Mr Crosse said that Mr Fitchie was not asked to attend, as the meeting was to discuss numbers rather than contract terms [TR1000000031_C, page 0037, paragraph 111; PHT000000021, page 134]. He said that Mr Fitchie would not have added any value at the meeting. In my view, this makes no sense. All the senior management team were – or should have been – aware that the difficulty in obtaining firm prices centred on the concerns as to the liability for increased costs where the designs were not completed. They were all aware that this was an issue of allocation of risk. That is a key element in the context of any contract negotiations and drafting. As the parties were clearly aware from the briefing papers that they would be discussing issues of allocation of risk, the sensible thing to do would have been to have access to legal advice. Also, it was foreseeable that BB would have access on site to its legal advisers, and this was another reason why **tie** should have

had the benefit of advice. As matters transpired, however, I conclude that the absence of legal advice did not determine the outcome of discussions to the prejudice of **tie**.

- 10.60** As for the role that each person had at the meeting, Mr Gallagher said that he had not been there to get involved in the detail [[PHT00000037](#), page 73], and he was at pains to point out that he had not been there to negotiate the deal [[TR100000037_C](#), page 0087, paragraph 276]. Instead, he said that he was there "to help close the negotiations on the discussions with the consortium". This begs the question as to how he could close the negotiations if he was not there to negotiate the deal. His job title indicated that he had an executive role within the company, and it is notable that he wrote the letters in the lead-up to the meeting, demanding that the consortium make the prices firm. As discussed below, I accept that, away from the main meeting, Mr Gallagher had private discussions with Dr Enenkel and Mr Hofsaess about the critical issue of price. The whole approach of Mr Gallagher to this phase of the progress to agreement put him at the very heart of it, and I reject his attempts now to distance himself from it. By December 2007, the issue of reaching agreement on price that enabled **tie** to report that the project could be delivered within the available budget of £545 million was so critical that it is inconceivable that he would genuinely forget his involvement in the relevant negotiations.
- 10.61** Similarly, Dr Enenkel said that he had been there for only part of the meeting and had played the role of a host rather than a negotiator. I reject his evidence as to his limited involvement. Other witnesses recorded him as having a more significant role [Mr Flynn [PHT00000045](#), pages 62–63] and, in particular, participating in the discussions between principals as will be discussed in paragraph 10.65 below. I prefer that evidence to the position adopted by Dr Enenkel.
- 10.62** Mr Gallagher said that the fact that the designs were behind schedule "was not a key issue at Wiesbaden" [[TR100000037_C](#), page 0079, paragraph 256]. I do not accept this statement. It is clear that it was the inability of **tie** to obtain designs timeously and its determination nonetheless to conclude the contract in the absence of designs that gave rise to the reluctance of the consortium to give firm prices. It was precisely that which led to the requirement for the meeting. It also has a critical bearing on what was agreed in the aftermath of the meeting. **tie** wanted a fixed price for the works, despite the design being incomplete. Mr Gallagher said that there were parameters within which the deal had to be done in order to be acceptable. One requirement was that the consortium accepted the design and development risk; if it did not, as Mr Gallagher put it, "in essence we would have no idea of what the end of the – the end product was going to cost" [[PHT00000037](#), page 69].
- 10.63** I have noted in paragraph 10.1 above that the evidence given by Mr Gallagher was not satisfactory in many respects. An example was in relation to his lack of recollection of discussions that he had had with a view to getting a fixed price. In the course of his oral evidence, the following exchange took place:
- "Q. Did you have discussions, though, about what the price would be and getting it fixed as opposed to variable?
- A. Actually, I truthfully can't recall. What we were trying to achieve at the time was the price that we had on the table, we want to get Bilfinger Berger Siemens to stand behind it. That's what we were trying to achieve. They had put in a request for 8.12 million. So I knew about that. And that was being analysed by the procurement people. So there was no response to that. But what we were trying to get to was a position where there was a price which would be acceptable to both parties, and an agreement on programme risk." [[ibid](#), page 74.]

- 10.64** It is difficult to understand how he could have expected to achieve his stated objectives without seeking to agree a price. Moreover, in contrast to his lack of recollection about the discussions about price, mentioned above, when asked about discussions regarding the design development risk, his position was that, by the end of the discussions, the parties had an agreement for a target price in which the consortium would take on the design development risk ([libid](#), page 76). These answers were closely related in time, as is evident from the page numbers of the transcript, and are inconsistent with each other. From the later answer it is clear that he did have a recollection of allegedly reaching agreement on a target price despite his earlier lack of recollection about discussions about price.
- 10.65** As for how the agreement was eventually reached, Mr Walker is clear that Mr Gallagher left the room with the principals of BB and Siemens, to discuss price ([PHT00000035](#), pages 46 and 50), even although he thought that it was possibly "not a totally correct way of arriving at a contract sum". Mr Gallagher did not say that it had not happened, but said that he did not recall any such meeting ([PHT00000037](#), page 72). Dr Enenkel had no memory of a private meeting away from the others, at which the price was agreed ([PHT00000034](#), page 128). Mr Flynn did not recall a meeting between the principals, but thought that it was possible that it had happened ([PHT00000045](#), pages 37–38). Although, in the request to him to provide a statement, Mr Hofsaess was asked whether there was such a discussion, he did not respond on that issue. Having seen the witnesses, I found Mr Walker's account compelling and concluded that there was such a separate private discussion involving Mr Gallagher, Dr Enenkel and Mr Hofsaess and that that was indeed how the price was fixed for the Infraco contract. I also accept his evidence that the three principals returned to the meeting and stated the figure that had been agreed for inclusion in the spreadsheet.
- 10.66** However, in the accounts there is a lack of consistency and coherence on what was actually agreed. The parties do not appear to have come away from the meeting with any document summarising or recording the agreement in even the most informal terms. Mr Gallagher said that notes were kept by both sides during the meeting and that the notes were compared to make sure "that they reconciled with each other so that we didn't have one interpretation and the consortium had another" ([TRI00000037_C](#), page 0083, paragraph 267). Mr Crosse said that, at the time of the Wiesbaden meeting, he would have prepared notes of the discussion that took place, but that he no longer had them ([PHT00000021](#), page 146). No such written record was provided in the documents made available to the Inquiry, nor is there any reference to it in emails that passed in the days and weeks following the meeting. If any note was to have been kept for **tie** about the separate price discussions, that would have been the responsibility of Mr Gallagher as the person who had had the discussions that formed the agreement in price.
- 10.67** It was clear that it had been agreed that there would be an increase of £8 million to the best and final offer price but there were several different accounts of what this was for. Mr Gallagher believed that they had "agreed price, scope and the whole process" ([TRI00000037_C](#), page 0094, paragraph 294). By reference to the minute of the TPB meeting dated 12 March 2008 ([CEC01246825](#)), he noted that it appeared to have been recognised that the payment agreed at Wiesbaden was simply in respect of provisional items and some contingencies on design issues ([TRI00000037_C](#), page 0086, paragraph 274). This is much narrower than accepting the design development liability generally. Mr McGarrity's view of what happened contained inconsistencies. On one hand, he considered that the effect of the agreement reached at Wiesbaden was that the consortium would pay for any additional costs arising on the completion

of design [PHT00000047, page 107] and that the additional £8 million was in return for the contractor taking designs from where they were to completion and bearing the risk of any resulting construction cost increase [ibid, page 143]. The practical effect of this was that he believed that the risk arising from incomplete design had been significantly removed [ibid, pages 107–108]. However, on the other hand, he referred to the sum of £8 million being added to the price as having been in return for provisional sums being made firm and fixed [TR100000059_C, page 0083, paragraph 79]. The difficulty with his evidence is that he got his information as to what had happened from Mr Gilbert, who in turn got it from Mr Crosse. The recollection of Mr Walker was that nothing was discussed or agreed at Wiesbaden in relation to design and design risk.

10.68 Mr Crosse was very vague when asked what had been agreed at Wiesbaden. He said:

"They agreed to take on the VE savings, I think, of GBP19 million. ... And I think they agreed to fix the price. I can't recall what for. I think we achieved the commercial objectives that we set out before we left for Germany." [PHT00000021, page 142.]

10.69 It was apparent that one element of the agreement was that the price would be increased by £8.12 million. In relation to this, Mr Crosse said:

"I understand it was to fix their price subject to certain things which aren't documented and were not documented the next day when we came back; sufficient enough for us to put a reliable, in FBC terms, price into the FBC." [ibid]

It was obviously of importance that there should be clarity about what qualifications there were to the agreed price, and the absence of documentation of this was to be a continuing factor in the events that unfolded in the days that followed. In similar vein, he said that **tie** had used remaining sums available in the project budget to get BBS to agree to a fixed-price contract [TR100000031_C, page 0041, paragraph 123]. He considered that the effect of the agreement was that the consortium would accept the design development risk, with the exception of junctions such as Picardy Place the design for which remained the responsibility of **tie** [PHT00000021, page 143]. However, he also said that the price was fixed on the basis of the design as it stood at 25 November 2007. These statements are contradictory. If the price was solely for construction in accordance with the design as it stood at a particular date, of necessity that would mean that the financial consequences of any change in the design would fall on **tie** and is inconsistent with the consortium accepting design development risk apart from specified exceptions.

10.70 In view of the importance of the Wiesbaden meeting, it is surprising that there is a lack of clarity or consistency in the evidence as to what was agreed. To some extent this may be attributable to the effects of the agreements concluded later in relation to price, but it is also indicative of a lack of focus or clear thinking on this critical issue. I consider that it is likely also to have been caused, at least in part, by having Mr Gilbert, as the person responsible for conclusion of the contract, remain in Edinburgh, and the negotiations on the critical issue of price carried out by Mr Gallagher, who believed that he was not going to get involved in detail. It was a recipe for disaster, and it is not just with hindsight that that should have been apparent.

10.71 Despite the presence of senior people from each organisation at the meeting, it appears to have been understood by Mr Gallagher that there would be a provisional quality to any agreement. In relation to getting the agreement of the consortium members, he recognised that the best that **tie** could have achieved at Wiesbaden

would have been an agreement of a target price that was supported by the directors of the members of the consortium, but he acknowledged that there was

"a two-month type cycle that was going to be required by not only the City of Edinburgh to get all the approvals, but also to go through the risk management process and the approvals process of the consortium" [PHT00000037, page 53].

10.72 In addition, he accepted that the agreement that had been reached was subject to "due diligence" [ibid, page 76], and he said that this was because the parties had not had legal representation at the meeting. He said that he

"expected that there would be a degree of tinkering, shall we say, once the agreement, the high level agreement was then taken by the procurement and the legal people" [ibid, page 54].

10.73 In other words he could not have thought that the position reached in Wiesbaden was a final one until it was ratified. This means that he would have been aware of the need to be alert for any changes in position on the part of the consortium. In fact, as I consider below, he did not scrutinise in any detail what was to happen afterwards. Mr Gilbert, too, said that it was not intended that the agreement would be legally enforceable [TR100000038_C, page 0051, paragraph 138] and Mr Crosse was clear that although the agreement reached in Wiesbaden was intended to fix the price, in reality a price is never fixed until the formal contract is signed [PHT00000021, page 139].

10.74 Mr Flynn considered that, with all the qualifications that had been made, it would have been wrong to focus on the headline figure of £218 million [PHT00000045, page 41]. This was the approximate value of the contract after inclusion of the increase of £8.12 million that had been agreed and this is illustrated in a spreadsheet prepared later by Mr McGarrity [CEC00132442]. He said, however, that, in view of the additional items and excluded items, an expectation that £218 million was the end of the line "would have been a premature conclusion" [PHT00000045, page 43]. Mr Walker went further in that he was adamant that Mr Gallagher had said at the meeting that the price agreed was not the real figure, because all parties knew that it would increase once the contract was signed [PHT00000035, pages 51–52; TR100000072_C, page 0022, paragraph 37]. Mr Walker said that Mr Gallagher had made his comments more than once, but that the first occasion had been at the end of the first day of the meetings in Wiesbaden. When asked by how much he thought that the price would increase, Mr Walker said that it would be by tens of millions, and he was clear that he had relayed this to Mr Gallagher [PHT00000035, pages 65–67]. He said that Mr Gallagher responded by saying "everybody knows that" [ibid, page 67]. As mentioned below, in an email dated 19 December 2007, he also relayed to Mr Gilbert that he anticipated that the Infraco contract price would increase by several million pounds because of incomplete design [CEC00547735; PHT00000035, pages 62–64]. Mr Walker said that he had also discussed the likely price increase with Mr Gilbert in the presence of Mr Fitchie [ibid, pages 75–76]. In his statement [TR100000102_C, page 0150, paragraphs 7.123–7.124], Mr Fitchie says that Mr Walker spoke to him directly about this matter at a meeting in early December 2007, but Mr Walker had no recollection of this. Mr Fitchie said that, following a meeting with Mr Walker in late 2007, at which he had been told that the cost might increase by £80 million, he immediately told Mr McGarrity about this [PHT00000017, page 76]. Mr McGarrity said that he had no recollection of this [PHT00000047, pages 139–140]. Given that an increase of that sum would have represented approximately 40 per cent of the Infraco contract price, it is reasonable to suppose that, had it been said, anyone would remember it, and I conclude that

Mr McGarrity was not told. Although it comes slightly later, Mr Walker said that there was a meeting in January 2008, which was attended by Mr McFadzen, Mr Flynn, Mr Gallagher and himself, which centred on a discussion to the effect that all parties were aware that the cost was going to go up [PHT00000035, pages 82–83]. Mr Gallagher, on the other hand, denied that he always knew that the price would go up [PHT00000037, page 97]. He denied both that he said it and that he thought it.

- 10.75** It is unnecessary fully to resolve the conflicts in evidence among Mr Fitchie, Mr Walker and Mr McGarrity. It is sufficient to note that Mr Fitchie's evidence discloses his awareness, in late 2007, that the Infraco price would increase significantly, and to that extent supports the evidence of Mr Walker. Mr Walker's account of notifying **tie** representatives of the likelihood of an increase of several million pounds in the price of the Infraco contract following the Wiesbaden meeting is supported by the email that he sent to Mr Gilbert on 19 December 2007 [CEC00547735]. It is also consistent with his wish, which I will consider in Chapter 11 (Contract Negotiations), to warn CEC of the position. I also accepted his evidence that he advised Mr Gilbert of the likely price increase in the presence of Mr Fitchie. I preferred Mr Walker's evidence on this issue to Mr Gallagher's denials that he was aware that the price would increase and that he had said so.
- 10.76** Despite the comments, noted in paragraphs 10.72 and 10.73 above, about the agreement not being enforceable and requiring the approval of the consortium and the understanding that there would be further "tinkering" [PHT00000037, page 54] to be done, both sides were keen to record the agreement in writing shortly after the agreement. The remainder of the Infraco contract was under negotiation, but no stand-alone agreements had been concluded between the parties in respect of any other agreed components. There is no record from either side as to why it was felt necessary or appropriate to have an interim formal agreement in respect of what was discussed at Wiesbaden.
- 10.77** Often, where an agreement is to be recorded in advance of its being incorporated into a formal contract, the parties will draw up heads of terms. Commonly, a term is inserted into such heads, saying that they are not intended to be legally binding so as to create rights and obligations. The parties thereby make it clear that this should not occur until the stage of putting the agreement into the formal contract with the accompanying detailed consideration of the wording, and that the heads of terms are there solely to record the consensus at a very general level. This was not done in relation to recording the outcome in Wiesbaden, and this created a dangerous situation in which an agreement on a key issue was being put together in a rush without the benefit of legal advice. As the person in charge, and having had experience of contract negotiation, Mr Gilbert should have been aware of that.
- 10.78** In relation to documenting the agreement, another issue of allocation of responsibilities arises. Neither Mr Gallagher nor Mr Crosse was involved in the process of preparing the written agreement, which was instead entrusted to Mr Gilbert. Despite this, Mr Gallagher claimed that Mr Crosse would document what was agreed and would be responsible for whatever actions had to be taken [TR100000037_C, page 0089, paragraph 282; PHT00000037, page 86]. He said that that was his role. He did not explain why documenting the agreement should not have been his responsibility, standing the part that he had played in the discussions, particularly those discussions in which he was the sole **tie** representative and which resulted in the announcement of an agreed figure. When asked about this, he said that he "wouldn't have been involved in that level of detail" [TR100000037_C,

pages 0090–0091, paragraphs 284 and 288]. He said that he did not consider it disadvantageous that he was not involved in turning the agreement into contract terms [\[ibid, page 0090, paragraph 284\]](#). I do not agree. He confirmed that he was interested in the high-level process in which he was involved, "i.e. agreeing a final price and ensuring that the transfer of risk and deliverables was consistent with the remit of the TPB" [\[ibid, page 0091, paragraph 288\]](#). It is difficult to imagine how he could fulfil that obligation without some involvement in turning the agreement into contract terms, even if it were merely limited to a supervisory function whereby he could satisfy himself that the contract truly reflected the agreement at Wiesbaden. It is clear that he did not do so. He did not even have an accurate recollection of who had been responsible for documenting the agreement. He believed that it was Mr Fitchie, working with Mr Crosse and then Mr Bell, who dealt with it [\[ibid, page 0090, paragraph 284\]](#). The involvement of Mr Gallagher could best be described as "dabbling", and that was inappropriate. While it is likely that Mr Gilbert was given an oral briefing as to what had happened in Wiesbaden, there is no record of his having been given a written statement of what had been agreed and should therefore be reflected in the agreement. As is apparent from the discussion below, in the process of having the outcome of discussions turned into an agreement, the position of **tie** was made significantly worse. If either Mr Crosse or Mr Gallagher had been involved to any material degree in the process, I consider that what was happening would have been apparent to them. If they had objected and pointed out that that was not what they considered had been agreed, it could not be said that the consortium would necessarily have conceded the point. There would, however, have been at least a chance that this would have been the outcome.

- 10.79** As was done for the correspondence that passed before the meeting, it is convenient to set out the principal items of correspondence in chronological order.
- 10.80** On 17 December 2007 at 14:15, Mr Crosse sent Mr Walker an email with a draft agreement attached [\[CEC01494927; CEC01494928; PHT00000021, pages 149–151\]](#). The agreement had been prepared by Mr Gilbert after discussions with Mr Crosse. Both expected that the consortium would respond by seeking to challenge the terms. Appendix A of the draft agreement [\[CEC01494929\]](#) referred to the sum of £8 million as "negotiated sum for firming up all elements", but there was still an allowance of over £10 million for provisional sums. The body of the draft agreement included the following statement in relation to detailed designs:
- "Detailed designs – BBS included in their price for the construction cost risk in the development and completion of detailed designs being prepared by SDS, save for:- a) Any future changes to elements of the design for civils works that are substantially different compared to those forming the current scheme being designed by SDS. b) items designated as provisional in the Appendix ... c) Excluded items, to the extent described in 3.4 below." [\[CEC01494928\]](#)
- 10.81** A discussion took place between Mr Gilbert and Mr Walker and later, on 17 December 2007, Mr Gilbert sent Mr Walker an email with revised wording for the agreement [\[CEC01494951\]](#). This did not change the statement about detailed designs. When that statement is read with the comment in the Appendix, a clear impression is given that, other than in respect of provisional items, the consortium will assume the risk of additional cost arising from development of designs.

- 10.82** Mr Walker then sent an email at 16:23 on 17 December [CEC01494961]. In it, he forwarded comments from Mr McFadzen of BB, which said:
- "My comment is that this does not look like a good deal (understatement) unless there is some side agreement that I don't know about."
- 10.83** Mr Crosse commented that it appeared that Mr Walker had checked the detail of the agreement with Mr McFadzen and that he had expressed the view that the company should not enter into the deal as had been agreed. Mr Gilbert thought that BB was perhaps trying to develop a negotiating position and change the view of the **tie** representatives as to what was agreed [PHT00000023, page 93]. In his oral evidence to the Inquiry, Mr McFadzen said that when Mr Walker described to him what had been agreed, "I thought we had agreed to take on a bit more risk than I thought we should" [PHT00000034, page 74].
- 10.84** On 18 December 2007, Mr Fitchie sent an email [CEC01430872] to Mr Crosse and Mr Gilbert, among others, commenting on a draft of the agreement that he had been given that morning. As he pointed out, not having seen it before, he was able to make only limited comment.
- 10.85** On 19 December 2007 at 08:37, there was a further email from Mr Walker [reproduced in both CEC00573352; CEC00547732], which included the following:
- "Secondly, having consulted with my team and reviewed e mails and meeting minutes, our firm price including the additional £8m to fix the 'variable' sums noted in our tender is based on all the additional information which we received from SDS via the 4 No. CDs. The last of which was delivered to us on 25th. November 2007. We therefore insist that our contract be related to this."
- 10.86** Mr Crosse noted that this meant that the £8 million was viewed by the consortium as being to fix the price rather than to fix provisional sums [PHT00000021, page 154]. That is not apparent from the wording, which, if anything, seems to relate more to provisional sums than to design generally. It is of note, however, that the email makes the express qualification that the price payable is to be linked to the design as notified to the consortium on 25 November 2007. By insisting that the price be fixed by reference to the design as at a certain date, it indicates clearly that the design changes after that date will not be included in the price. If this was not the case, there would be no need to refer to the design as at a certain date. This is therefore wholly inconsistent with the consortium accepting the design development risk arising after the chosen date and means that the additional money could be only in exchange for firming up provisional items. Mr McFadzen was of the view that the reference to the design information on CDs was part of his attempts to try to make the agreement fit with what he believed the BB corporate position was [PHT00000034, page 78]. Mr Walker agreed that the consortium sought to draw a line and price only up to a certain point [PHT00000035, page 61]. He said that he had explained this to Mr Gilbert many times. Mr Gilbert, however, did not accept that the reference to fixing the design as at the date in November 2007 indicated an intention on the part of the consortium not to accept responsibility for design development after that date [PHT00000023, page 103]. Mr Gallagher would not accept that this was the position either [PHT00000037, page 87].

10.87 Later, at 11:42, Mr Gilbert replied to Mr Walker and Mr McFadzen [[CEC00547733](#)], saying:

" ... Regarding your second point Scott [McFadzen] has had a discussion with Matthew [Crosse]. Based on that discussion there would be no reason to change the current wording on design – which was acceptable to you yesterday. Scott I've left a message for you to contact me. We need to close this out now if we are to move forward and so that I can brief the Tram Board and CEC correctly."

10.88 A meeting of the TPB was due to take place the following day. Later in the day (13:29) Mr Gilbert sent Mr Walker a further email with a new draft of the agreement attached [[CEC01384941](#); [CEC01384942](#)]. In relation to the price, it said that:

"BBS included in their price for the construction cost risk in the development and completion of detailed designs being prepared by SDS," [[ibid](#), page 0003]

but the first exception had been revised to read:

"save for:–

a) Any future changes to elements of the design *intent* for civils works that are substantially different compared to those forming the current scheme being designed by SDS, *as typically represented by the drawings issued to BBS with the design information drop on 25th November 2007*" [[ibid](#)].

10.89 The words in italics were those added by Mr Gilbert in this draft. As would be expected, Mr Gilbert considered that this reflected the terms of his discussions with Mr Walker [[PHT00000023](#), page 106]. Mr McFadzen said that, from the standpoint of the consortium, this was still considered too onerous [[PHT00000034](#), page 82].

10.90 Later still, on 19 December at 13:44, Mr Walker sent Mr Gilbert a further email [[CEC00547735](#)], saying that the pricing was envisaged on the basis that the design would be complete and that as it was clear that it would not be, there would be an increase in price. He said that he was concerned that **tie** might not have the budget to accommodate this [[PHT00000035](#), pages 62–65]. This, too, was inconsistent with the consortium taking the design development risk.

10.91 Mr Gilbert made a few changes to the draft agreement to accommodate CEC and sent it back to Mr Walker at 19:42 [[CEC00547740](#)]. Early on 20 December, Mr Walker replied, saying:

"We still have issues with accepting design risk. We have not priced this contract on a design and build basis always believing until very recently that design would be complete upon novation. With the exception of the items marked provisional which we have now fixed by way of the 8 million we cannot accept more drain [sic] development other than minor tweaking around detail. Your current wording is too onerous. Trust we can find a solution."

10.92 The word "drain" appears to be an error; the context indicates that "design" was intended. Mr Crosse said that this was the consortium resiling from commitments that it had made, but he saw it as a negotiating strategy. Mr Gilbert said that he was concerned and frustrated at the reply and thought that it was completely contrary to the agreement that the parties had made [[PHT00000023](#), page 108]. Mr Gallagher was not clear in his understanding of this. When asked about it, he said:

"This email is making it plain at this moment in time that Bilfinger Berger Siemens are not [going to accept design risk], and then there will be another meeting, and

there will be another negotiation, which I think did take place, where there would be another discussion about what it's worth to them to take design development risk, which would then increase and crystallise higher price for the bid; and this was typical of the behaviour all the way through to financial close." [PHT00000037, page 92.]

- 10.93** This illustrates how evasive he sought to be in his answers. The import of Mr Walker's email is quite plain: the consortium would not accept the design risk. Mr Gallagher's explanation that the consortium was adopting a negotiating position to obtain a higher contract price fails to appreciate that the nature of the contract under negotiation had altered materially. The original intention had been that design would have been completed prior to completion of the Infraco contract and that, at that date, **tie**'s contract with SDS would be novated to Infraco. The effect of that arrangement would have been that Infraco would have borne the risk of design development, but that **tie** would pay for any changes of design resulting from **tie**'s change of instructions. However, by December 2007, the delays in completion of design were substantial and there was little or no prospect of its being completed prior to the signing of the Infraco contract unless that itself was substantially delayed. If the design contract had been novated to Infraco when the design was incomplete, with all risk of design development passing to Infraco, it would have transformed the nature of its obligations from those of a build-only contract to those of a design-and-build contract in which it had not included a substantial risk premium associated with the latter. Mr Gallagher's response fails to acknowledge this – either because he did not understand the position or because he was being disingenuous. In either event, it suggests his unsuitability as chairman and chief executive of a publicly owned company in charge of a multi-million pound project that was being funded by the public purse.
- 10.94** In response, in an email dated that day at 14:07, Mr Gilbert sent Mr Walker a further draft of the agreement [CEC01495066; CEC01495067]. In this, clause 3.3 was amended to read:

"The BBS price for civils works includes for any impact on construction cost arising from the normal development and completion of designs based on the design intent for the scheme as represented by the design information drawings issued to BBS up to and including the design information drop on 25th November 2007. The price excludes:-

- a) Items designated as provisional in the Appendix A4.
- b) *Any material changes to the design resulting from the impact of the kinematic envelope of the CAF tram vehicle on the civils design.*
- c) Excluded items, to the extent described in 3.4 below.

In respect of *footways*, full reuse of existing *kerbs* and flags and minimal reinstatement behind *kerb* lines is assumed. i.e. not wall to wall. Design must be delivered by the SDS in line with our construction delivery programme previously submitted.

For the avoidance of doubt normal development and completion of designs means the evolution of design through the stages of preliminary to construction stage and excludes changes of design principle, shape and form and outline specification."

- 10.95** The text in italics was marked up in the draft to show that it was new. Mr Crosse said that this wording "reflects what was agreed in Wiesbaden but there might have been changes in the detail" [TR100000031_C, page 0041, paragraph 122]. Mr Gilbert said that in making the adjustments he was trying to ensure that the intent of the Wiesbaden Agreement to fix the transfer of risk for the remaining design development to BBS was articulated [PHT00000023, page 109]. He denied that the changes meant that he was no longer seeking to transfer the design risk as a result of what Mr Walker had said. It is useful, however, to consider exactly how the changes were made. Mr Gilbert thought that the proviso at the end had come out of discussion that he had had with Mr Walker. However, he also said that he recalled sitting with Mr Wright of Siemens and writing out wording that they wanted [TR100000038_C, page 0051, paragraph 138]. However, Mr Walker said that the wording of the Wiesbaden Agreement relating to normal design development had come from him in discussion with Mr Gilbert [TR100000072_C, page 0024, paragraph 41; PHT00000035, page 73]. He said that he had probably suggested an original draft that was even tougher.
- 10.96** There is no record of the new draft having been discussed with the boards of **tie** or TEL or the TPB. There is no written record of Mr Gilbert discussing it with any of his colleagues. Mr Gallagher claimed that although he was not involved in discussion on the new wording and what effect it would have, "there was discussions to [sic] the Board to outline what concession that would make" [PHT00000037, page 93]. When asked about the lack of time, he said:
- "I think I must have had meetings with both the tie procurement and finance team. I must have had discussions with the Board, and on the basis of these discussions, we must have been comfortable for the document to be signed." [ibid, page 94.]
- 10.97** I reject this. There is no record of the views of either company board or the TPB being sought on this, and it is apparent that there was no time to do so.
- 10.98** Mr Crosse considered that the agreement did not require legal input, yet he also considered that it was important that the point was captured with no ambiguity [PHT00000021, pages 160–161]. On the other hand, Mr Gallagher said, it was "absolutely the case that follow up advice was sought as to the content of the [Wiesbaden] deal. It would have been sought from Andrew [Fitchie]" [TR100000037_C, page 0091, paragraph 287]. Mr Gilbert said that he could not recall whether he took legal advice on this new drafting [PHT00000023, page 115], but I conclude that he did not do so. There was little time between the email from Mr Walker in the morning and Mr Gilbert sending out the new draft. In that period of a few hours it is apparent that there was some discussion between Mr Gilbert and someone within the consortium. Time would then be required for drafting, which would leave almost no time in which to take advice. That, coupled with the absence of any recollection on the part of Mr Fitchie or any record of a request for advice, leads me to conclude that Mr Gilbert decided to make the changes without advice as to the consequences. Mr Gallagher's answer, noted above, suggests that he would have been of the view that advice ought to be taken. That being so, it is very surprising that he did not take any steps to verify that this was the position before signing the agreement.
- 10.99** The decision not to take advice may have been coloured by Mr Gilbert's view that, even in its concluded form, the agreement was not expected to be legally enforceable [TR100000038_C, page 0051, paragraph 138]. If he truly believed this, it is an astonishing position for him to take. He was responsible for appointment of the

Infraco contractor and was aware that the contract was yet to be drafted. He then participated in an email exchange over some days while parties sought to agree on a wording for their agreement. It was to be subject to formal signature. At no time did he suggest a clause to the effect that the agreement would not create legally enforceable rights and obligations. I can see no rational basis on which anyone in the position of Mr Gilbert could be unaware that they were drafting an agreement that would have legal consequences. I reject his evidence in this respect. His evidence about the intention that the agreement would not be legally enforceable is, at best, wishful thinking with the benefit of hindsight once he was aware of the contractual disputes and their disastrous consequences for **tie** following the incorporation of clause 3.3 into the Infraco contract with minor changes, as will be mentioned in paragraph 10.100 below.

- 10.100** Taken at face value, the effect of the new wording was that changes to the design principle existing at 25 November 2007, changes of shape and form after 25 November 2007, and changes to the outline specification existing as at 25 November 2007 would not be considered normal design development, were not included in the price and would therefore generate additional liability on the part of **tie**. With some minor changes, the new wording of clause 3.3 found its way into the Infraco contract and was the subject of considerable dispute. These disputes were referred to adjudication and will be considered in Chapter 15 (Contractual Disputes: May–December 2008). Although, as a matter of law, the views of the parties to a contract are irrelevant to the issue of how it should be interpreted, witnesses were asked what they thought the effect of the proviso was, simply so that the Inquiry could assess the extent to which there was understanding of the agreement. In relation to the introduction of the qualification that normal design development would not include changes to “design principle, shape and form and outline specification”, Mr Gilbert said that this wording “was an attempt to try to establish an ‘envelope’ for the physical boundaries of the design, works and the boundaries of Infraco’s obligations” [*ibid*, page 0102, paragraph 261] or was an attempt to differentiate true design development from betterment to meet the aspirations of stakeholders (in practice, CEC) [*ibid*, pages 0098–0100, paragraphs 253–255]. He remained of the view that design risk had been transferred [*PHT00000023*, pages 87–88]. When Mr Walker was asked what the proviso meant, he said “[c]hanging the quantities by plus or minus 5 per cent” [*PHT00000035*, page 74]. Mr McFadzen said the consortium would expect to bear the costs of some changes in design. The import of his evidence in this respect was similar to that of Mr Walker. The intention was to limit the consortium’s risk to “normal design development” – for example, by accepting relatively minor changes such as an increase in section depth from 1 metre to 1.1 metres or an increase in reinforcement content from 250 kilograms per cube to 255 kilograms [*PHT00000034*, pages 87–88; *TR100000058_C*, page 0050, paragraph 174].
- 10.101** The agreement was signed by Mr Gallagher and Mr Walker a few hours later, on 20 December 2007. Mr Gallagher either did not check the agreement before signature or failed to appreciate that it did not accord with the verbal agreement reached in Wiesbaden. Prior to signature he did not seek any legal advice on its terms. As it was an agreement that addressed transfer of risk and established the price in a contract worth over £200 million, this was a material failing and represented the first of a number of failings in control that, if applied properly, could have detected and possibly corrected the deal done before it was concluded in May 2008. While it might be said that there was no certainty as to what the outcome would have been if the problem had been identified in December, or at any other time prior to May 2008, I consider that it is clear that the contract would not have been entered into in terms

that were as materially disadvantageous to **tie** as they turned out to be. Whether the result would have been a more favourable contract from **tie**'s perspective, or a failure to reach a mutually acceptable contract resulting in the cancellation of the project, is a matter of speculation, but they are clearly both possibilities.

- 10.102** When the above evidence is considered together, the clear picture that emerges is that, at Wiesbaden, the agreement was that the consortium would assume the design development risk. As was noted in paragraph 10.71 above, Mr Gallagher understood that there was a provisional quality to any agreement, which would be subject to the approval of the consortium's risk committees and the board of BB. Allowing for that process, Mr Gallagher hoped that the basis and substance of what had been agreed at Wiesbaden would remain and would be crystallised into an agreement that both parties could sign in January [PHT00000037, page 54]. However, within a few days of the meeting at Wiesbaden, and certainly by 17 December, the consortium considered that the assumption of design development risk was an error, and it was seeking to pull back. It made comments to **tie** – including statements in emails – that demonstrated that this was the case. Mr Gilbert did not recognise that this was happening, and it therefore appears to have proceeded unchecked. While it would be a mistake for Mr Gilbert to fail to notice the change from what should have been reported to him as the outcome of the meeting, his failure to spot it is truly remarkable when regard is had to the fact that he wrote the negotiating paper stating what should be obtained in return for conceding an increase in price [see paragraph 10.55 above]. He, of all people, knew that the intention was to ensure that design development risk did transfer. The position was no doubt made more difficult in that he had not been at Wiesbaden and had not prepared the first draft of the agreement. Nonetheless, he had responsibility for negotiating this matter, which required that he understood what had been agreed in Germany and the effect of the draft agreement. If there was to be a change to what had been agreed, it would have been appropriate for him to obtain guidance or instruction on it from Mr Crosse and Mr Gallagher, both as the parties who had been at the discussions and as the persons most senior in the company. He failed to do this. Instead, he did not raise any objection to this approach by the consortium as being inconsistent with what had been agreed in Wiesbaden. Surprisingly, in relation to such an important matter, Mr Gilbert did not bother to seek advice to ascertain whether his understanding of the agreement at Wiesbaden was correct. He proceeded to conclude an agreement in modified terms that reflected the approach preferred by the consortium.
- 10.103** It may be said that the consortium would simply not have adhered to what had been agreed in Wiesbaden, particularly after the agreement had been reviewed by the risk committee and board of BB. It is not possible to conclude whether this is or is not the case. However, if there was to be a significant change to the contract arrangements that transferred risk back to **tie**, resulting in financial risk to CEC, it is a matter that should have been clearly reported so that both **tie** and CEC could have taken an informed decision about it. In that regard in paragraphs 3.129 and 4.49 I have already rejected any suggestion that it would have made no difference to the outcome of the project even if CEC had been made aware of the true position.
- 10.104** Possibly as a result of the many differing interpretations of what had taken place at Wiesbaden, the outcome was reported in a number of different ways.

(a) Section 2 of the minutes of the Legal Affairs Group meeting of 17 December 2007 [CEC01501051] records that Mr Gallagher reported that the Infracore contract was 97 per cent fixed price, with BBS taking on design risk [Mr Gallagher TR100000037_C, page 0089, paragraph 281; Mr Crosse TR100000031_C, page 0040, paragraph 119].

(b) Section 4.2 of the minutes of the TPB meeting on 19 December 2007 [CEC01363703] notes that Mr McGarrity explained "that a premium had been included in the contract price to firm up previous provisional sums". His presentation to the meeting [CEC01483731] said that it was a good deal for **tie** as the design development risk was transferred to BBS. He was therefore making inconsistent statements about what had been agreed. Each report had therefore focused on a different objective of the two that **tie** had when it went into the discussions in Germany. To add to the confusion, at this meeting, Mr Gallagher is recorded as saying that design risk is passed through novation. Although, in oral evidence, Mr Gallagher said that this was design risk in the narrow sense of the cost of completing the designs [PHT00000037, pages 81–82], it does not appear that this was the point of the question in response to which Mr Gallagher made his statement. I do not accept the evidence of Mr Gallagher in this regard but, even if I had, it is plain that his comment would open the way to confusion.

(c) The pack of papers for the TPB meeting on 23 January 2008 [CEC01015023] contains conflicting statements. In the minutes of the 9 January meeting there is a statement that the discussion on design risk transfer is continuing [ibid, page 0005, item 1.5]. When Mr Gallagher was asked what discussions were still ongoing in January 2008, his response was that he had no idea [PHT00000037, pages 82–83]. As a statement from the Executive Chairman of a company concluding a contract of this value, that is wholly unsatisfactory. In the Executive Summary of the report from the Project Director, Mr Bell, later in the papers, he says that the "effective transfer of design development risk excluding scope changes to BBS" [CEC01015023, page 0009] is a key part of the concluded agreement.

- 10.105** What is striking about the reporting after the conclusion of the agreement is that no change was made to the cost estimate of £498 million that had been included in the two business cases.
- 10.106** That neither Mr Gallagher nor Mr Crosse oversaw or supervised the drafting of that agreement, or even provided a detailed written account of the discussions and agreement, was surprising. It was the responsibility of those who had attended the meeting – and particularly Mr Gallagher as Executive Chairman – to ensure that the task of drafting the agreement was delegated in such a way that the person charged with it would be able to achieve it and would be provided with sufficient information to do so. Even then, prior to such a critical agreement being signed, the person who had made the oral agreement and who was to be the signatory of the written agreement should have verified that one correctly reflected the other.
- 10.107** From the matters that I have considered above, it is apparent that, by the end of December 2007, there had been a significant departure from the procurement strategy in relation to the intention to have design completed by the date of contract signature and the extent to which the price was fixed. It appears that the latter change was not appreciated at the time. The former was, however, understood by the senior management at **tie** and, to a large extent, created the situation in which the price could not be fixed. Not only was the change in relation to completion of design prior to contract signature understood; it appears to have been regarded by the senior management as necessary and appropriate. What is striking about this decision is that it was not reported clearly to the TPB, CEC or to officials in Transport Scotland.
- 10.108** Underlying all the above is the question whether there should have been a pause in the process in December 2007. The possibility of pausing at an earlier stage to allow the design to catch up had been considered but had been rejected because

of the desire to maintain the timetable of the programme. The situation that arose in December 2007 was, however, different. At the earlier stage, the hope was frequently expressed that the position could be recovered. In April 2007, when design was only 50 per cent complete, Mr Crosse was still relaxed about completing the design "Sufficient enough to enable the contract to be awarded" [PHT00000021, page 89]. In view of the significance of this, it might assist to recall the relevant passage in his evidence in its entirety:

"Q. This is now the second half of April 2007. We saw the Draft Final Business Case saying that detailed design would be 100 per cent complete at contract award, which was planned for the end of the year.

A. Mm-hm.

Q. The fact that the detailed design was only 50 per cent complete, did you think it was going to be possible to award the contract on schedule?

A. I – I didn't have a problem with this. I didn't think this would prevent us from doing that.

Q. You thought the other 50 per cent of design should be capable of completion in the seven months which followed?

A. Sufficient enough for the contract to be awarded. Yes.

Q. If we go then, please, to page 23.

A. Let's be clear, there were many different stages to the design. There was a preliminary design, and what amount of design did the contractors need in order to price it reasonably accurately is the kind of – the big question.

And I thought, based on my experience, the amount of work that had been done for this stage of the project, it was quite mature. But this was a different procurement model, and I think therein lies the issue.

So on Nottingham and Croydon, the level of design that was done at this stage, at this point of procurement, was actually much lower, but the design responsibility was the turnkey consortium that went on to build it.

Because tie were doing the design, it had to be much more complete. And I didn't – it didn't register. Hindsight is a wonderful thing. I didn't think at the time that we couldn't achieve a design that would prevent us from closing the contract.

I think I knew there were challenges all the way through without a doubt." [ibid, pages 89–90.]

10.109 It is clear from the entirety of Mr Crosse's response that he was basing his judgement about the adequacy of the design for contract award on his experience of other contracts that had different procurement strategies. He failed to recognise, or at least have any regard to, the procurement strategy in this contract, which was significantly different from those in the Nottingham and Croydon Tram projects. In his response he acknowledged that he did not appreciate that in this project design had to be much more complete than in those other projects, because it was tie's responsibility to ensure that it was complete before contract close. His reliance upon hindsight as an excuse for failing to appreciate that is astonishing. He was the project director, and had been appointed to lead the procurement phase of the project because of his

experience in procurement [TR100000031_C, page 0001, paragraph 1]. It was impossible for him to perform his duties as procurement director without understanding the procurement strategy; yet from his responses, noted above, it appears that he negotiated with Infracore without realising where the responsibility for design lay. His lack of understanding and his treatment of design based upon the different procurement strategies for the Nottingham and Croydon projects might explain some of the confusion around the Wiesbaden negotiations. His reference to hindsight suggests that he appreciated the different procurement strategy adopted by **tie** only after he left the project. By December 2007, the issues that had previously been anticipated were crystallising and it was clear that there was no prospect whatsoever of the design being completed before contract close unless there was a pause and a significant delay in the procurement process. CEC would shortly take a decision on whether it wanted to proceed with the project. The availability of reliable cost information was clearly critical to the quality of the decision-making process, and it was entirely plain that that depended on the completed design if price certainty was to be achieved.

10.110 Mr Crosse noted that there was a concern that the construction costs would increase with each month of delay and, as the Scottish Ministers had made it clear that there would be no additional money to meet these costs, there was some urgency to get the contract signed [ibid, page 0035, paragraph 106; PHT00000021, page 124]. He made the point that the Inquiry concentrated on the bad news that was arising in the project in 2007 and that attention was not paid to the good news and what was going well. The remit of the Inquiry set by Scottish Ministers described in the Annex to the Letter of Appointment of the chairman, reproduced in Appendix 1, meant that the Inquiry would be required to focus on problems with progress that arose throughout the project but that does not mean that the Inquiry entirely disregarded what was being achieved. It remains the position, however, that, on any view, there was bad news as to the progress of the design and the impact that this was having on the agreed procurement strategy, and there was therefore a very real question as to how this should be managed, irrespective of what was going well elsewhere.

Conclusions

10.111 From the foregoing it is apparent that there are very material inaccuracies in the statements within the FBC that was submitted to CEC for consideration by councillors (see paragraph 10.18 above and the paragraphs following it). I do not consider that it is any answer to this to say that some councillors sat on the various boards and should have been aware of the true situation. The FBC was intended to inform the decision to be taken in relation to the trams, and separate briefings were provided to each of the political groups within CEC to familiarise its members with the contents. This was a key decision. It is obvious that any report that was intended to provide the basis for the decision should not have misrepresented the position. The issue, then, is who bears the responsibility for the misleading FBC. As with those of other key decisions in the project, the records as to approval of the FBC are incomplete.

10.112 In the passage of his evidence, quoted in paragraph 10.24 Mr Renilson noted that although the figure of £498 million was identified by Mr Gallagher, it was accepted by all those who had attended the meeting. Which meeting was it? Mr Renilson said that it was a "heavyweight meeting" at which no politicians were present but he recalled that Mr Mackay and Mr Gallagher "amongst others" were there. On the basis of that evidence I have concluded that it was a meeting of representatives of senior management, including but not restricted to Mr Mackay, Mr Gallagher and Mr Renilson but may not have involved other members of the Tram Project Board

(TPB). It was not a meeting of the TPB, otherwise councillors would probably have been present. Unfortunately the Inquiry has been unable to identify minutes of such a meeting in the papers supplied to it and cannot therefore be certain who was involved in the discussion on this matter. Given the significance of this matter that is unfortunate to say the least. Although the evidence of Mr Renilson referred to the figure to be included in FBCv2, the issue of reporting a range of figures for the estimated cost of the project, as distinct from a single figure, was considered at the joint meeting of the TPB and **tie** board on 15 October 2007 when an earlier version of the Business Case (FBCv1) was discussed. The minutes of that meeting record the endorsement of FBCv1 [CEC01357124, Part 1, page 0012]. In FBCv1 the updated cost estimate for Phase 1a is stated to be £498 million reflecting "substantial external validation from the procurement process for the major contracts and contains a sensible level of risk contingency" [CEC01649235, Part 1, pages 0016–0017, paragraphs 1.65 and 1.72]. The minutes of the joint meeting of the TPB and **tie** board note specifically that there was discussion of the merits of using a single figure for cost rather than a range and the decision was taken to use a single figure in FBCv1. A key reason for that decision was "the credibility issue with the bidders and the public which would arise if a range was to be used." [CEC01357124, Part 1, page 0012, paragraph 4.1]. The effect of that decision was to create the impression of greater price certainty than actually existed. The attendance at the joint meeting of the TPB and **tie** board was as shown in Table 10.1:

Table 10.1: Attendance at joint meeting of tie Board and TPB on 15 October 2007

Members:			
tie Board		Tram Project Board	
Willie Gallagher (Chair tie Board)	WG	David Mackay (Chair TPB)	DJM
Brian Cox	BC	Neil Renilson	NR
Kenneth Hogg	KH	Andrew Holmes	AH
Neil Scales	NS	James Papps (for James Stewart)	JP
Cllr Ricky Henderson	RH		
Cllr Allan Jackson	AJ		
Cllr Phil Wheeler	PW		
Cllr Gordon MacKenzie	GMcK		
In Attendance:			
Matthew Crosse	MC	Jim McEwan	JMcE
Susan Clark	SC	Gill Lindsay	GL
Geoff Gilbert	GG	Steven Bell	SB
Colin McLauchlan	CMcL	Duncan Fraser	DF
Andrew Fitchie	AF	Jim Harries	JH
Alastair Richards	AR	Colin McKenzie	CMcK
		Miriam Thorne (minutes)	MT

It is a matter of concern that while the non-executive directors cannot be expected to have had detailed knowledge of the pricing and contents of the business case, they appear not to have questioned how the figure of £498 million was calculated or the approach that was being taken either then or in December as part of their challenge function. For something as important as this I consider that it would have been appropriate for them to do so.

- 10.113** The minutes of the **tie** Board meeting of that date note the endorsement by both **tie** and the TPB of the recommendations and conclusions of FBCv1 [[TIE00147431](#)]. Despite the apparent prominence given to it in the governance structures (see Chapter 22, Governance) at the TEL Board meetings of 31 October 2007 and 19 December 2007, there was no mention of the FBC.
- 10.114** As was noted above, FBCv2 is dated 7 December 2007, but there is no record of its having been approved on or after this date by the **tie** Board or by the TPB. This is a further indication of the very casual approach that was taken to issues of project governance. A presentation to the meeting of the **tie** Board on 12 November 2007 [[CEC01427080](#)] noted that FBCv2 would be approved by it on 20 December 2007. There is no record of a meeting of the **tie** Board on 20 December, but there was one on 11 December. Although FBCv2 is dated prior to the date of the meeting on 11 December, neither the presentation to that meeting [[CEC01387401](#)] nor the minutes of it [[CEC01048838](#)] makes any reference to FBCv2. In passing, and having regard to what is said in FBCv2 as to pricing, it is significant that the minutes of that meeting [*ibid.*, page 0003] record that “[i]ncreasing certainty of pricing of Infraco is proving slower than planned”.
- 10.115** There was a meeting of the TPB on 7 December, and it may be that it was not possible for it to consider FBCv2 which was dated that day. However, the minutes note that, in relation to FBCv2, Mr McGarrity reported that no significant changes to FBCv1 had been necessary [[CEC01526422](#), page 0009]. The terms of FBCv2 quoted above are substantially the same as those that appeared in FBCv1. If anything, it is all the more remarkable that the boards were willing to approve statements that capital costs had been agreed in October 2007 rather than in December. The statements quoted above materially misrepresent the position. The issue then is: who bears responsibility for this misrepresentation? All the members of the Board of **tie** and the TPB are accountable for it. They cannot hide behind the committee structure. Each member of each Board bears a direct and personal responsibility for the contents of the FBC. Although some details of the contracts and negotiations might not be known to the non-executive directors and the councillors, they should clearly have been aware of the headline issues, such as the state of the contracts overall and whether there was agreement on the contract price. I therefore do not think that the non-executive directors or councillors can rely on ignorance to avoid responsibility. In addition to the members of the Boards, of the people who were in attendance, Mr Crosse, Ms Clark, Mr Gilbert, Mr Fitchie, Mr McEwan and Mr Bell were all involved in the preparation of the FBC or were in a position in which they should have been aware that the facts were other than as stated in the FBC.
- 10.116** By December 2007 there was a perception within **tie** that the contract had to be concluded without delay and that, as a consequence, there was a requirement for a price to be stated. This aspiration was akin to desperation to conclude the contract, or at least report to CEC on 20 December that the contract negotiations were such that tram line 1a from the Airport to Newhaven would be delivered within the budget of £545 million, with the possibility that part of line 1b might also be delivered, depending upon the extent to which contingency sums were spent

in the construction of line 1a. This desperation was manifested in the decision to use the pre-arranged routine meeting in Wiesbaden as a high-level meeting, involving principals, to seek to progress to a conclusion of the contract. It was also manifested in the correspondence from Mr Gallagher prior to that meeting, in which he threatened to advise CEC to withdraw from the project unless his objectives were achieved. Neither he nor Mr Crosse seemed to appreciate that the stating of a fixed price was in conflict with the lack of design information and the consortium's reluctance – which should have been clear – such that it did not want to take the risk of design development even in return for additional payment. This conflict was not articulated. Instead, a deal was done on an informal basis in Wiesbaden, where a price was quoted that enabled **tie** to report that the project could be delivered within budget, albeit that both parties were aware that the price would increase. As part of the price negotiations, an additional £8.12 million was agreed to firm up certain elements in the Infraco bid that were costed as provisional sums. Moreover, there was an agreement that the consortium would assume responsibility for design development, subject to the approval of its risk management committees. That agreement favoured the interests of **tie** in that it did involve the consortium absorbing the risk presented by the incomplete designs. On that basis, it cannot be said that the failure to take legal advisers to Wiesbaden caused any prejudice to **tie** – in fact, it appeared to have secured all that it wanted. The problem was that, within days, the consortium became unhappy with the informal agreement and returned to the position that it would not take the risk. The critical failure on the part of **tie** was that this went unnoticed, and that a more formal agreement was concluded in which the substantial risk fell on it. At the start of the month, there had been an element of price that was provisional, which **tie** sought to firm up. The signature of the agreement on 20 December had the effect that the fixed nature of any price was compromised over the entire scope of the agreement. Taking December 2007 as a whole, at the end of the month, and as a result of the actions of persons employed by **tie**, the position was materially worse for its interest than it had been at the start. In that this was not the final Infraco contract, it might have been possible for matters to have been recognised and recovered in the negotiations that would follow but, as will be seen in Chapter 11 (Contract Negotiations), that did not happen.

Chapter 11

Contract Negotiations

- 11.1** Mr Maclean joined City of Edinburgh Council ("CEC") in December 2009 as Head of Legal and Administrative Services. He therefore had no part in the conclusion of the infrastructure contract ("Infraco contract"). However, as part of his role, he was required to become familiar with it. Prior to the mediation at Mar Hall, he described the Infraco contract to Councillor Balfour as "mince" [TR100000016, page 0020, paragraph 59; Mr Maclean PHT00000008, pages 41–42]. In evidence to the Inquiry he said that it was "riddled with deficiencies" [ibid, page 42]. When asked to elaborate on what he meant by this he referred to the fact that it was a fixed-price contract without a completed design in place; that the novation of the design contract meant that the designer and the contractor were "on the same team" [ibid]; that the pricing assumptions were vague and had contradictions; and that clause 80, which addressed changes to the works, meant that **tie** could not force the contractor to carry on with the works. I consider the disputes that arose under the Infraco contract, and the effect that they had on both the cost of the works and the timescale for completing them, in Chapters 15–18 below. Having regard to what happened in relation to those disputes, I find that, although Mr Maclean's opinion in his evidence was strongly worded, it is accurate.
- 11.2** The disputes centred principally on two related sets of provisions in the Infraco contract: (1) the provisions relating to entitlement to additional payments in Schedule Part 4 ("SP4"); and (2) the provisions in clause 80 as to what should happen in relation to execution of the works when it was considered that a change was being made to those works. The former class of dispute centred on assumptions that were stated in the Infraco contract to be the basis on which the price was quoted. There were provisions whereby if those assumptions did not hold true, there could be an entitlement to additional payment. Clauses in contracts stating the basis on which the price has been determined and regulating entitlement to additional payments are common enough in construction contracts. In themselves, therefore, the existence of such clauses in the Infraco contract is not remarkable. It is apparent, however, that the terms as they appeared in the contract for the Tram project caused substantial problems that led to the breakdown of working relationships and, ultimately, the practical cessation of works. It is therefore necessary to consider how those terms came to be in the contract in the form that they did and why the potential problems were not detected or corrected prior to the signature of the contract.

Schedule Part 4

- 11.3** The pricing provisions were contained SP4 of the Infraco contract [USB00000032]. These included the pricing assumptions that were the focus of disputes and are considered in detail below. Although many parts of the contract had been drafted by late 2007, SP4 was blank at the time of the Wiesbaden discussions and the signature of the Wiesbaden Agreement. When CEC made the decision to proceed with the Edinburgh Tram project (the "project") in December 2007, there were still no draft provisions on the pricing mechanism. Once approval to proceed had been given, however, it was necessary that the terms of this part of the Schedule be drafted and agreed. In order to consider how the contract came to be in the form that it was in when it was signed, it is useful to look at the principal steps in the process of negotiation. I have not sought to consider every communication and development of the terms and have concentrated instead on the ones that I consider were most significant.

The drafts

11.4 Early in 2008, Mr Dawson, **tie**'s Procurement Manager, was tasked by Mr Gilbert with preparing a first draft of SP4. Mr Gilbert said that he regarded drafting SP4 as "straightforward" and that he gave the drafting exercise to Mr Dawson rather than doing it himself [PHT00000023, page 120]. Mr Dawson had not been involved in either the discussions at Wiesbaden or the preparation of the Wiesbaden Agreement that followed them. He was given a couple of days over a weekend to produce a draft. On 13 January 2008, he emailed his first draft to Mr Gilbert and Mr McGarrity [CEC01495585; CEC01447445; CEC01447446] and this draft was subject to revision within **tie** before it was sent to Bilfinger Berger Siemens ("BBS") by an email of 16 January 2008 [CEC00592608; CEC00592609]. In the draft, clauses 1.1 and 1.2 read:

"1.1 The majority of the Infraco Construction Price is on a 'fixed and firm' lump sum basis and not subject to variation unless changed pursuant to one of the following clauses:

- Clause 80 – **tie** Changes
- Clause 81 – Infraco Changes
- Clause 82 – Small Works Changes
- Clause 83 – Accommodation Works Changes
- Clause 84 – Qualifying Changes in Law
- Clause 85 – Phase 1B Option

"1.2 However certain items are not 'fixed and firm' *or alternatively are conditional upon certain criteria being fulfilled*. This Schedule sets out the various categories of items that will be subject to change, together with a mechanism for adjustment." [CEC01447446] (italics added).

11.5 The words in italics were introduced when the draft was revised within **tie**. At first sight, they appear to indicate a general qualification to the fixed nature of the price. However, when read alongside other terms, this does not appear to be the case. The provisions relating to value engineering ("VE") were in the following terms:

"4.1 The parties have agreed Identified Value Engineering opportunities/savings as noted in Appendix D.

"4.2 These VE opportunities/savings and [sic] not simply targets but are fixed and firm reductions, save for conditions noted.

"4.3 In the event that the conditions noted are not possible, any adjustment will be made by applying the principles of Clause 80 (**tie Changes**)." [CEC00592609, page 0004.]

11.6 Appendix D, which was mentioned in clause 4.1, also contained reference to the fact that the reductions identified were "fixed and firm" save for the conditions noted. There was no other reference to "conditions" in the draft. It therefore appears that the qualification to the fixed and firm nature of the price, to the effect that some matters are conditional upon criteria being met, relates to the element of VE rather than something broader.

11.7 Mr Gilbert said that the instructions that he gave in relation to SP4 were to incorporate the things agreed in the Wiesbaden Agreement [PHT00000023, page 116]. Mr Dawson said that he could not recall the basis on which he was asked to prepare it [PHT00000056, pages 56–57]. He was questioned about this matter and it did not appear that he had been told that SP4 was to mirror the written Wiesbaden

Agreement [*ibid*, pages 57–58 and 103–110]. In the evidence there was conflict as to whether Mr Dawson had seen the Wiesbaden Agreement. He said that when he sent on his first draft of SP4, he had been informed by email of the figures that had been agreed [*ibid*, pages 35–36; [CEC01495585](#)] rather than getting them from the Wiesbaden Agreement. It was apparent from emails that he had nonetheless been sent a copy of that agreement on 9 January 2008 [[CEC01546351](#)]. He was questioned in relation to this and I found his attempts to suggest why he had not seen it unconvincing and also puzzling [[PHT00000056](#), pages 74–77]. However, the draft that he produced is substantially different from the Wiesbaden Agreement and, when taken with his denial, it leads me to conclude that he did not refer to the Wiesbaden Agreement in preparing that draft.

- 11.8** As was noted above, the initial draft stated that the price was “fixed and firm” unless changed in accordance with exceptions listed in the Schedule and, to that extent, did reflect the wording of the Wiesbaden Agreement. However, the draft does not incorporate many of the terms agreed under the heading “Basis of the Price” in the written Wiesbaden Agreement [[CEC02085660](#), Part 1, pages 0005–0009]. Mr Gilbert said that he could not recall the reason for that being so. This is surprising in that he had given Mr Dawson the instruction to prepare the draft. It would be expected that the person instructing the draft would have some idea of what it should include. This could simply be a matter of recollection on the part of Mr Gilbert. Alternatively, it might reflect an unwillingness on his part to disclose what was happening at the time. Further, it may reveal a lack of any focus or consideration as to the intentions and objectives for what was, on any view, one of the most important parts of the contract. Certainly, in his evidence Mr Gilbert gave little indication that he appreciated how important these provisions were. The following exchange took place in his oral evidence.

“Q. Why were you sending Schedule 4 out without any reference to those matters? I.e. the negotiated terms contained within the Wiesbaden Agreement.]

A. I don't recollect why. Much of what this document is about at this stage is about how the adjustments would be made to the price.

Q. Schedule 4 is essentially the price of the contract?

A. It is.

Q. Presumably it's a matter of some critical importance?

A. Conceivably, I don't – I don't remember –” [[PHT00000023](#), pages 126–127.]

- 11.9** When I asked him whether he was saying that the price of a contract might conceivably be important, he said:

“Sorry. Of course it's important. Yes.” [*ibid*, page 127.]

- 11.10** This seems to indicate that it is not a matter of recollection but reflects a lack of insight on his part. His attitude is remarkable. If genuine – and I proceed on the basis that it is – it discloses a total failure on his part to appreciate the critical nature of this part of the contract. I am aware that there is always a danger that judgements such as this are made easily with hindsight and that matters are different for the people engaged in carrying out the work at the time. That, however, is not a factor here. Provisions of any agreement that regulate the price to be paid are obviously of key importance. Where, as here, there was the known sensitivity about costs that surrounded the Tram project, this was all the more so. If his attitude in this respect

was not genuine, it is of equal concern. It demonstrates that he was prevaricating in an attempt to distance himself from any responsibility for difficulties arising from the terms of SP4 despite the fact that he was the commercial director of the project with responsibility for leading the work to award the Infraco contract and had instructed Mr Dawson to prepare the first draft of the document over a weekend. That latter fact alone tends to support the view that he failed to appreciate the critical nature of SP4.

- 11.11** It is of note for what follows that, despite being the person who drafted SP4, Mr Dawson said that, from January 2008, he was aware that the aim of price certainty had not been achieved and could not be achieved without the design. He accepted that this position was generally understood within **tie** [PHT00000056, page 95].
- 11.12** Significantly, neither Mr Gallagher nor Mr Crosse, who had represented **tie** at the Wiesbaden discussions, was involved in the preparation of this draft. Although, as Project Director, Mr Crosse had overall accountability for the discussions and negotiations relating to SP4, Mr Gilbert "was in the lead from the commercial and procurement perspective and finishing the drafting of that document" [Mr Bell PHT00000024, page 36]. Before agreement was reached on the terms of SP4, Mr Bell took over the role of Project Director from Mr Crosse. The decision that this should happen was made by Mr Gallagher on 30 October 2007 and was intended to take effect from 28 January 2008, but it fully took effect from the end of February [CEC01441488; Mr Bell PHT00000024, pages 36–37]. The impetus for that decision appears to have been the withdrawal of Scottish Ministers' support for the Edinburgh Airport Rail Link ("EARL") and the change in the management of the Stirling–Alloa–Kincardine railway ("SAK"), both of which resulted in reduction of staff requirements within **tie** [TR100000037_C, pages 0011 and 0014, paragraphs 38 and 49 respectively]. Before this change, the intention had been that Mr Gilbert and Mr Dawson would both support Mr Crosse as he focused on managing the final stages of procurement and Mr Bell would take over from completion of procurement activities **libid**, page 0049, paragraph 49; Mr Bell PHT00000024, pages 23–24]. In fact, the procurement became so protracted that Mr Crosse, by now relieved of his role as Project Director, had left **tie** before it was concluded. This decision of Mr Gallagher to change the person in charge part-way through the work to award the most significant contract represented a loss to **tie**. Mr Gallagher's concern to relocate staff from the EARL and SAK projects as replacements for consultants in the Tram project failed to appreciate and take full cognisance of the significance of the experience of tram and light rail projects that Mr Crosse had in contrast to Mr Bell's lack of such experience **libid**, page 6]. There is no record of reasons for the absence of involvement from Mr Gallagher in the agreement of SP4. He was the Executive Chairman and, significantly, had chosen to attend the discussions in Wiesbaden. The preparation of the draft was a continuation of the process started there. While a chief executive or executive chairman might not always become involved in details of contract drafting, when he has elected to involve himself in a key element of the negotiations and has known that the other person in those negotiations was leaving, his involvement would have provided valuable continuity.
- 11.13** By email dated 4 February 2008, Mr McFadzen of Bilfinger Berger ("BB") attached a draft of the SP4 pricing assumptions to Mr Dawson [CEC00592614; CEC00592615]. He copied it to Mr Gilbert at **tie**, personnel within BB and Siemens and their legal advisers. It was not sent directly to anyone at DLA Piper Scotland LLP ("DLA") by anyone from the consortium, although, as noted below, Mr Dawson forwarded it to Mr Fitchie on 6 February in advance of a meeting with him an hour later to discuss the pricing assumptions in Schedule 4 [CEC01448308]. The draft included a number

of "base case assumptions". The effect of these was made clear by clause 1.1 of the draft, which stated:

"1.1 The Contract Price has been fixed on the basis of inter alia the Base Case Assumptions. If now or at any time the facts or circumstances differ in any way from the Base Case Assumptions (or any of them) the Infraco may (if it becomes aware of the same) notify **tie** of such differences (a '**Notified Departure**')." [CEC00592615, page 0008.]

- 11.14** The specified consequences of a Notified Departure included changes in the programme and potential increase in the price payable to the contractors. This approach – of having assumptions which, if not correct, would give additional rights to the contractors – had not been discussed at Wiesbaden and was a new approach from BBS. That this was an innovation upon the Wiesbaden Agreement was accepted by Mr Laing, a partner in Pinsent Masons, BB's solicitors [PHT00000040, pages 13–14].
- 11.15** One of the draft's base case assumptions that was to become particularly important was:
- "(a) that the Design prepared by the SDS [System Design Services] Provider will: ... (ii) not, in terms of design principle, shape, form and/or specification, be ... amended from the Base Date Design Information" [CEC00592615, page 0002].
- 11.16** The Base Date Design Information was defined as the design issued to the Infraco on or before 25 November 2007. No provision was made to the effect that changes arising from normal development of the designs that existed as at November 2007 would not infringe this assumption.
- 11.17** Although some of this terminology echoes what had been in the Wiesbaden Agreement [CEC02085660, Parts 1–2], there are differences in the way in which the wording is used and the agreement is structured. The relevant parts of the Wiesbaden Agreement are as follows:
- "3.3 The BBS price for civils works includes for any impact on construction cost arising from the normal development and completion of designs based on the design intent for the scheme as represented by the design information drawings issued to BBS up to and including the design information drop on 25th November 2007.
- "... For the avoidance of doubt normal development and completion of designs means the evolution of design through the stages of preliminary to construction stage and excludes changes of design principle, shape and form and outline specification." *ibid.*, Part 1, pages 0005–0007.]
- 11.18** It can be seen that, in the Wiesbaden Agreement, the terms concerning development of the design were in the context of a statement as to what was included in the price. There was a general statement of principle that cost increases resulting from this would not increase the price. As such, it was a statement of the areas of risk that would be borne by BBS and for which no additional monies would be paid. As this meant that normal design development was at the risk of the contractor, it was necessary to have a date by which the design to be developed could be identified. The parties chose 25 November 2007. It is of note that the contractors take the risk of construction costs arising from development of designs based on the "design intent" represented by those drawings, which is broader than simply development of the particular drawings. In the draft of SP4 sent by BBS, on the other hand, there was no statement that design development is included and no reference was made to the

design intent. Instead of a provision as to what was included in the price, the words define a state of facts that, if it is incorrect, will lead to an entitlement to additional money. That change of emphasis and approach was not noted or commented on at the time by **tie**.

- 11.19** Despite these points, nothing was done to assess the extent or value of the risk that was being undertaken in making these changes to SP4. Mr Gilbert said that he had considered the matter but had thought that the wording was still sufficient to pass the risk to BBS [PHT0000023, pages 137–138]. Both legal and practical issues arise from this. That an issue of the meaning of the wording even arose for consideration is an indicator that it would have been appropriate to have taken legal advice. At a practical level, no check was made with System Design Services (“SDS”) to assess the likelihood of changes that would be caught by this provision in the event that the risk lay with **tie** [*ibid*, page 136].
- 11.20** The following other significant base case assumptions were included in the draft of SP4:
- “that the Design would be issued to the Contractors ready for construction no later than four weeks in advance of programme or any longer period necessary to allow the contractors to procure plant and materials” (Base Case Assumptions, (a), (i)); and
- “that the MUDFA [Multi-Utilities Diversion Framework Agreement] Contractor shall have completed all [MUDFA Works] in accordance with the MUDFA Completion Programme (Base Case Assumptions (d)(ii))” [CEC00592615, page 0003].
- 11.21** The assumption in relation to the MUDFA works was not part of the Wiesbaden Agreement and was therefore new. In relation to the assumption concerning delivery of design, it is of note that by this time the design had been slipping for over a year. Mr Gilbert was aware of the design slippage that had occurred up to that date. When asked whether he considered that it was highly likely that there would be further slippage in the design programme, his initial response was that it was possible. When pressed, he thought it likely that there would be further slippage [PHT0000023, page 151]. Nonetheless, nothing was done to remove or qualify these assumptions and there was no assessment of the extent or value of the risk.
- 11.22** Clause 1.1 of this draft made clear how the base case assumptions would affect the price. It stated:
- “The Contract Price has been fixed on the basis of inter alia the Base Case Assumptions. If now or at any time the facts or circumstances differ in any way from the Base Case Assumptions (or any of them) the Infracore may (if it becomes aware of the same) notify **tie** of such differences (a “**Notified Departure**”).” [CEC00592615, page 0008.]
- 11.23** The draft also had provisions as to how the effect of a Notified Departure on the programme and the price should be assessed. The parties were to discuss and seek to agree these matters but, if agreement was not reached in 28 days, the issue would be addressed under the dispute resolution procedure (“DRP”). It is clear that this draft envisaged that the assessment of consequences for both programme and price of a Notified Departure would be determined after the change giving rise to it had been given effect.
- 11.24** There were meetings to discuss this draft within **tie**. Mr Gilbert marked up a copy of it with his comments [CEC01448862]. In relation to the provision quoted at paragraph

11.15 above, he suggested that it should state: "Save for design development. Words as Wiesbaden agreement." [PHT00000023, pages 154–155.] This is significant, as it indicates that he considered that, as drafted, the assumptions went further than the earlier agreement. It is apparent that his suggestion was not implemented and Mr Gilbert did not pursue the matter. In his comments, Mr Gilbert also considered that it would be desirable to qualify the word "amended" by addition of the word "materially" *libid*, page 135]. He claimed, however, that he was unable to assist the Inquiry in determining the meaning of some of his comments *libid*, pages 147–152]. This is both surprising and disappointing. Although the comments were made some time ago, with the benefit of prompts from notes and emails written at the time, other witnesses attempted to recall the purpose of what was happening and appear to have been able to do so with reasonable accuracy. It is unsatisfactory that the person in charge of the process could not provide the Inquiry with similar assistance. I gained the impression that Mr Gilbert was not making any serious attempt to assist the Inquiry in understanding the apparent inadequacies of a contract in the preparation of which he had a significant role.

- 11.25** Mr Dawson said that he was not happy with parts of the draft from BBS, and this is apparent from his comments that he marked on to a draft that he sent to Mr Fitchie on 6 February 2008 [CEC01448308; CEC01448309]. During evidence, reference was also made to CEC00592615 as the document with the mark-ups. In common with Mr Gilbert, Mr Dawson suggested that the word "materially" should be added to qualify the word "amended". In relation to clause 1.1 quoted above, he also noted that "[It] can't be just any departure or all risk will come back to tie". He said that he was concerned that, as the assumptions were not correct, there would be additional costs [PHT00000056, pages 64–69]. He had discussed this with Mr Gilbert, Mr Murray and Mr Fitchie *libid*, pages 70–71]. As a result of these discussions, he said that an attempt was made to mitigate the concern by progressing the design. However, it is immediately apparent that as the expedited design would still come after November 2007, this would be of no benefit to tie unless BBS agreed to change the "design freeze" date retrospectively. To do that, it would require to re-price, which would simply crystallise the problem.
- 11.26** In his comments on the draft [CEC01448355; CEC01448356], Mr Steel noted, in relation to the assumption that there would be no amendment in terms of design principle, shape, form and/or specification, "[g]iven that a substantial amount of design requires to be presented, reviewed etc this clearly will not happen" *libid*, page 0002]. This was a clear recognition that there would be a change from the factual position that was being assumed.
- 11.27** Mr Fitchie said that he did not like any part of this draft. Nor did he like the idea that the document had been drafted without any input from DLA or the fact that there was a design drop date of November 2007 when design had been evolving in the intervening months [TR100000102_C, page 0175, paragraph 7.241; PHT00000017, pages 85–86]. He said that he assumed that in SP4 the terms of the Wiesbaden Agreement were being translated into a Schedule, but this is hard to reconcile with his claim that, at that time, he was not aware of the terms of the Wiesbaden Agreement *libid*, page 89]. He said that when he attended the meeting on 6 February 2008 to discuss this draft, he thought that "tie had agreed something which had very direct and serious contractual implications" *libid*, page 90]. He noted that he:
- "quickly recognised that having a base case assumption in relation to design was an area where this would create – it was likely to create a large cost and time implication for tie" *libid*, page 91].

- 11.28** Although his first involvement with SP4 was in early February, Mr Fitchie claimed that a version of SP4 had been negotiated by **tie** and BBS for two to three weeks immediately after Christmas 2007, that it included all the pricing assumptions, excluding engineering and commercial pricing assumptions [**libid**, page 149] and that **tie** and BBS had been discussing SP4 from mid-December [**TRl00000102_C**, page 0174, paragraph 7.235]. He claimed that the drafting of SP4 was fixed in email exchanges between **tie** and BBS in January 2008, before the issue of SP4 as a working draft in early February 2008 [**libid**, page 0178, paragraph 7.259]. I reject his evidence in this regard. It seems to be an attempt to put forward an account that has the effect of portraying him as having had no involvement when key matters were being determined. I prefer the accounts of Mr Dawson and Mr Gilbert as to the production of the first draft as noted above. That account is supported by the contemporaneous documentation. It is also consistent with the account of Mr Laing. He, too, said that there had been no discussion about assumptions prior to the draft sent by BBS in early February 2008 [**PHT00000040**, page 8]. In his evidence, Mr Fitchie was asked about emails, and he agreed that none of the emails referred to in his statement or the attachments to them dealt with the issue of pricing assumptions [**PHT00000018**, pages 1–8]. He ultimately accepted that the first mention of pricing assumptions had been in early February 2008 [**libid**, page 8]. There is accordingly no basis at all for his suggestion that they were in any sense agreed or even discussed before the sending of the first draft at that time. The practical consequence is that Mr Fitchie was aware of the use of pricing assumptions from the first time that they were proposed.
- 11.29** Mr Walker said that the thinking behind this draft was developed by Pinsent Masons. Where there was something relevant that BBS did not know or could not quantify, it was put in a “risk basket”. This later became SP4. Mr Walker said that if matters could not be properly priced, BBS was not willing to take the risk [**TRl00000072_C**, pages 0013–0015, paragraph 21]. This is borne out by the evidence of Mr Laing, who said that the assumptions were intended to address risk.
- 11.30** At about this time, the parties concluded an agreement that came to be known as the Rutland Square Agreement [**CEC01284179**]. This increased both the price payable for the infrastructure works and the programme length. It is considered at the end of this chapter. A draft of what were termed “base case assumptions” was attached to the agreement. Although not part of the draft SP4, a page attached to the back of the agreement states:
- “The design information which provided the basis for BBS’s price will be a pricing assumption under Schedule 4. The risk of design ‘creep’ accordingly lies with **tie**.”
[**libid**, page 0027.]
- 11.31** This shows that BBS saw the liability for design development resting with **tie**. There is, however, no record of this document having been sent to **tie**.
- 11.32** **tie** responded with an email dated 19 February 2008 from Mr Dawson with an attachment in which **tie** took some of the points that BBS had raised in its draft of the pricing assumptions and included them in a new draft [**CEC00592621**; **CEC00592622**]. Mr Dawson had prepared this draft [**CEC01448861**]. The email with the new draft SP4 was sent to Mr McFadzen at BB and Mr Flynn at Siemens. It was not sent to anyone at DLA. Within the email, Mr Dawson stated “I think we need to resolve practical issues between ourselves before you involve your lawyers this time” [**CEC00592621**].

- 11.33** In this new draft, both the approach in the Wiesbaden Agreement and the approach in the BBS draft of assumptions are apparent. The first price assumption had been changed to read:
- “The Infraco Construction Works Price includes for any impact thereon arising from the normal development and completion of designs based on the design intent for the scheme as represented by the design information drawings issued to Infraco up to and including the design information drop on 25th November 2007.” [CECo0592622]
- 11.34** Notably, this echoed the Wiesbaden Agreement, with its reference to the “design intent” and the fact that costs arising from development of this were included. By way of clarification of what was meant by “normal development and completion of designs” the draft again echoed the Wiesbaden Agreement and stated:
- “For the avoidance of doubt normal development and completion of designs means the evolution of design through the stages of preliminary to construction stage and excludes changes of design principle, shape and form and outline specification.” [ibid]
- 11.35** The exclusionary approach adopted by BBS is, however, apparent in the last part of paragraph 2.4(a), in which the assumption stated is that the design would not:
- “in terms of design principle, shape, and/or specification be materially amended from the drawings forming the Infraco Proposals (except in respect of Identified **tie** Changes or Value Engineering)” [ibid].
- 11.36** There are inconsistencies in this clause 2.4. The first is that the inclusive term defines the design that is to be developed by reference to the design information drop on 25 November 2007, whereas the prohibition or exclusion seeks to fix design by reference to the Infraco proposals. The latter approach could have led to some flexibility in **tie**'s favour if those proposals had been developed at all between November 2007 and the date of the contract. The prohibition also includes the word “materially” as a qualifier in relation to changes, whereas the stipulation of what is included in normal development does not. The inclusion of such overlapping and potentially inconsistent terms indicates that the draft had not been properly considered before being sent out.
- 11.37** The assumption that design delivery was aligned with the Infraco construction delivery programme remained. The assumption as to completion of the MUDFA works was changed so that they would be done in accordance with the requirements of the Infraco programme. This was a surprising change, as at this time there was no concluded Infraco programme, which meant that it would not be clear precisely what this obligation entailed.
- 11.38** This **tie** draft did state the consequences if the assumptions turned out not to be correct, but it did not use the term “notified departures”.
- 11.39** Shortly after Mr Dawson had sent his draft, on 22 February 2008, Mr Laing sent an email with a further draft attached [CECo1449876; CEC01449877] to him, Mr Gilbert and Mr Fitchie. It was copied to others. The draft of SP4 had a note in clause 2.4 that the preferred approach was to state the assumptions on which the price had been prepared rather than to consider what was or was not included in the price. There was a comment that the wording of the assumptions would have to change to reflect this, but they had not been reworded in this draft.

- 11.40** In the assumptions in relation to design, both the reference to "outline" in relation to the specification and the word "materially", which had been inserted to qualify the statement that there had been no change in the design, had been deleted. This draft contained the following definition:
- "normal development and completion of designs means the evolution of design through the stages of preliminary to construction stage and excludes changes of design principle, shape, form and outline or specification" [\[ibid\]](#).
- 11.41** A footnote on page 0006 stated that the definition of normal design development was not satisfactory and that it would be helpful to understand what was included in "normal development". As the wording used reflected that in the Wiesbaden Agreement, it is surprising that there was not an understanding on this matter before this time.
- 11.42** The deletion of the requirement that, in order to be relevant, any change to the design had to "materially" amend the design as at November 2007 is significant. This was a qualification that **tie** had sought. It would have been aware of the reasons that it wanted it and, presumably, considered that this was appropriate to protect its interests. Despite this, no objection appears to have been raised to the deletion.
- 11.43** At the end of February 2008, a draft negotiating paper [\[CECo1450123\]](#) was prepared by **tie**. **tie**'s aims were to "resolve outstanding points of principle and take due account of any material financial, time and risk impacts" [\[ibid\]](#), page 0001]. It anticipated that BBS would seek to amend "price levels upwards, leave options open post contract award and negotiate risk transfer" [\[ibid\]](#). The paper noted that SP4 was one of the areas not yet agreed and suggested that **tie** should get agreement that the definition of "normal design development" from the Wiesbaden Agreement should be used [\[ibid\]](#), page 0004]. In relation to risk transfer, it said that there should be no difference to the preferred bidder position [\[ibid\]](#). This negotiating paper also stated, in relation to SP4, that there should be agreement that it was subsidiary to contract terms, Employer's Requirements and the Infracore works proposals [\[ibid\]](#), Table, page 0004]. Although the author of the documents was not identified, the statements that it contained demonstrated that within **tie** there was a view that such matters were still open for negotiation. It did not consider that the terms of SP4 had been dictated by the Wiesbaden Agreement or BBS or that everything had already been fixed.
- 11.44** I acknowledge that certain aspects of what follows here have already been noted at paragraph 11.12 above, but I consider that they bear repeating. At about this time, Mr Bell took over the role of Project Director from Mr Crosse. The intention had been that Mr Gilbert and Mr Dawson would then support Mr Crosse as he focused on managing the final stages of appointment of contractors, and that Mr Bell would take over from completion of procurement activities [Mr Bell [PHT00000024](#), pages 23–24]. In fact, the procurement became so protracted that Mr Crosse, by now relieved of his role of Project Director, had left before it had been concluded. This decision of Mr Gallagher to change the person in charge part-way through the procurement of the most significant contract represented a loss to **tie**. Mr Crosse had experience of tram projects, whereas Mr Bell had no experience of tram or light rail projects [\[ibid\]](#), page 6]. The decision appears to have been undertaken at a time when it might reasonably have been obvious that the target of concluding the contract by the end of January 2008 was not going to be achieved. It was not the first – nor would it be the last – change in key personnel in this part of the contract process.

- 11.45** On 3 March 2008, Mr Dawson sent out a further draft of the agreement [CEC01450182; CEC01450183]. There were no material changes to the base case assumptions. This time, the definition of Notified Departure referred to the situation “where the facts or circumstances that comprised the basis of the Base Case Assumptions are subsequently changed in a manner that results in a **tie** Change in accordance with this Agreement” [ibid, page 0005].
- 11.46** The definition of base case assumptions had not been completed. On the wording of this draft, there would be no entitlement to additional payment or time to complete the works unless what had taken place amounted to a “**tie** Change”. As that already had consequences for time and payment, it meant that the existence of a Notified Departure added little to what was already in the contract. In relation to the issue of precedence between SP4 and the remainder of the contract, a note on the cover sheet recorded that **tie** did not want SP4 to have precedence as its function was simply to explain the basis of the price.
- 11.47** On 10 March 2008, Mr Dawson sent an email to the solicitors for BB and for Siemens and their representatives, and also to Mr Fitchie [CEC01450544]. It followed on an earlier message that he had sent on 6 March 2008, which had attached a further draft of the agreement. The email noted that there had been a “telephone conference with Geoff and Dennis” in which wording had been agreed for a clause dealing with the situation in which the facts differed from the base case assumptions. The agreed text read:
- “3.4 The Construction Works Price has been fixed on the basis of inter alia the Base Case Assumptions noted herein. If now or at any time the facts or circumstances differ in any way from the Base Case Assumptions (or any part of them) such Notified Departure will be deemed to be a Mandatory **tie** Change in respect of which **tie** will be deemed to have issued a **tie** Change on the date that such Notified Departure is notified by either Party to the other.” [ibid]
- 11.48** The effect of this is that any departure from the base case assumptions would now give rise to an entitlement to additional time and payment. Despite the reference to discussion with Mr Gilbert and Mr Murray, it is apparent from the context that the discussion must also have involved representatives of BB and Siemens and was intended to agree the effects of a Notified Departure. It is not clear whether the legal advisers for BB and Siemens were involved in the call. From the absence of any mention of Mr Fitchie in the body of the email, I conclude that he had not been involved.
- 11.49** This new wording created a situation in which, if the facts did not accord with the assumptions, there was an automatic right to additional payment and further time for the works. This is different from the liability that would arise if **tie** instructed any amendments to the works, because, in that situation, the decision whether to proceed with the amendment was within **tie**'s control. Mr Gilbert was asked whether any assessment had been carried out of the risk presented by this automatic liability. This was one of the many occasions in his evidence on which he said that he could not recall [PHT00000023, pages 183–184]. As there is no evidence of any such assessment, I conclude that this change to the wording was put into effect without any such assessment being undertaken and that this was another situation in which the parties engaged in the drafting were unaware of the effect of the agreements that they produced.

- 11.50** There were a number of developments in the drafting process in mid-to-late March. A new draft was sent by Mr Laing to Mr Dawson and was copied to other **tie** personnel and Mr Fitchie on 19 March 2008 [CEC01451012; CEC01451013]. Mr Fitchie clearly saw this, because he commented on some of the terms in an email the same day [CEC01489543]. The draft reflected changes made in meetings on 11, 12 and 18 March 2008. It contained the agreed wording noted above in relation to Notified Departures being deemed to be a Mandatory **tie** Change [CEC01451013, page 0013, clause 3.5]. It stated that any change to the base case assumptions was a Notified Departure. The definition of Base Date Design Information ("BDDI") was revised with the intention that there be a list of the documents that comprised it. More significantly, however, base case assumptions were defined to include the BDDI, the base tram information, the pricing assumptions and the specified exclusions. When these terms were read together, the effect was that any change of design as it stood in the BDDI as at November 2007 would be a change in a base case assumption and therefore a Notified Departure. This made any consideration of whether a change fell within normal design development – or even whether it was a change of design principle, shape and form and outline specification – irrelevant. This was not commented on at the time, or even in the context of the disputes that arose once the works had started. It is, however, the clear meaning on a plain reading of the wording. That a revision amounting to such a departure from the negotiating strategy at Wiesbaden could be made without consideration or comment demonstrates that the persons involved for **tie** had no proper understanding of the effect of the clauses that they were drafting and therefore no proper understanding of the obligations that they were agreeing that **tie** should undertake.
- 11.51** Despite the width of the change discussed above, this draft also reworded the first assumption so that it read:
- "The design prepared by the SDS Provider will not (other than amendments arising from the normal development and completion of designs):
- "1.1 in terms of design principle, shape, form and/or specification be amended from the drawings forming the Base Date Design Information (except in respect of Value Engineering identified in Appendices C or D),
- "1.2 be amended from the drawings forming the Base Case Design Information as a consequence of any Third Party Agreement (except in connection with changes in respect of Provisional Sums identified in Appendix B) and
- "1.3 be amended from the drawings forming the Base Case Design Information as a consequence of the requirements of any Approval Body.
- For the avoidance of doubt normal development and completion of designs means the evolution of design through the stages of preliminary to construction stage and excludes changes of design principle, shape and form and outline specification." [ibid, page 0007.]
- 11.52** Thus, this draft (1) removed the statement that normal design development was included; (2) removed the qualifier that change had to be "significant"; (3) in subparagraph 1.1 introduced the requirement that there could be no amendment of design principle, shape, form and/or specification from the Base Date Design Information as opposed to the Infraco proposals; and (4) provided an exception from this prohibition where the change arose out of normal design development, but then (5) defined that exception so that it could not include changes of design principle, shape and form and outline specification. As a matter of interpretation of the words

used, the prohibition and the proviso were drafted in such a way that they cancelled each other out. In disputes that arose later, the parties were agreed that the fact that the text in paragraph 1.1 referred simply to "specification" and the proviso referred to "outline specification" made no difference to the effect of the clause. So, if there was a change of "design principle" etc, contrary to sub-paragraph 1.1, the exception for normal design development in the opening phrase would not apply as a result of the proviso at the end. In his evidence, initially Mr Laing would not confirm that this was the case, and he said that it was an issue for engineers [PHT00000040, page 26], but he later agreed that the wording in brackets in the opening words was redundant [ibid, page 34]. Mr Fitchie recognised that there was a contradiction or difficulty with this clause and that, in this form, the issue of normal design development was redundant [PHT00000017, page 145]. It is important to note that this occurred with the change of wording contained in this draft from mid-March – which he had seen and commented on – and not, as Mr Fitchie claimed, in the first draft.

- 11.53** In conclusion, the effect of the first sub-paragraph, when read with the opening words and the proviso at the end, is that wherever a variation in the works amounted to a change to "design principle, shape, form and/or specification" [CEC01451013, page 0007], there was an entitlement on the part of BBS to further payment and additional time. How onerous this would turn out to be would depend on how those words are interpreted. While "design principle" could readily be understood as referring to quite high-level design considerations such that only a significant change would be caught, on the face of them, the notions of "shape", "form" and "specification" could catch far more. There is no record of this being the subject of any consideration. As it was critical to any understanding of the effect of the assumption, this was a material omission.
- 11.54** The only potential scope for input from engineers, as Mr Laing had suggested, was as to whether any particular alteration to the design amounted to a change of "design principle, shape, form and/or specification" [ibid]. If it did not, the prohibition was not engaged – quite apart from issues of normal design development. Witnesses from BBS were asked what change might arise that would not conflict with the assumption. Mr Walker said that a change of quantities by plus or minus 5 per cent might be something that would be normal design development and would not be caught by the words "design principle" etc [PHT00000035, page 74]. Mr McFadzen thought that it might include things such as increase in section size or reinforcement content [PHT00000034, page 88]. He appeared, however, to be struggling to identify what change could be made without being caught by this assumption.
- 11.55** The exception in relation to normal development and completion of designs also applied to the prohibition on changes that were a consequence of third-party agreements and the requirements of an approvals body – sub-paragraphs 1.2 and 1.3. The various sub-paragraphs use differing terms: "Base Date Design Information", "Base Case Design" and "Base Case Design Information" [CEC01451013, page 0007]. However, there were definitions only of "Base Case Assumptions" and "Base Date Design Information" and it therefore appears that the others were drafting errors that went unnoticed. On the face of it, changes under these last two sub-paragraphs might be thought to have fallen under the more general prohibition in sub-paragraph 1.1. If that is the case, they added nothing to the position noted above. It is possible, however, that they were even wider and that they covered any change, provided that it was for one of the reasons specified. If that is the situation, it follows that two considerations arise. The first is that it is not clear how they would interact with the proviso in the opening words as to "normal development and completion of

designs". The second is that the changes would have been caught anyway, as a result of the terms considered in paragraph 11.50 above. The width of the second means that there is little purpose in attempting to reach a view as to how the opening proviso interacts with the various sub-paragraphs. On any view, the fact that there is no immediately obvious answer gives the clear impression that this had not been thought through when the draft was sent out.

- 11.56** The overall picture of the evidence from this draft is one of a lack of coherence. Clearly it was a work in progress and it is to be expected that there might be ambiguities, areas of lack of precision and infelicities in any draft of an agreement. Despite this, the terms of the draft do not appear to relate to an underlying understanding of what the position should be and what rights and obligations parties should have. The impression that I have is of discussions that have dwelt on individual clauses without any attempt to get an overview or working understanding of the position. It is a cause for concern that it was this draft, with all its apparent disarray, that marked the change from the approach that had been contained in the Wiesbaden Agreement to the one that appeared in the final version of SP4 in the signed contract.
- 11.57** This draft also changes the assumption in relation to the Design Delivery Programme version 26.¹⁷ It is notable that the reference to version 26 is in square brackets, which clearly suggests that at the time it was thought that another version would be the one actually to be used. The significance of this is that it indicates that **tie** was aware that it would be necessary to change the version of the design programme that it was using. Despite this, there had been no consideration with BBS during the negotiations about whether it would agree to such a change. The very fact that **tie** was anticipating further change in relation to this should have put it on notice that, in the absence of agreement with BBS, there would be a consequence for the project cost. The issue of which design programme was assumed in relation to the price was to arise again later, and I consider it in that context from paragraph 11.66 below onwards.
- 11.58** At the same time as these modifications were being considered, another major change was made to the team conducting the negotiation. Mr Gallagher transferred responsibility for managing completion of SP4 to Mr McEwan in place of Mr Gilbert. As he was to be put in charge of negotiating a pricing schedule to a civil and electrical systems engineering contract, it might be thought that Mr McEwan would have had some relevant experience, but this was not the case. Mr McEwan's job title was "Business Improvement Director". He had worked for Scottish Power and its predecessors for the preceding 40 years [TR10000057_C, page 0001]. He had worked in information technology for 25 of those years and, in the last 20, had managed projects. While this gave him business experience, none of it was in the field in which he was now to conclude a contract. The reason for the transfer of responsibility from him to Mr McEwan was one more matter that Mr Gilbert said he could not recall [TR10000038_C, pages 0116–0117, paragraph 292]. He said that he thought that he had made it clear that he had to leave by a certain date and that his successor, Mr Murray, was already at **tie**. He thought that Mr McEwan would provide the continuity through to conclusion of the contract. This is hard to reconcile with the fact that Mr Gilbert remained involved in the process until he left **tie** at the end of April 2008. Mr Bell also became more involved in the negotiation process from

¹⁷ Although this is said in the draft to be a term from the SDS Agreement [CEC00839054], this is not the case. That agreement defines "programme" to refer to that programme set out in Schedule 4 of that agreement. Alternatively, it may have been intended as a reference to the programme to be provided under clause 4.5 of the SDS Agreement setting out the order in which each deliverable is to be submitted.

around this time [PHT0000024, pages 25–26]. While BBS had retained the individuals who had been involved in the discussions in Wiesbaden to lead the contract negotiations, **tie** made yet another change and had done so while the drafting of the pricing assumptions was at a critical stage.

- 11.59** As I consider in more detail in Chapter 14 (CEC: January–May 2008), another factor at this time was that Mr Gallagher wished **tie** to press ahead with publication of a Notice of Intention to Award the contract and, following a decision to that effect by the Tram Project Board (“TPB”) [CEC00114831, Part 1, page 0008], **tie** did so on 18 March 2008 [TR100000102_C, page 0222, paragraph 7.481]. This could only be seen by BBS as an overt commitment by **tie** to appointing them that would be difficult to depart from.
- 11.60** In relation to the MUDFA works, although there had been a change to the wording there was still an assumption that the MUDFA contractor would have completed the works in accordance with the Infraco contract programme. I have referred above to the assumption in relation to the timing of delivery of the design and whether it was known that the facts were likely to be different. The same issue arises in relation to the assumption about the MUDFA works. Mr McEwan was asked about his understanding of the extent to which the works would be complete so as to comply with the assumption. His answers were inconsistent. He accepted that by this time (March 2008) he was aware that there were issues with the progress of the MUDFA works [PHT0000022, page 140]. When asked whether he was aware that it was unlikely that the MUDFA works would be finished before commencement of the Infraco works, however, he replied:

“I don’t think I was explicitly aware. I don’t think I remember – if you’re saying very unlikely, I think I was aware that there may have been a potential, I think, but I wasn’t aware – in fact not even that. I wasn’t aware, no.” *libid*, page 141.]

Later, he said:

“In terms of the programme, there was clearly potential for MUDFA to affect the programme, but the true extent of that was unknown. It was unknown to me.” *libid*, page 148.]

- 11.61** Shortly after that, the following exchange took place:

“Q. But by that time you perhaps would have been aware – were you aware that the MUDFA contract was running late and that was going to be a change that would arise under the contract?”

A. My – my understanding – I certainly personally wasn’t aware that the MUDFA contract would potentially generate a major change, not at that point in time. I knew there were problems. There are always problems. I wasn’t aware of the extent of the problems, and to be fair, I don’t (inaudible).

Graeme Barclay reported directly to Steven Bell. I’m not certain Steven understood the full extent of what – and perhaps Mr Barclay didn’t either – the full extent of what we were going to uncover and things that were going to delay that project. The issues that delayed that project were legion, and unfortunately, on 31 March 2008, weren’t fully understood.

Q. Were they understood at all?

A. Because they were discovered on a daily basis.

Q. Were you aware that they were being discovered on a daily basis, that problems were arising?

A. I wasn't aware of the extent of the problems at that specific time, no. I was – I was aware of some reporting at tie executive meetings on the ones that I attended that there had been problems. But, you know, frankly, I wasn't particularly tuned into those." [libid](#), pages 149–150.]

11.62 For completeness, when questioned about the assumption in relation to delivery of design, Mr McEwan said:

"My understanding was that SDS were slipping in some design elements as far as I'm aware. In delivery of design. But I don't have any detailed understanding and I don't have any detailed recollection of it. I'm sorry." [libid](#), page 150.]

11.63 Mr McEwan sought to pass responsibility to Mr Bell. I find his denials of knowledge wholly unconvincing. However, even accepting his answers at face value, it is remarkable that he was leading a team that was drafting a contract containing assumptions and yet had no idea whether those assumptions were correct and if they were not correct, to what extent the facts would depart from the assumptions. Nor did he attempt to assess the financial consequences of any departure from the assumptions.

11.64 Mr Dawson said that it was known prior to the end of March that the design programme did not fit with the Infracore programme as there was a "negative float", meaning that the design was too late for the Infracore programme [[PHT00000056](#), page 50]. However, he said that because he was leaving, he did not know what was happening with design. He said that when he left, he did not think that a design sufficient to get a fixed price would be available any time soon [[libid](#), page 53]. He did not accept that he had considered this draft sent back by BBS on 19 March, despite the fact that it had been attached to an email addressed to him [[CEC01451012](#)]. This was on the basis that he was leaving at the end of March, and he said "I may have been doing other things" [[PHT00000056](#), page 87]. His job title was "Procurement Manager". This was the largest single contract of the project and he was identified as part of the team. His unwillingness to accept responsibility was striking. His efforts to distance himself from negotiations in March about the draft document were unconvincing. I gained the impression that he was seeking to shelter behind his imminent departure from **tie** to minimise his involvement, thereby avoiding criticism for any failure to protect **tie**'s position. In all the circumstances, I am satisfied on a balance of probabilities that Mr Dawson would have considered the email and the attachment sent to him on 19 March and attended the meeting the following day. He had been actively involved in considering earlier drafts of the document and it is inconceivable that, having received the draft on 19 March, he would not continue to be involved as part of the **tie** team until his departure at the end of March. In his evidence, he stated that he assumed that he had attended the meeting on 20 March but that he could not recall [[libid](#), page 89]. The email from Mr Hecht, of DLA, mentioned in paragraph 11.65 included Mr Dawson as a principal addressee along with other employees of **tie**, and it was copied to Mr McEwan. It is a reasonable inference that the principal addressees were those who had attended the meeting to which the email referred. Disappointingly, Mr Dawson maintained his position that he could not recall what was discussed at that meeting.

11.65 Following the meeting on 20 March to consider the draft, on the same day Mr Hecht sent out a new version that recorded what had been agreed [[CEC01451053](#); [CEC01451054](#)]. All the changes referred to above remained and the square brackets

around reference to Version 26 of the SDS programme were removed. In that the earlier draft had been sent to Mr Fitchie and this draft was sent out by DLA, it is apparent that there had been input from legal advisers for **tie** at the meeting that day.

- 11.66** On 26 March, Mr Laing sent an email [[CEC01451185](#)] to various persons including, on the **tie** side of the discussion, Mr Hecht, Mr Bell, Mr Murray, Mr Dawson and Mr McGarrity. It was also copied to Mr McEwan and Mr Fitchie. It said:

"As we discussed earlier today, the Design Delivery Programme that [sic] will be v28. The Pricing Assumption in Schedule 4 of the Infraco Contract assumes that the Design Delivery Programme will not change from v26. It follows that there is the possibility that there will be an immediate Notified Departure on contract execution. Given the unusual position that we are in, please can you confirm that this is understood and agreed by tie."

- 11.67** Perhaps reflecting the change in responsibility within **tie**, this email was not addressed to or copied to Mr Gilbert, who said that it was not shown to him [[PHT00000023](#), pages 192–193]. On 31 March, Mr Laing sent a follow-up or chaser email [[CEC01465933](#)] in the following terms:

"Please can you let me have confirmation that the position on the Notified Departure in relation to the Design Delivery Programme is understood and agreed by tie."

- 11.68** In his oral evidence, Mr Laing explained that his motivation in sending the emails was to ensure that there was a common understanding and a concern on his part that the Notified Departure should not sour relations if a claim was made immediately following signature of the contract [[PHT00000040](#), page 42].

- 11.69** Mr McEwan forwarded the chaser email to Mr Fitchie on 31 March 2008 [[CEC01465933](#)] and asked for advice as to what the response should be. While Mr McEwan accepted that what Mr Laing was saying was factually correct and that the version change would be a Notified Departure, in his email he expressed the concern that there should be

"no gaming of this position by BBS, and that only where the change can be shown to materially change the Infraco programme critical path should we be liable for potential additional charges".

- 11.70** This shows that there was at least some understanding on his part of the scope for BBS taking advantage of this provision. His email is couched, however, solely in terms of considering the particular issue that arose in relation to the change from version 26 to version 28 of the design delivery programme and not the possibility of more widespread departures from the assumptions. In his oral evidence, he said that he was not concerned by the email from Mr Laing but simply wanted to know the correct way to respond [[PHT00000022](#), pages 145–146].

- 11.71** On the same day, Mr Fitchie responded in an email to Mr McEwan and Mr Bell that was copied to Mr Gilbert, and Mr Bissett at **tie**. It is appropriate to set out the text of his email in full:

"If the situation is that at this point SDS is unable to produce a design delivery programme which is reliable and static at V26 – and that is indeed the situation that SDS have articulated – and that this programme will need to be varied immediately post contract award, tie needs to endeavour to negotiate with

BBS now the specifics of what is or is not to be permitted as a variation to the Infraco Contract and its master construction programme, otherwise the Notified Departure mechanism is too blunt and will permit BBS to include everything that they estimate is going to affect them to be priced and to be granted relief. That Estimate is bound to be all encompassing and conservative.

"The only approach open to tie, in my opinion, is a factual one, not a contractual one (since the mechanism for Notified [sic] Departure puts the advantage with BBS by creating an automatic tie Change): to capture as many identified key changes that tie knows will be required and to attempt to fix them and agree their likely programme and/or cost impact with BBS prior to contract award, or at the least identify the reasonable range of programme and cost impacts. Tie can still monitor/evaluate what are the elements of this specific Notified Departure for which Infraco will assert claims for additional cost and time, but tie has no ability to prevent there being a tie Change, other than going to DRP.

"The optimal response to Ian would then be to acknowledge that V26 will need to [be] varied to reflect v28 but that tie wishes to agree the principles and key facts around which the construction programme and any related financial impact will be assessed and calculated by BBS.

"This is one where Steven and Geoff must, I feel, have a better sense of how factually to restrict BBS's ability to exploit this. After this review, we might be able to go about trying to structure acceptable controls in the Infraco Contract."
[\[CECo1465933\]](#)

- 11.72** The opening of the first paragraph clearly deals with the issue focused by Mr Laing's email – the mismatch between the design delivery programme in the contract and that which it was then thought would be current when the contract was awarded. It is aimed at identifying the various consequences that flow from this departure and getting agreement on them so that **tie** had a more accurate understanding of the liability that it was undertaking. The remainder of the first paragraph and the reference in the second paragraph to "as many identified key changes that tie knows will be required" seems to go further and contemplate the other changes that may be required. Thereafter, and in the following paragraph, however, it seems to revert to consideration of the change from programme version 26 to programme version 28. It seems to me that Mr Fitchie had in mind the possible impact of other changes. This is consistent with his evidence as to his understanding of the problems that lay in SP4 as it was then drafted. However, his email does not clearly communicate the concern. It is not surprising that the recipients of the email did not understand it to be referring to the broader risk.
- 11.73** Oddly, when asked about this, Mr Fitchie presented his email on the basis that it addressed only the particular concerns arising out of the change in design programme. He said that it was significant in that, up to that point, there had been no intimation of a specific Notified Departure that was going to take place. Mr Laing's email indicated that there would be, and his advice was aimed at quantifying the liability arising from that change [[PHT00000017](#), pages 155–157]. It is surprising that he would focus such efforts on a single change when there was a possibility of a much larger claim on all sorts of fronts. Even if BBS had been willing to put a price on the single change represented by the move from version 26 to version 28, the potential for other changes meant that **tie** would have had no real certainty as to the likely final contract price. To have that, they would have to engage on the subject-matter of changes on a much broader basis. To secure an agreement on the value

of one change and ignore the others entirely would be to create a false sense of security. It is all the more surprising when one has in mind that Mr Fitchie said that he was aware that other Notified Departures would arise under Pricing Assumption 1 ("PA1") [ibid, page 160]. If he knew that, why make the suggestion that the liability in respect of design programme should be pinned down and say nothing about this other liability? His advice was clearly incomplete to the extent that it was misleading. The problem was not merely a matter of identifying changes to date, as Mr Fitchie suggested [ibid, page 161]; it was also appreciating what further changes would be made in future and the quantification of both past and future changes.

- 11.74** It is of note that, assuming that Mr Fitchie was intending to communicate the risk that could arise from changes more generally, he did nothing thereafter. In view of the potential scope of the risk of which he said he was aware and the absence of anything being done to meet or even acknowledge it, I would have expected him to make sure that a response to it had been considered or, at the very least, that it had been understood.
- 11.75** Although Mr Fitchie's email was neither sent nor copied to him, I asked Mr Gallagher whether the terms of the email were such that he considered that it would have been appropriate to take it to the Board, but he did not give a clear answer [PHT00000037, pages 108–109]. On any view, the records of the boards of **tie**, Transport Edinburgh Limited ("TEL") and the TPB suggest that it was not taken to them and they were not told in such clear terms that changes were going to happen and that the cost would increase.
- 11.76** Although Mr Laing had not addressed his email to Mr Gilbert, Mr Fitchie did copy him in to his answer to Mr McEwan's question. Mr Gilbert responded on 31 March [CECo1465933] to say:

"My view is that we need to:-

a) confirm the agreements made with SDS on how the differences between V26 and V28 will be dealt with e.g. where and how they have agreed to pull back those dates.

b) identify the impact of these mitigations and any unmitigated changes from V26 on the BBS critical path. This presumably shows that their critical path is unaffected. Then agree this position with BBS.

c) include the agreed SDS mitigations in the Programme Schedule.

"This is I think the best that we can do to pin BBS and SDS down on this issue.

"Any Pricing Assumption ought to be no more than that already stated in clause 3.4 item 2 of Schedule 4."

- 11.77** Mr Gilbert accepted and supported the approach suggested by Mr Fitchie that there was a need to agree the detail of what the consequence would be of the change from version 26 to version 28. In his oral evidence, he said that it was a matter that needed to be resolved before the contract was concluded [PHT00000023, pages 197–198]. Adopting this approach would have meant that **tie** would at least have been certain what additional liability it would assume and that the matter could be reported to CEC. Although Mr Gilbert said that he could not recollect whether his concerns extended to other possible Notified Departures, it is apparent from his reply that he had not taken on the more general implications of the effect of the pricing assumptions and instead viewed the issue as arising only in relation to the move from

version 26 to version 28. Mr Gilbert could not recall whether anything was done to implement his advice, did not recall any feedback on it from Mr Bell or Mr McEwan and did not pursue the matter [[ibid](#), pages 201–202].

11.78 Although he was the principal person to whom it was addressed, Mr McEwan appeared to have little understanding of Mr Fitchie's reply. Mr McEwan made the point that if **tie** had been able to understand all the differences that might arise, the issue would not have existed in the first place [[PHT00000022](#), pages 147–148]. This is correct, but it does not explain his response by email on 31 March 2008 that:

"if we pursue Andrew's steer on this we will open up the whole can of worms on the Infraco contract cost overall, and that we have to take on the chin that the programme version is not consistent, get the deal signed and then fight the notified departure tooth and nail. I understand Andrew's point but if we are at all hopeful of getting this done by the 15th April (this year) we cannot take his suggested approach" [[CEC01465908](#)].

11.79 This clearly only applies to the change from version 26 to version 28 of the design programme. Mr McEwan proceeded on the basis that anything that could be considered normal design development would be at the risk of the consortium [[PHT00000022](#), pages 154–155 and 190]. As I have noted above, that interpretation was simply not open on the plain wording of the contract terms that had been agreed. Mr McEwan did not give any clear answer on what he was referring to by the expression "can of worms" [[ibid](#), pages 153–154]. He said that by May 2008 there was a concern that a year had elapsed since bids had first been put in and that the contractor's supply chains might collapse if the matter was delayed further [[ibid](#), page 191; [TRl00000057_C](#), page 0041, paragraph 36(4)]. It was thought that commodity prices had increased and that if the contract was re-tendered the price would have gone up. This meant that if the contract had to be opened up, there was a concern that the prices would increase. The approach suggested by Mr McEwan amounted to an outright rejection of the advice from Mr Fitchie and, in effect, proceeded on the basis that the problem should be shelved and that once **tie** had committed itself to a contract in these terms it could argue about it afterwards. This approach was foolish in the extreme. Nonetheless, in essence, it is what was done.

11.80 Although Mr Bell said that **tie** followed the recommendation of Mr Fitchie and Mr Gilbert [[PHT00000024](#), page 99], in fact the approach adopted was largely that advocated by Mr McEwan. There was an attempt to mitigate the scope of changes that had been identified, but no attempt was made to identify and assess changes generally [[ibid](#), page 104]. Mr Bell said that where there was a known risk of a likely Notified Departure, an allowance would be made for the risk [[ibid](#), page 94]. Mr Murray explained that this is what would happen in other contracts where there was to be something of the nature of a pricing assumption [[PHT00000055](#), pages 119–121]. He said that where there is an assumption, there is a risk. It would, he said, require an assessment of potential exposure and what the possible magnitude of claims might be. In fact, in the period from January 2008 to contract signature, **tie** made no increase in the risk allowance to reflect the way in which the contract was drafted, and it was instead assumed that the existing provision would suffice. This is despite the fact that it was aware of the liability that would flow from design programme changes and it was becoming apparent within **tie** that there were challenges with completion of the MUDFA works [**tie** Board Minutes, 12 March 2008 [CEC01271457](#), page 0002]. By this time, **tie** was also aware of further issues concerning the assumptions as to the depth of road reconstruction [[PHT00000024](#), pages 95 and 109].

- 11.81** On 2 April 2008, Mr Laing sent a further draft of SP4 to Mr Bell, Mr Murray, Mr Dawson and Mr McGarrity of **tie** and Mr Hecht among others [CEC01423746; CEC01423747]. He copied the email to Mr Fitchie and others. In the previous draft, clause 3.2 had said:
- "It is accepted by **tie** that certain Pricing Assumptions have been necessary and these are listed and defined in Section 3.4 below." [CEC01423075, page 0005]
- 11.82** In this version, it said:
- "It is accepted by **tie** that certain Pricing Assumptions have been necessary and these are listed and defined in Section 3.4 below. The Parties acknowledge that certain of these Pricing Assumptions may result in the notification of a Notified Departure immediately following execution of this Agreement. This arises as a consequence of the need to fix the Contract Price against a developing factual background. In order to fix the Contract Price at the date of this Agreement certain Pricing Assumptions represent factual statements that the Parties acknowledge to represent facts and circumstances that are not consistent with the actual facts and circumstances that apply. For the avoidance of doubt, the commercial intention of the Parties is that in such circumstances the Notified Departure mechanism will apply." [CEC01423747, page 0005.]
- 11.83** Mr Laing had not had an acknowledgement of his emails of 26 and 31 March and this was his way of ensuring that the matter had been disclosed to **tie** and that it was aware of the possible consequences. He explained that he wanted to ensure that, if there was a dispute as to the meaning of the contract, **tie** would not be able to argue that an interpretation that gave rise to immediate claims could not have been what the parties had in mind [PHT00000040, page 46]. A similar argument had been used in the case of *Emcor Drake and Scull v Edinburgh Royal Joint Venture*, 2005 S.L.T. 1233, in which one of his partners in Pinsent Masons had acted [*ibid*, pages 42–44]. He said that he had never used such a clause before and Mr Bell said that it was not a standard clause [PHT00000024, page 136]. Mr Laing noted that the contract had an "unusually large number of qualifications to the price" and that the parties needed to understand clearly what the consequences would be.
- 11.84** Mr Bell pointed out that it was the inclusion of the assumptions that enabled the consortium to provide a firm construction works price, together with a clear basis by which it was administered and could be adjusted if a Notified Departure occurred. When asked whether this was not in fact the precise opposite of firming up a price, he replied: "It allows us to be firm on the price. It doesn't – it doesn't mean it's fixed." [*ibid*]
- 11.85** Although a price is obtained, it is provided in the knowledge of all parties that it will change immediately after the contract is signed. This neatly encapsulates the contradiction. I asked him whether the price in such circumstances is a fiction. His reply and my follow-up questions were as follows.
- "CHAIR OF THE INQUIRY: Firm on the price; in these circumstances the price is a fiction? Is the price a fiction in those circumstances, if you alight on a price which you acknowledge the day after the contract won't apply?
- A. I don't believe it's a fiction. It is the basis on which the obligations are going to be delivered. There were certain elements that were not complete in the design, and this approach allowed us to be firm on the items that were clear and to take cognisance of areas that weren't, for example by provisional sums, and to allow a mechanism to say: well, you've based this element of work as follows; if

it changes from that outwith in a review normal design development, then the Infraco is entitled to make the case on that, and it's our job to have identified elements within the risk allowance to deal with the items that we saw.

CHAIR OF THE INQUIRY: But if I had come along to you on the day of the contract signing and said: right, what's the cost then; what would you have said?

A. We would have said we had a firm construction works price and there are elements of risk that need to be addressed. So the contractor is obliged to provide certain things for this amount of money. If certain events happen, then he may be entitled to additional monies. Our approach from a project perspective was to address that through either a contingency sum for certain items or a risk allowance.

CHAIR OF THE INQUIRY: What's the price?

A. The contract price is for the items that we can be firm on.

CHAIR OF THE INQUIRY: But it's acknowledged here that it's based on circumstances that don't exist. So what's the price? If I want to know, is it 100 million, 200 million, you can't tell me, can you? You can see there are certain things we've priced on the basis they're fixed, but that might change. But in any event it's based on a design that has developed, and therefore it's not fixed at all.

A. It's fixed in terms of the elements that are clear from the documentation, and has to be read in conjunction with the commitment from the contractor to achieve the employer's requirements, and there are a number of areas that were not fixed and we agreed a mechanism by which we would value them.

CHAIR OF THE INQUIRY: There's a price based on certain elements, but as of today's date, when I've signed it, there's an immediate uplift. Would that be a fair way –

A. There is. Yes. There is a Notified Departure, and that's why in the items we discussed a couple of questions ago, it was very clear that we knew there was going to be an impact of the SDS design deliverables version of the programme.

CHAIR OF THE INQUIRY: So if the people of Edinburgh or the Council came to you and said: we need to know what the price is; you wouldn't have been able to tell them, would you, apart from this formula that you keep repeating? But if we want to know what the price is, can you tell me?

A. The contract was not set as a guaranteed maximum price form of contract. If it had been, then you could use that number." [libid](#), pages 137–139.]

11.86 Whatever one thinks of Mr Bell's explanation, it is quite clear that this was not the way in which matters were communicated to CEC when it came to the decision to enter into the contract. It is apparent that the fact that the price was not truly fixed was apparent to others involved in the negotiations. In his internal report dated 18 April 2008, Mr Reynolds stated:

"To a large extent the current position is one of BBS's making where the offer is dependant [sic] upon a set of pricing assumptions which can be interpreted by the informed reader as a basis for price increase and programme prolongation." [\[PBH00018333](#), page 0001, paragraph 1.3.]

In this report Mr Reynolds noted that Mr Walker had concerns as to how the Infracore deal was being presented to CEC. Mr Walker's concerns were such that on 22 April 2008 he drafted a letter to Mr Gallagher for signature by him and Mr Flynn about these concerns but he was instructed by Dr Enenkel not to send it, [PHT00000035, pages 91–102; SIE00000401]. Mr Flynn too confirmed that before contract signature Mr Walker expressed to him the concerns set out in the letter [PHT00000045, page 66, line 9–page 75, line 14]. The concerns of Mr Walker and Mr Reynolds in relation to **tie**'s reporting to CEC, as noted in its contemporaneous records before contract signature, lend support to the perception of financial engineering to secure the approval of CEC. I consider that matter further below.

Quality assurance

11.87 With so many people involved in drafting the various parts of the contract, it was clear that some process for quality assurance/quality control ("QA/QC") would be required, and a scheme was accordingly put into place. The procedure is described in an email from Mr Bissett dated 25 March 2008 with attached spreadsheet [CEC01431194; CEC01431195]. It identified the person or persons responsible for finalisation of each element of the contract or the close documentation, who was to carry out the main quality control review and, in some circumstances, the secondary quality control review. It also stipulated that all elements of the contract should be subject to a full legal quality control review by DLA. Mr Bissett explained that it was intended that DLA should provide confirmation the contract was "in shape for signing" [PHT00000056, page 9]. In relation to documents such as the Close Report, the question for DLA was:

"do these documents provide a fair representation of all the key issues that are relevant to people being asked to approve the contract signing?" *ibid*, page 9.]

11.88 On the basis of his previous experience of significant corporate transactions, Mr Bissett was able to explain that a similar sort of check is common in large commercial transactions involving legal advisers. He said that in his experience the firm of solicitors

"takes responsibility for the final quality control over all of the legal documentation which they've obviously been involved in negotiating and advising on" *ibid*, page 7].

11.89 In terms of the QA/QC procedure, Mr Gilbert, Mr Dawson and Mr Murray had responsibility for finalisation of SP4. Mr McGarrity was to carry out the main quality control review and Mr Bell was to carry out the secondary review. As noted above, DLA was to carry out "full legal quality control" review. Day-to-day monitoring of the implementation of the programme was the responsibility of Ms Clark, assisted by Mr Bissett *ibid*, pages 3–4]. All the persons named and Mr Fitchie were recipients of the email from Mr Bissett intimating the procedure and identifying individual responsibilities. There is no record of any party taking objection at the time to what was proposed.

11.90 On 22 April 2008, Mr Murray sent an email to Mr McGarrity and Mr Fitchie, which was copied to Mr Bell [CEC01374219], with a copy of the draft of SP4 as it stood the previous day. The first line of the email said "Schedule 4 Attached for QA review".

11.91 In substance, the pricing assumptions in the draft sent out in March 2008, which are considered in paragraphs 11.45–11.47 above, remained in the draft attached to the email. Mr Murray explained that in response to his email he expected that

there should be an overall quality assurance check on the whole document [PHT00000055, page 138]. To anyone who had received details of the QA/QC procedure – as Mr Fitchie, Mr Bell and Mr McGarrity had – this should have indicated that the recipient was required to discharge his responsibility under that procedure. Mr McGarrity responded to Mr Murray's email the following day [CEC01293506]. The Inquiry has not found any record of a secondary review by Mr Bell as required by the QA/QC procedure.

11.92 Mr Fitchie accepted that, under his supervision, DLA was responsible for the final due diligence and QA/QC of the Infracore contract and the accuracy and consistency of the entire suite of ancillary documentation, but not for the content of technical, commercial and financial schedules [TR100000102_C, page 0202, paragraph 7.376]. He appeared to rely on this when claiming that no legal input was required for quality assurance of SP4 [PHT00000017, pages 162–163]. It is correct that the question of the commercial aspects of the deal was clearly one for the **tie** employees and directors to determine. However, there is still a role for legal advice. There is always the possibility that there are matters in the contract wording that will present problems. This could be because objectives will not be attained, procedures will not work or because risks are placed on the client rather than the contractor. If the client is happy with such a position, that is fine. The legal adviser's role is to ensure that the persons taking the commercial decision are properly informed of the likely effect of the contract. Mr Bissett was clear that the review was not intended to require a review of negotiated positions and second-guessing commercial positions [PHT00000056, pages 11–12]. Nonetheless, he said,

“if the reviewer felt: well, I know that's where we've got to, but this clearly carries significant risk, for example; that would be something that might be raised and discussed further before people put pen to paper” *ibid.*, page 13].

11.93 In relation to the issue of whether the problems inherent in SP4 were the sort of matter that should have been identified in a legal review, Mr Bissett said:

“[it] depends on the sequence of events.

“If – I'm not quite sure where that situation ended up, but if a commercial view had been taken by the team in a discussion with the legal advisers, and that final position was, as far as they could tell, the extent of the negotiating power that they had, and it was properly represented in the documents, it may not – excuse me – of itself be something that would be flagged because it was there as an agreed position, and understood to be agreed.

“On the other hand, if the presentation in the documents seemed to say something that was at odds with the apparently agreed position, then one would expect that to be flagged and, you know, that would be one example, had that transpired.” *ibid.*, pages 11–12.]

11.94 The issue of legal advice is considered in detail below. For present purposes, it is enough to note that **tie** had not taken a decision to accept the commercial risk that lay in SP4 having first taken legal advice. The procurement strategy required that there was a fixed price with a transfer of risk. Even on Mr Fitchie's own evidence, he was aware that this was not the result that would be produced by the agreement as drafted. Accordingly, it is a matter that should have been identified and notified to **tie** in a competently conducted review. This was not done. At the same time, no query was raised within **tie** that it had not had the legal quality control that the QA/QC procedures required to be undertaken by DLA. Accordingly, a further opportunity to identify the problems was missed.

- 11.95** When asked about Mr Murray's email [CECo1374219], Mr Fitchie at first tried to say that it was internal and it had to be pointed out to him that it was in fact sent to him [PHT00000017, page 163]. He then claimed that he did not know why it was sent to him [ibid, page 164]. I do not accept this. However, even if he had been ignorant of the purpose, he should have found out. He was aware from Mr Bissett's email of 25 March 2008 that DLA had a role in the QA/QC process for SP4. From Mr Fitchie's reference during his oral evidence to paragraph 7.379 of his statement [ibid, page 165], it seems that he relies on the fact that Mr McGarrity replied to the email from Mr Murray [CECo1293506] to mean that he did not have to. This makes no sense at all. The QA process specified that Mr McGarrity would provide the first QA check. DLA was to provide the legal overview. The procedures were intended to be complementary and carrying out one would not do away with the need for the other. This must have been apparent to Mr Fitchie. His attempt to say otherwise seems to be no more than another attempt to avoid the fact that he did not fulfil his responsibilities.
- 11.96** In all its reviews of the documents, the Inquiry Team has not found any written report of consideration by DLA of the contract suite and whether it "works" to achieve the objectives of the client of which it was aware. Nothing of this nature has been drawn to the attention of the Inquiry by the representatives of DLA. It is clear that this exercise required of them in the QA scheme was not in fact carried out. As a result, a significant opportunity to identify the problems that were later to plague the project was lost.

Role of Wiesbaden Agreement and the willingness to negotiate

- 11.97** Within the evidence relating to the negotiation of SP4 there were the linked issues as to the role that the Wiesbaden Agreement had to play and the extent to which BBS was willing to negotiate the terms. There was a sharp conflict in the evidence on these matters.
- 11.98** I have considered above whether the Wiesbaden Agreement dictated or informed the initial draft of SP4, and I have concluded that it did not. Mr McEwan said that, although the Wiesbaden Agreement was assumed to be a foundation document for SP4, there was scope for negotiation and the terms of the Schedule were not set in stone [PHT00000022, pages 119–120 and 179]. Mr Bell said that the Wiesbaden Agreement was the framework that **tie** would work to [PHT00000024, pages 40 and 143]. While he said that it was the intention of Mr Crosse and Mr Gallagher that there would not be further adjustments of the points agreed in Wiesbaden, this was presumably on the basis of what they had agreed while there – the transfer to BBS of the cost increase from design development – rather than the position in the written agreement concluded by Mr Gilbert. Mr Murray was not aware of any statement that, as far as the consortium was concerned, there was a bar to a fixed-price deal [PHT00000055, page 132]. Mr Laing had a different recollection and said that he had no recollection of going back to the Wiesbaden Agreement and it being something to which they had to adhere on an ongoing basis [PHT00000040, page 15]. He said that this was not least because circumstances were constantly changing throughout the negotiation of the Schedule. He denied that there should be no development of SP4 after the Rutland Square Agreement [ibid, page 17]. He accepted, however, that Wiesbaden indicated the view as to what BBS was prepared to accept in terms of risk [ibid, pages 51–52].
- 11.99** At the other extreme, Mr Fitchie claimed that the basic principles of SP4 came from the Wiesbaden meeting and that these did not change and sat within SP4

[[TR100000102_C](#), page 0174, paragraph 7.235]. He said that nothing in SP4 went further than the Wiesbaden Agreement [[PHT00000017](#), page 106]. He described that agreement as a "200-page pre-contract agreement", which he had not seen in its entirety until 2009/10 when **tie** had an investigation into what had happened at Wiesbaden [[ibid](#), page 108]. This misrepresents the contents of the Wiesbaden Agreement. A reading of the Wiesbaden Agreement reveals that the "legal" terms make up just the first six pages and the remainder is Appendices consisting of price breakdowns, programmes, correspondence and minutes of meetings. In relation to the negotiations as a whole, he said: "There were few changes we managed to make to SP4 but none to PA1 language" and

"Pinsent Masons/BBS simply refused to re-open the principle of PA1 on the basis that it had already been agreed between the clients' senior representatives at Wiesbaden" [[TR100000102_C](#), page 0175, paragraph 7.243].

- 11.100** He also put the matter more broadly by stating that there was no willingness on the part of BBS to make any changes in relation to acceptance of risk of cost changes arising from design.
- 11.101** Mr Fitchie sought to support his contentions in a number of ways. In relation to SP4 in particular, he said that, at a meeting on 6 February 2008, he was told by Mr Laing that the language in SP4 regarding design was "not negotiable, because it had been agreed ... at Wiesbaden" [[PHT00000017](#), pages 104–105] and that he told **tie** of this at the time or within a few days [[TR100000102_C](#), page 0184–0185, paragraph 7.291]. He also said that he was told by Mr Laing, at a meeting on 9 February 2008, that the concept of Notified Departures and the language of PA1 were not open for discussion [[ibid](#), page 0176, paragraph 7.249]. He took this to mean that it was "set in stone" [[ibid](#), page 0177, paragraph 7.251].
- 11.102** As noted above, the evidence of Mr Laing is inconsistent with this evidence. At the stage when it was claimed that Mr Laing had made the statement, BBS had sent only a draft of the pricing assumptions, and that had been received just two days beforehand. The Wiesbaden Agreement had contained no reference to pricing assumptions, which of itself indicated that matters were still fluid. It would be surprising for Mr Laing to have said what was claimed at that stage. No one on the negotiating team had any recollection of having been told that BB and its solicitor were saying that the terms were non-negotiable. Had it been said to them, in view of the importance of that part of the Schedule, I consider that they would have remembered it. In addition, and most tellingly, it is apparent that, as a result of negotiation, the pricing assumptions in general and the wording of PA1 developed considerably during the period prior to contract signature. In this period, as noted below, there were three agreements to increase the price. It cannot be said that SP4 was simply replicating the Wiesbaden Agreement as, apart from anything else, it went far beyond what was discussed at Wiesbaden in terms of stating assumptions on which the price was based. Taking all these matters together, I reject Mr Fitchie's evidence on this issue. It is yet another example of his distorting the facts to suit his own preferred narrative.
- 11.103** Mr Fitchie's allegations about the stance taken by BBS raise the broader issue of what the intentions or aspirations were in relation to SP4. At the outset, there was an understanding among the representatives of **tie** that the normal design risk should fall on the contractor [see, eg, Mr McEwan [PHT00000022](#), pages 122–123]. Mr McEwan said that his view was that as the contract was drafted, the risk arising from development of the incomplete designs lay with BBS [[ibid](#), page 132]. This belief was incorrect. Mr Dawson displayed more insight when he said that the responsibility

for additional costs arising from design development was to rest with the consortium, but what constituted design development was difficult to resolve [PHT00000056, page 41]. He said that when it was drafted, he was concerned that the contract would not achieve a fixed price and that he discussed his concerns with Mr Gilbert, Mr Fitchie and Mr Murray [ibid, page 45]. This concern does not appear have been understood and was clearly not acted upon.

11.104 On the part of BBS, on the other hand, it is apparent that there was an intention not to accept the risk of matters over which it could not exercise control. This was described as a “mantra” [Mr Walker PHT00000035, pages 44 and 77]. Mr Walker’s comments indicate that throughout the negotiations BBS maintained the position that it would not accept the risk from design development. This was reflected in an email that he had sent to Mr Gilbert and others on 1 February 2008 [CEC01489538], in which he said:

“Bilfinger Berger’s business model does not permit the liability for risks that do not belong in our industry or risks which are unable to be assessed and quantified.”

11.105 As I have noted in paragraph 10.102 during the discussions at Wiesbaden it appears that BBS agreed that the consortium would accept the design development risk but that it drew back from this position in the course of converting those discussions into a written agreement. Mr McEwan noted that, even as late as May 2008, Dr Enenkel said that the policy of BB was that it would not carry any risk in construction contracts and that the client held all the risk [PHT00000022, pages 103–104].

11.106 It is difficult to say what the outcome of discussions would have been had the matter been pressed by **tie**. A weekly report from Parsons Brinckerhoff (“PB”) from February 2008 noted that Mr Walker had said that, within BB, he and his manager had seriously discussed withdrawing their bid [PBH00035854, page 0003]. Mr Walker, however, said that there was no desire to withdraw [PHT00000035, page 89; TRI00000072_C page 0031–0032, paragraph 59]. Mr McFadzen said that he was in favour of proceeding [PHT00000034, page 142]. If both sides wished to reach an agreement it would be expected that, through negotiation, they would reach a compromise of some sort. This is perhaps the fundamental principle underlying any contractual negotiations. I do not think that it is possible to conclude that had **tie** identified the issue of the risk that it was being asked to take and pressed it with BBS, it would have made no difference to the outcome. I am reinforced in that view because BB desired to develop its business in the United Kingdom and the Tram project was seen as the foundation of other developments [Mr Walker TRI00000072_C, page 0002; PBH00035854, page 0003]. On the other hand, any attempt to state what the outcome of that negotiation would have been would entail too much speculation to be of value. What can be said, however, is that if the issue had been identified and pressed, there would at least have been a chance of a better outcome in which the risk was, from the standpoint of **tie**, better managed and, on any view, would have been one that **tie** and CEC would have been fully aware that they were taking on. CEC could even have taken an informed decision as to whether to proceed with the project in whole or in part, but it was denied that opportunity.

Persons involved

11.107 The discussions at Wiesbaden were conducted for **tie** by Mr Gallagher and Mr Crosse. Thereafter a written agreement was negotiated by Mr Gilbert. At the outset of the negotiation of SP4 in January 2008 he was leading the **tie** team. The Quality Assurance Scheme for contract documents sent out by Mr Bissett in March stated that responsibility for negotiating SP4 lay with Mr Gilbert, Mr Dawson and Mr Murray

(see paragraph 11.8g above). As noted above, Mr McEwan took over from Mr Gilbert as leader of the team in March 2008.

- 11.108** While Mr Gilbert accepted that he had led the team until Mr McEwan replaced him, it was a feature of the evidence of the others involved that they denied or sought to play down their role. Mr McEwan said that the part of SP4 that gave rise to disputes once the works were started – PA1 in SP4 – was “cellophane wrapped” before he and Mr Bell became involved [[PHT00000022](#), page 138]. While it is true that this had its origins in the Wiesbaden Agreement concluded months earlier, it is clear from the above that the negotiations in relation to the pricing assumptions and their effect continued after Mr McEwan took over from Mr Gilbert on 18 March 2008. As to when his involvement ceased, Mr McEwan said that it was at the end of March or the beginning of April [[ibid](#), pages 109–110]. Here, too, I do not accept his evidence. It is apparent from the documents that he was involved in meetings right up until May.
- 11.109** Mr Dawson said that after his initial draft in January 2008 he was kept out of meetings [[PHT00000056](#), pages 59 and 79] or at least was not involved in all discussions [[ibid](#), page 82]. He said that the reason that emails were sent to him was only that he was acting as a post box [[ibid](#), page 83]. I do not accept his evidence in this regard. The emails in question were sent to the others in the team as well as him [see, eg, [ibid](#)] and that is not consistent with his being included only as a post box. It is also plain from the terms of the emails that he was involved in discussions [see, e.g., in [CEC01545414](#); [CEC01451012](#); [PHT00000056](#); pages 83–85]. In reply to questions that I asked him, he ultimately accepted that he was part of the team that was responsible, but continued to insist that he was junior to the two directors involved [[ibid](#), pages 79–80]. In his evidence he was at pains to stress that he was to leave at the end of March 2008 – before the contract was concluded. That is correct, but he clearly played an important role before he went and, had the contract been awarded on the timescale originally intended, he would still have been there. It is therefore quite reasonable to have expected that he would play a full role as part of the negotiating team until his departure.
- 11.110** Mr Dawson said that he believed that Mr Murray was to take over from Mr Gilbert [[ibid](#), page 48]. However, Mr Murray did not believe that he had responsibility for SP4. He had joined the project as Commercial Director in January 2008. He was to be responsible for commercial management of the contract after it was awarded and believed that this would be by the end of January [[TRL00000063_C](#), pages 0004–0005]. Clearly, matters did not proceed as intended and this was not the case. It is necessary to consider what Mr Murray’s role came to be rather than simply what had been planned. He did not accept that he was part of the team responsible for general drafting [[PHT00000055](#), page 122] irrespective of the fact he was one of the three people identified for the task in the Quality Assurance Scheme sent out by Mr Bissett in March [[CEC01431195](#) – see paragraph 11.8g above]. He said that this was intended merely to refer to his role in populating schedules of rates for pricing changes. He recognised that he attended meetings and discussions, including those considering SP4, but said that he did so as part of getting himself up to speed rather than taking responsibility for the drafting [[PHT00000055](#), page 121]. He said that he was copied into emails for information purposes and his role was confined to agreeing rates etc to be included within SP4 to assist with pricing post-contract changes [[ibid](#), pages 122 and 124]. It is of note, however, that he is named by Mr Dawson as part of the negotiating team for SP4 in an email sent to Mr Walker on 11 February 2008 [[CEC01448511](#)].

11.111 As I note in Chapter 22 (Governance), it is a feature of the project that allocation of responsibility for various tasks was not clearly made and communicated. It was often done in a way whereby a number of people could be thought to bear responsibility, and this appears to have led to a culture in which everyone assumed that someone else would address concerns. Where the decisions and the responsibilities were collective, no one felt that matters were "their" problem to address or report upon. What was required was a clear allocation of responsibility with an understanding of the position by the person to whom it had been allocated. It would then be necessary that that person should account for what was being done and the extent to which they had been able to achieve the goals. Sometimes the approach of the contractors would have meant that that was not possible. In that situation, what was required was a clear statement to that effect so that an informed decision could be taken as to whether the position was acceptable and what, if any, further protections might be required.

Awareness of consequences

11.112 A striking feature of the evidence was that while the contract terms were being settled and **tie** was agreeing to wording in which there was no doubt that there would be Notified Departures, there was no attempt to quantify the financial exposure inherent in the risk that it was assuming. Mr Dawson did not have a view as to what the consequences might be [PHT00000056, page 43]. He was not even sure whether anyone at **tie** had asked whether SP4 created a liability for **tie**. Mr McEwan did not know what the likely value of Notified Departures would be, but considered that these would not exhaust the contingency included within the project cost estimates [TRl00000057_C, page 0057, paragraph 55(3)]. This assumption was based upon the "painstaking process undertaken by the procurement team to document and review the Employer requirements". However, in his oral evidence Mr McEwan observed that while there was a contingency within the **tie** budget to deal with Notified Departures, the "reality was that nobody knew the extent or otherwise of what those Notified Departures were going to be" [PHT00000022, page 185]. It seems to me that documenting and reviewing the employer requirements for the purposes of designing the project is different from, and no substitute for, an assessment and valuation of the likely extent of Notified Departures that would certainly arise following contract close. In the circumstances that prevailed in this case there was no rational basis for the assumption that Mr McEwan was making.

11.113 The evidence from witnesses from **tie** contrasts sharply with that from other witnesses. As mentioned in Chapter 9 on procurement up to the appointment of preferred bidder, when I was considering the question of VE savings, Mr Reynolds expressed concerns in his internal reports dated 28 March 2008 and 18 April 2008 about **tie**'s presentation of the Infraco deal to CEC [PBH00036973; PBH00018333] and cautioned that PB would need to ensure that it was protected against any accusations of deception that could be levelled at **tie** in the future. In his later report he explained that the pricing assumptions in the offer from BBS could be "interpreted by the informed reader as a basis for price increase and programme prolongation" [*ibid.*, page 0001, paragraph 1.3]. Mr Walker had similar concerns about **tie**'s reporting to CEC, which will be considered below. Witnesses from BBS were aware that **tie**/CEC would be taking on a substantial risk and they even sought to check that **tie** appreciated this. Mr Walker said that the fact that the price would increase was the subject of discussion that he had with Mr Gallagher, Mr McFadzen and Mr Flynn in January 2008 [PHT00000035, page 83]. His evidence was not only that BBS was aware that the price would increase but that, within **tie**, at least Mr Gallagher was also aware that it would go up. He claimed that Mr Gallagher had said to him on or

shortly after the day on which the Infracore contract was signed that everyone knew that the price was going to go up [libid](#), pages 111–112]. Mr Gallagher denied this [\[PHT00000037](#), page 98]. Mr Gallagher also denied that he was told by Mr Walker that CEC would have to fund increases in the contract price [libid](#), pages 117–118] or that he said that everyone knew that the price would increase when the contract was signed.

11.114 The evidence in this respect is not dissimilar to the evidence mentioned in Chapter 9 on procurement up to the appointment of preferred bidder about the use of unachievable VE savings as financial engineering to achieve a target price that would enable **tie** to obtain CEC's approval to proceed with the project. Mr Reynolds's report in the month before contract close recognised that the pricing assumptions could be interpreted as a basis for a price increase. It is probable that senior employees of **tie** involved in the contract negotiations were aware of the likelihood of price increases following contract close, and it seems unlikely that Mr Gallagher would not have been made aware of that. I have concluded that, as a matter of fact, everyone did know that the price would increase. The only remaining issues are whether Mr Gallagher said so and was told by Mr Walker that CEC would have to fund price increases. It is difficult to see what benefit would accrue to Mr Walker from giving such evidence, if it were untrue. In contrast, Mr Gallagher has an interest to deny such conversations as they might suggest that he was complicit in misleading CEC. Having regard to the conclusion that I reached in Chapter 10 (Events between October and December 2007), that Mr Gallagher's evidence was untruthful about the existence of practices within **tie** to ensure that the project could be reported as being within budget, as well as the contemporaneous records of Mr Reynolds mentioned above and the draft letter prepared by Mr Walker on 22 April 2008 [\[SIE00000401\]](#), I prefer the evidence of Mr Walker.

Legal advice: the role of DLA

11.115 There was conflicting testimony about the role played by DLA in relation to settling the terms of SP4. I comment that, in general, the evidence of Mr Fitchie was particularly unsatisfactory in this regard. He was often reluctant to give clear, straightforward answers to questions, preferring obfuscation and diversion. He prevaricated and often had to be pressed repeatedly to provide an answer to the question posed. In answering questions, his desire to refer to his statement suggested that he was not confident of what it said and that he preferred the answers that had been crafted there over giving his recollection to the Inquiry. By relying upon his statement he could reduce proper scrutiny of his evidence and the risk of any resultant criticism. The written closing submissions on behalf of DLA, adopted by Mr Dunlop, suggest that DLA perhaps appreciated the inadequacies of Mr Fitchie's evidence in this regard by commenting on the robust and rigorous cross-examination by senior counsel to the Inquiry for a day and a half on 10 and 11 October 2017 and the fact that Mr Fitchie was clearly exhausted at the end of proceedings on 10 October. In support of the allegation that Mr Fitchie was exhausted at that time the submissions contained the following footnote:

"As the Inquiry is aware, Mr Fitchie had travelled from the west coast of the USA the day before his evidence and would also have been dealing with the consequent time difference." [\[TR100000288_C](#), pages 0010–0011 and footnote 20.]

As noted below this statement was inaccurate but its inclusion in the closing submissions on behalf of DLA was given widespread coverage in the media on 25 and 26 June 2018 in the course of which reference was made to Mr Fitchie suffering

from "jet lag" having travelled from the USA the day before he gave evidence. That coverage prompted Brodies, the solicitors for DLA and Mr Fitchie, to write to the Solicitor to the Inquiry on 29 June, advising that this statement was inaccurate and that Mr Fitchie had arrived in Edinburgh on Thursday 5 October, 5 days before he started to give evidence at the public hearing. A copy of the letter is contained in Appendix 6. The letter makes it clear that the error was not attributable to Mr Fitchie or DLA but arose due to a misunderstanding on the part of the drafter at Brodies. Although a misunderstanding might explain the error about the date on which Mr Fitchie travelled from the USA, it does not explain the allegation that the Inquiry was aware that he had travelled the day before he gave evidence implying that the Inquiry ought to have known that he might be exhausted as a result. It is a matter of regret that, as far as the Inquiry is aware, Brodies made no contact with the media seeking to correct the coverage based upon the inaccurate information that they provided in the closing submissions. For the sake of completeness, I wish to record that I did not gain the impression that Mr Fitchie was exhausted nor did senior counsel for DLA or anyone else draw any such concern to my attention or to the attention of either Senior Counsel to the Inquiry or the Solicitor to the Inquiry in the course of Mr Fitchie's oral evidence when clearly it would have been open to them to do so.

- 11.116** Mr Fitchie was firmly of the view that DLA had been excluded from the negotiation and preparation of SP4 [PHT00000017, pages 94–95 and 141]. Initially, he said that a decision in that regard was taken after the first meeting that he attended regarding SP4 on 6 February 2008 [ibid, page 95]. He went as far as to say that "the instruction was that I was not to get involved in Schedule Part 4 until asked to" [ibid, page 136]. This alleged positive instruction was said to have come from Mr Bell and Mr Gilbert. Later in his evidence he said there was a distinct discussion on the issue of DLA involvement, but that it was in March rather than at the February meeting as he had said before [ibid, page 137]. In addition to an instruction not to get involved, he relied on an absence of specific instructions to provide advice to support his stance. He claimed instead that while he was on secondment he was not instructed to get involved in the drafting.
- 11.117** A decision that Mr Fitchie and DLA should not be involved could be seen as consistent with the decision that had been taken in 2007 to stand down DLA at the time that the contract was being negotiated. However, I reject Mr Fitchie's evidence in this regard. The contemporaneous documentary evidence, the evidence of other witnesses and even Mr Fitchie's own testimony are all indicative of his involvement. In his statement, Mr Fitchie accepted that DLA was to represent **tie** in relation to the Infraco main contract terms [TR100000102_C, page 0181, paragraph 7.273]. Mr Fitchie seemed reluctant to accept that SP4 was a main term, but it is hard to conceive of something much more important than the price for most contracts – and even more so when getting a fixed price is seen as a key objective. Thereafter, it is apparent that he was involved throughout.
- 11.118** Mr Fitchie recognised – as he had to – that drafts of SP4 were sent to him, but he claimed that this did not mean that he was being asked for advice [PHT00000017, pages 97, 104–106 and 137]. His answers to questions on this matter were notably evasive and vague. For instance, when asked whether he had been specifically instructed not to get involved in SP4 until asked to do so, his answer was lengthy and opaque [ibid, pages 136–137]. He was at **tie** on secondment for the very purpose of providing advice during the procurement phase. This was the most significant contract of the project. Any person in his position would have considered *why* the

drafts were being sent to a solicitor on secondment. It would have been obvious that this was with a view to getting advice. When asked why he thought **tie** employees continued to copy him into emails with drafts, he simply said that he did not know [ibid, pages 105–106]. I do not accept this. He recognised that as he was, in effect, the in-house lawyer for **tie**, it would have been of assistance to the client if he had pointed out any difficulties [ibid, page 140]. He was fully aware that he was being relied on to provide legal advice generally and would have been aware of an email from Mr Dawson on 11 February 2008 [CEC01448511] that named him as part of the negotiating team. Further, he did offer advice on some of the drafts [PHT00000017, pages 139–140]. He tried to explain this away by saying that he might have been asked to look at this particular draft that had been sent to him [ibid]. There is nothing in the material available to the Inquiry to support this and it appears to be pure speculation in an attempt to avoid the inference obvious from the documents.

- 11.119** Mr Fitchie pointed out that he was not given a draft of SP4 until 6 February 2008 and said that by this time the core principles and language were established [TR100000102_C, page 0177, paragraph 7.252]. It is true that this is when he was first given the draft but, as I have noted above, it is not the case that by then the core principles and language were settled. It is clear that at the time he was given a draft and became involved **tie** had submitted a first draft of SP4 to BBS and BBS had, in return, submitted a first draft of the pricing assumptions. Negotiations in relation to both were continuing and each was changed to a significant extent as a result of those negotiations. The process of negotiating the assumptions continued until about 20 March 2008. Mr Fitchie would have been in a position to give advice to **tie** and CEC as to the risks presented by the form in which SP4 had been drafted both during that period and after.
- 11.120** The evidence from **tie** personnel was overwhelmingly to the effect that DLA was providing advice in relation to the negotiation of SP4. Mr Gilbert recognised that at the outset SP4 had been seen as a mechanistic exercise that would not require lawyers but he described Mr Fitchie as "part of the team" as matters progressed [PHT00000023, page 116]. He said that where there were representatives from DLA at meetings, they were there to provide legal advice and not, as Mr Fitchie claimed, merely to mark up the drafts [ibid, page 117]. When considering who was to attend negotiation meetings for SP4, Mr Gilbert suggested that Mr Fitchie or Mr Hecht, his assistant, should attend [email from Mr Dawson to Mr Walker dated 11 February 2008, CEC00592619]. Mr McEwan confirmed that DLA was providing legal advice and stated that the suggestion that solicitors from DLA were there simply to mark-up drafts was 'In]onsense' and that there had been no decision to exclude legal advice [PHT00000022, page 116]. He said that the reason that emails were sent or copied to DLA personnel was to ensure that they were up to speed to provide an assurance in that regard. Mr Dawson said that DLA advised on SP4 [PHT00000056, page 38] and that Mr Fitchie was heavily involved in meetings [ibid, page 78], but he did not recall any advice from DLA on the liabilities that it created for **tie** [ibid, page 44]. Mr Bell said that DLA was at least implicitly involved in giving advice on SP4 from the time when he himself became involved – mid-February [PHT00000024, pages 44–45]. Mr Fitchie gave advice about the mechanism by which SP4 would convert into a **tie** change [ibid, page 45]. He did not accept that DLA was excluded from the discussions on SP4 [ibid, pages 50–51]. He said that it was "fundamental" to the drafting and finalisation of SP4 [ibid, page 41]. Mr Murray said that Mr Fitchie was involved in drafting. Mr Gallagher said that legal representation was attached to every clause within the contract and schedule [PHT00000037, pages 106 and 110].

- 11.121** It was not solely on the part of the **tie** representatives, however, that there was an understanding that DLA was involved. As is apparent from the communications noted above, DLA was included as recipients of emails sent both from BBS and their representatives and from within **tie**.
- 11.122** Although it is clear that DLA had involvement in drafting SP4 it is clear also that it was not concerned in all communications and drafts at the time. There were communications in relation to SP4 that were not copied to Mr Fitchie or DLA. The agreement as to the effect of Notified Departures in the email of 10 March 2008 from Mr Dawson [CEC01450544] noted above is an example of something agreed without any legal input. The Citypoint Agreement, which will be considered at paragraph 11.168 below, was negotiated without any legal advice. It is also to be noted that there is no record of DLA's expressly being asked for advice. Mr Bell said that advice was not sought from it [PHT00000024, page 48]. Although Mr McEwan said that he was certain that advice had been taken as to whether the terms of SP4 were effective to transfer risk [PHT00000022, page 138], on the basis of the evidence as a whole I accept that Mr Fitchie is correct in saying that no one at **tie** expressly sought an opinion as to the meaning of the contract and whether it was effective to achieve its objective as to a fixed price and the transfer of risk. Nonetheless, Mr Fitchie was aware of the objectives that **tie** had in relation to the agreement and was concerned in the drafting process. Even if advisers had not negotiated a term, on being presented with the draft as it had been developed and knowing that there were to be further negotiations I would have expected that they would consider the terms and advise whether there were pitfalls or perils. The issue arises as to whether he did this. Again, the testimony of Mr Fitchie conflicts with other evidence.
- 11.123** As I noted above, Mr Fitchie said that he did not like SP4 when he first saw it [TRl00000102_C, pages 0027 and 0175, paragraphs 2.130, 2.131 and 7.241; PHT00000017, pages 85–86]. He said that this was because the price was fixed by reference to design as at 25 November 2007 and he was aware that the design had been developing constantly since then [ibid]. By the end of February he knew that there would be design development that would generate a Notified Departure [ibid, pages 129–130]. As such, he was in a position to appreciate the risk presented to **tie** by the pricing assumptions and, in particular, PA1. The issue is then whether he did anything to communicate his concerns effectively to the management of **tie**.
- 11.124** Mr Fitchie appeared to claim that advice from him was not necessary. He said:
- "TIE's Project Directorate's internal work on SP4 PA1 long before DLA Piper even saw it means that it is axiomatic that TIE knew with precision what the meaning and effect of SP4 and especially PA1 was" [TRl00000102_C, page 0180, paragraph 7.269]
- and
- "[s]ince TIE had agreed this document themselves without any input from DLA Piper, my natural starting point was that TIE management knew what its purpose and effect was" [ibid, page 0183, paragraph 7.286].
- 11.125** At the heart of these statements there is a non sequitur. Just because a client has drafted an agreement, it does not follow that they will fully understand the effect of the words chosen. They may not have managed to give effect to the intention in their mind when drafting the document. Any legal adviser would be aware of this. However, it is apparent that there must have been some knowledge within the **tie** team that there could be variation and demands for more money once the contract

was signed. I have referred to the wording of the contract introduced on behalf of BBS on 2 April 2008 (see paragraphs 11.81 and 11.82 above), which made it clear that there could be a Notified Departure immediately on signature of the agreement. In addition, Mr McEwan was aware of the need to fight the Notified Departures “tooth and nail” [PHT00000018, page 120] and Mr Laing recalled a comment by Mr McEwan made shortly before contract close that the agreement had “more holes than a teabag” [PHT00000040, page 49].

11.126 In my view, this does not have the result that advice is not required. The Notified Departure that had been discussed in correspondence prior to conclusion would arise because the design programme that would be used was not that referred to in the contract. The scope of the potential liabilities under PA1 went much further. It was not merely a question of the dates on which designs would be made available; it covered the content of the designs. Critically, the effect of the wording in the contract as finalised was that there was no express statement that BBS would bear additional costs arising from normal design development, and that had been **tie**'s clear intention. On the contrary, the wording that had been included tended to transfer the liability for additional costs arising from changes to **tie**. Mr Fitchie was aware of the importance that had been attached to transfer of this risk and on his own evidence was aware that the agreement did not achieve the objective.

11.127 If Mr Fitchie was aware of the pitfalls in the contract and advice was appropriate, the question is whether it was given. He said that it was. Some of his evidence in relation to this is as follows.

(a) He said that he had made his views known on SP4 in general and PA1 in particular [TR100000102_C, pages 0175 and 0183–0184, paragraphs 7.241 and 7.286 respectively; PHT00000017, page 86].

(b) He said that he had notified Mr Bell and Mr Gilbert that there would be design development that would generate change [*ibid.*, pages 129–130].

(c) He said that he had had discussions with them regarding Notified Departures [*ibid.*, page 132].

(d) He said that he gave advice on PA1 in meetings in February; at meetings with Mr Bell and Mr Murray; in discussions with Mr Gilbert; in the course of his daily updates to the **tie** management team; and at a Legal Affairs Committee meeting [TR100000102_C, page 0183, paragraph 7.283].

(e) He said that, by 22 February 2008, he had had a discussion with Mr Gilbert and Mr Bell that the draft SP4 was transferring the whole risk of MUDFA works being incomplete to **tie** [PHT00000017, pages 123–124].

11.128 As to the content of the advice that was given, Mr Fitchie said,

“I believe that my verbal advice on this was very clear: it introduced obvious blunt transfer back to TIE of cost and time implications from SDS design development post BDDI” [TR100000102_C, page 0185, paragraph 7.291].

11.129 He said that he told Mr Gallagher that SP4

“carried, in my opinion, currently unquantified time and cost consequences for TIE because of the incomplete and unapproved state of a significant part of the SDS scheme design” [*ibid.*, page 0185, paragraph 7.293].

- 11.130** Mr Fitchie said that he told Mr Bell that there were different ways of reading PA1 and that BBS would exploit that fact [libid, pages 0185–0186, paragraph 7.295]. Having been told by Mr Fitchie that BBS was not open to any adjustment of the PA1 language, Mr Bell said that he accepted this [libid, page 0186, paragraph 7.297] but that he was “sanguine” about the PA language [libid, page 0184, paragraph 7.287] and Mr Bell’s ultimate view was that “what was or was not normal design development would be relatively easy to agree, if everyone was pragmatic” [libid, page 0184, paragraph 7.290].
- 11.131** There is no dispute that no written advice was given [PHT00000017, page 168]. There is no letter or report from DLA or Mr Fitchie that draws the attention of tie, and/or CEC, to the risks inherent in SP4 as it had been drafted. At one point Mr Fitchie claimed that he had sent tie a message saying that what it was negotiating was beyond the original premise of SP4 [libid, page 106]. The Inquiry has not found any such message in its searches and none was provided to the Inquiry by DLA. On the basis of the material that is available, I conclude that no such message was sent. What was said in the Close Report and the letter issued by DLA at close is considered below.
- 11.132** Mr Fitchie contends that advice would have been given orally and that in the context of contract negotiation there is often not sufficient time to record advice in emails, formal papers or letters [TR100000102_C, pages 0045–0046, paragraphs 4.19–4.20]. He said that the outcome of advice is often enshrined in the next draft. I accept that the position was one in which rapid responses were required and it would not have been reasonable to document every piece of legal advice given throughout the negotiation. I accept also that while he was on secondment it would be expected that some informality would arise in the way in which advice would be tendered. However, these matters have to be seen in the context of the very obvious importance of the risk that was being undertaken. There could be no doubt of the importance to CEC, and therefore to tie, of having a contract that was “fixed price” or in which risk was transferred to the contractors. The effect of the wording that had been arrived at was the opposite. Far from seeing the position corrected from one draft to another on the basis of advice that had been tendered, if anything the position for tie worsened as the drafts progressed. In itself this should have indicated that any advice that had been given had not been heeded, and it raised the possibility that it had not been understood. In view of the importance of what was at stake, it would have been appropriate to ensure that any advice that had been given was recorded in writing, had been fully understood and had been properly passed on within tie and to CEC.
- 11.133** When the tie witnesses were asked about whether advice was given, they all denied having been told by Mr Fitchie of the risks that lay in SP4. Mr Gallagher denied being told that the effect of SP4 was that all the risk for design development lay with tie and that it gave rise to unquantifiable risks to tie [PHT00000037, page 114]. He also denied that Mr Fitchie had said that tie should not sign the contract until matters were clarified [libid, page 115]. Mr Murray also did not recall advice from DLA that SP4 represented a substantial risk to tie [PHT00000055, pages 124–125]. Mr Gilbert could not remember whether he got advice as to transfer of design risk [PHT00000023, pages 180 and 204–205] or having been told of the risk presented by SP4 [libid, page 141]. Although his recollection was generally poor, he said that had he been made aware that the risk lay with tie, he would have discussed it with the rest of the team and gone back to Mr Walker to try and take them back to what he believed had been agreed at Wiesbaden and was reflected in the written agreement from December

[libid](#), pages 141 and 180–181]. That this did not happen indicates that Mr Gilbert did not get advice as to the risk. He also said that had he been told that risk remained with **tie** it would have been such a significant matter that he would expect to have remembered it. Mr Dawson said that Mr Fitchie never advised him that BBS would not accept a fixed-price deal or that matters should be delayed to enable the legals and the design to catch up before the contract was concluded [[PHT00000056](#), page 77]. Mr Bell said that he and his colleagues at **tie** were not given advice that PA1 meant that the design risk had not been transferred and that they simply trusted that, as between **tie** and BBS, there would be a “collegiate approach” to the missing design as there were obligations in the contract to work collaboratively and the Infracore contractors had to insert their proposals into the final design [[PHT00000024](#), page 53]. Mr Bell said that Mr Fitchie understood that **tie** was interpreting PA1 as meaning that it was only when matters went beyond normal design development that **tie** would bear the liability for additional construction costs [[libid](#), pages 46 and 48], and he did not demur. When comments from the statement from Mr Fitchie were put to him, he denied that Mr Fitchie had said he had misgivings that responsibilities for cost following Base Date Design Information (“BDDI”) design development remained with **tie** [[libid](#), page 57]. He accepted that he was told that a Notified Departure would be associated with the design time issue, but denied that he had been told of the more general risks facing **tie** [[libid](#), pages 57–58]. Neither did he recall being told of the magnitude of the risk transferred to **tie** or having a discussion in 2007 about halting the procurement process. Ms Clark said that she was not aware of advice having been given by Mr Fitchie regarding risks [[PHT00000025](#), page 152].

- 11.134** In support of its contention that advice was given, DLA rely on a document that bears to be a DLA file note [[DLA00006319](#)]. It has as its date “9 April [2010]”. It is said that the year is an error and it should refer to 2008. The DLA submissions give an account as to how this document and others came to be produced and why they were late on behalf of DLA. It is said that the note was created when Mr Fitchie asked a secretary to type up his handwritten notes. The Inquiry requested that the handwritten notes be provided, but it was told that they were no longer available. The purported justification for getting the note typed was to preserve the record of what had happened. If that was the intention, it would have been necessary that the typed-up version be checked. The file note clearly contains errors so it is apparent that this had not been done. It seems odd, to put it at its lowest, for the original to have been destroyed without Mr Fitchie or someone else within DLA having checked the notes. According to the DLA submissions, notes were typed up as Mr Fitchie was leaving and this was presumably with a view to having a proper record. Not checking the new version and destroying the original would have the opposite effect.
- 11.135** On the face of it, the file note records that on 9 April a meeting took place between BBS and **tie** with their respective advisers to consider a claim by BBS for an additional price increase of £9 million. In his statement, Mr Fitchie referred to a demand for a price increase of £17 million having been made for the first time at a meeting on 9 April 2008 [[TR100000102_C](#), page 0224, paragraph 7.498]. He said that there was a breakout from this meeting, which was attended by the **tie** team and him. The question that the file note records as having been posed to Mr Fitchie was whether **tie** could close on this – ie the contract with an increased price. The concern appears to be that to have allowed another increase in price would have increased the chance that the award would be challenged by the disappointed bidder on the basis that it was a breach of the rules on public procurement [[libid](#), page 0225, paragraph 7.499]. The file note [[DLA00006319](#)] records Mr Fitchie as having said that SP4 already “contained numerous relief/compensation/arguable risk allocation

points for BB(S) – on civils work” and was “[b]iased for Infraco”. It notes that Mr Fitchie referred to a risk of BB exploiting SP4. There is a section that records the views of the various members of the **tie** team and, in that context, there is a note that Mr Fitchie said that SP4 was not negotiable.

11.136 A number of factors cast doubt on the extent to which it is appropriate to place reliance on the file note.

(a) It contains errors. It refers to “very slim price differential at PB appointment in December” [**ibid**]. I assume that in this context “PB” means “preferred bidder”. It is of note, however, that the appointment of preferred bidder was made in October and not December as stated.

(b) The request for a price increase of approximately £9 million, which is the context for the meeting, is said to be a demand for £9 million from the contractors. In the evidence there has been no reference to a demand for £9 million in early April. **tie** acceded to demands in February, March and May.

(c) The note indicates that one of the matters in respect of which additional monies were sought was the costs of the bid for phase 1b. The issue of those costs was dealt with as part of the demand, made in early May, which led to the Kingdom Agreement.

(d) A document that describes the outstanding issues as at 7 April 2008 [**TIE00079487**] refers to VE and immunisation, which are two of the matters said to justify the price increase sought, but makes no reference to any price demand. Similarly, an email from 1 April 2008 [**CEC01466500**] deals specifically with NR Immunisation, but without any demand being noted.

(e) An email from Mr Fitchie dated 5 April 2008 (Saturday) refers to a meeting on the following Monday [**CEC01542399**], two days before the meeting said to be covered in the note, but there is no reference to price demands. Instead it says: “[s]ome knotty smaller issue remain [sic] but nothing that cannot be solved.” This is hardly consistent with a demand for £9 million to be discussed in the following days.

(f) There is another email string, including an email from Mr Laing dated 4 April in which he says “I hope that the project comes to a successful close during my annual leave” [**CEC01541476**]. This, too, is a very odd thing to say if there is an unresolved demand on the table.

11.137 Although, in response to questioning by counsel for DLA, Mr Murray said that he could not contradict that there was a meeting at that time [**PHT00000055**, pages 143–144], as it was one meeting among very many held 20 years ago, that is hardly surprising.

11.138 It may be said that the above factors indicate that the note is in error in saying that the meeting took place in April and that it should have said May. An error such as that, however, would be wholly inconsistent with the document originating in a handwritten contemporaneous note as opposed to an account prepared later. I observe also that had the meeting been on 9 May rather than 9 April, Mr Gilbert could not have been in attendance, as the note records. He left **tie** at the end of April, other than a couple of days spent in the office on 6 and 7 May. Quite apart from all these considerations, and even taking it at face value, the note does not support the contention in the submissions for DLA that there was a clear discussion of risks [**TRl00000288_C**, page 0012, paragraph 20]. In all the circumstances, I place no weight on it.

11.139 There is one further factor that, in my view, is perhaps the most important as an indicator that Mr Fitchie did not give the advice that he claims to have given. As events unfolded and the works commenced, the meaning of SP4/PA1 and the issue of where risk lay came to assume critical importance. These issues were the subject of a lot of controversy between the parties. There was a great deal of correspondence and discussion and there were several adjudications (considered in Chapter 17, Adjudications and Beyond). Mr Fitchie was involved in the discussions and correspondence, and DLA had involvement in most of the adjudications. Not once in this period did Mr Fitchie refer to any email or minute of a meeting relating to the DRP in which he said he had given earlier advice to the effect that his view aligned with that of BBS and that the risk lay with **tie** [PHT00000017, page 168]. Even when McGrigors started to act for **tie** and it conducted an investigation into the Wiesbaden Agreement and SP4, Mr Fitchie did not claim that **tie** was advised of, and was therefore fully aware of, the effect of the agreement that it signed [ibid, pages 169–170]. Mr Fitchie did not raise the issue of advice in response to an email from Mr McGarrity in the middle of the dispute process [ibid, pages 170–174]. Although he said that it could have put him in an awkward situation to raise this, it seems to me that the situation would be much worse, and far more awkward, if Mr Fitchie had critical information and did not provide it to McGrigors and/or Mr McGarrity. He accepted that he would have been duty-bound to provide the information in the investigation [ibid, page 170].

Legal advice: advice to CEC

11.140 In the preceding paragraphs, I have considered the issue of advice to **tie**. There is a separate question of advice to CEC. Mr Fitchie's response was that DLA was not advising CEC [TR100000102_C, pages 0181–0182, paragraphs 7.275–7.277]. I have considered this in Chapter 4 (Legal Advice). He accepted that where a conflict of interest arose, he would be obliged to bring this to the attention of CEC. It seems to me that, after February 2008, he should have been aware that such a conflict had arisen. Mr Fitchie noted that the Rutland Square Agreement concluded in February 2008 contained a clause in terms of which BBS could lose preferred bidder status if it did not adhere to its terms, including the requirement there be no further claims for additional payment, but that **tie** neither used nor threatened to use this sanction. In his view, this sent an "unmistakable signal" to BBS that **tie** wanted "above all else" to award the Infraco contract [ibid, page 0220, paragraph 7.467]. This being so, it meant that **tie** was no longer necessarily acting in the interests of CEC. If that was the position, and he was aware of it, as a solicitor he had a professional duty to notify CEC.

11.141 The state of knowledge of CEC even became a matter of concern to BBS. Mr Laing explained that shortly before contract close there was a CEC meeting at which it was reported that the contract was near finalisation and that it was a lump-sum, fixed-price contract. Mr Laing thought there was a risk that CEC might misunderstand the position, and he raised the matter with Mr Fitchie. He recalled that Mr Fitchie was irritated by this and told him in effect that it was none of his business and that CEC was being advised by its legal advisers [PHT00000040, pages 47–48]. Mr Laing gave his evidence in a straightforward manner and was a credible and reliable witness. I believed his evidence that he was anxious that there should be no misunderstanding about price on the part of CEC and that he raised this matter with Mr Fitchie. Moreover, contemporaneous records support Mr Laing's understanding at that time. The minutes of the meeting of CEC on 1 May 2008 noted:

"the imminent award of the two contracts [Infraco and Tramco] with a final price for the Edinburgh Tram Network of £508m which was within the funding envelope of £545m" [CEC00079774, page 0008].

11.142 Immediately after the signature of the contracts **tie** and Edinburgh Trams issued a media release on 14 May 2008, which included the following statement:

"With these final fixed price contracts now completed all parties can now proceed to delivering this project safely to programme and budget."

[[CEC01231567](#), page 0001.]

11.143 As mentioned in paragraphs 11.113 and 11.114 above, Mr Reynolds had similar concerns and had mentioned them in internal reports. Mr Walker also had concerns regarding CEC's understanding of the nature of the Infraco contract. He said that he was concerned whether CEC fully understood that there was likely to be a significant increase in cost and duration once the contract was signed [[PHT00000035](#), page 6]. He had expressed such concerns to Mr Reynolds, who mentioned Mr Walker's concerns in his internal report dated 18 April [[PBH00018333](#); [PHT00000035](#), pages 90–91]. Mr Walker had raised it with Mr Gallagher, and he said that on 22 April 2008 he was concerned enough to draft a letter [[SIE00000401](#)]. He produced a copy of this letter at the outset of his oral evidence. It is unfortunate that this was not produced by BB to the Inquiry at an earlier stage so that it could have been made available to other parties in advance and considered in Mr Walker's statement. He did not send the letter as Dr Enenkel considered that it would spoil the working relationship between Mr Walker and Mr Gallagher. In his oral evidence, Mr Walker explained that he had asked Mr Gallagher to give him an undertaking that CEC was aware that the price would increase. Mr Gallagher said that CEC was informed [[PHT00000035](#), pages 92–94]. The draft letter was intended to confirm this. In summary, his concerns were to ensure that CEC fully appreciated that "the woefully inadequate progress of the utility diversions were dramatically going to affect the price by a significant number of tens of millions" [*ibid*, page 93]. For completeness, it may be noted that Mr Gallagher denied that the conversation mentioned by Mr Walker took place [[PHT00000037](#), pages 117–118]. I preferred the evidence of Mr Walker.

Misunderstandings

11.144 Although there appeared to be a general view among those negotiating for **tie** that the objective was to transfer risk to the contractors, a number of misunderstandings could have affected the negotiating process.

11.145 Mr Gilbert said that in February 2008 he assumed that the pricing assumptions were agreed [[PHT00000023](#), page 144]. This was clearly not the case. Not only were they the subject of continued discussions; BBS continued to obtain concessions from **tie**. His view that they were agreed may be tied to his view that he did not expect further changes because he thought that the future design risk had been passed to BBS [*ibid*, page 148]. Such a significant error in understanding was bound to have affected his approach to negotiation.

11.146 There was a misconception among a number of the key personnel that the novation of the System Design Services contract ("SDS contract") from **tie** to the consortium would transfer design risk [see, eg, Mr McEwan [PHT00000022](#), pages 124, 128, 134, 183–184; Ms Clark [PHT00000025](#), pages 155–156]. In the December Board Minutes for **tie**, in response to a question from Mr Holmes about the risk of programme delays, Mr Gallagher said that normal design risk had been passed to BBS through the novation. It is remarkable that someone in his position should not understand that while the novation meant that PB would complete the design as a sub-contractor of BBS, the risk of additional costs arising from that work would fall on **tie**. This may show up a critical lack of consensus as to what was meant by "design risk". Part of the problem was that a general term such as "design risk" may have been understood by

different people to mean different things. This may explain the competing messages about design risk reported to **tie** and the TPB following the Wiesbaden Agreement. It demonstrates the importance of ensuring that all persons had a clear understanding of what was meant by terms being used in relation to key elements of the contract. The number of changes of personnel within the **tie** management team generally would have increased the scope for misunderstanding.

- 11.147** Another problem apparent in the approach of the persons involved within **tie** was to conflate what they considered ought to happen or was appropriate with what they were offering to agree. Purely by way of example, Mr McEwan relied on the fact that **tie** was to pay the consortium a substantial sum of money to have the SDS contract novated to it as meaning that the consortium should be required to absorb a significant part of the risk [PHTooooo022, pages 128, 134–135 and 155]. He also claimed that the consortium would be assuming the risk on the basis that it had, in his view, been given critical design elements and had provided a price for the works [ibid, page 133]. There was therefore a lack of focus on what was actually agreed.
- 11.148** To remedy the above problems, it would have been necessary to have had a clear statement of what the objectives were and to ensure that each person conducting the negotiations had the same understanding of it. It would have been necessary also that they had effective legal advice, which they understood, both on what had been drafted and on the effects of procedures such as novation.

Clause 80

- 11.149** In paragraphs 11.73, 11.133 and 11.139 above I have considered at some length the process by which the terms of SP4, and, in particular PA1, were determined. When the works commenced, PA1 created demands for additional payment under the Infraco contract but, when taken with clause 80 of the contract, it resulted in significant delays to the progress of the works. The delays and the steps that were taken to address them are considered below. It is useful at this stage, however, to consider the process by which the terms of clause 80 were finalised.
- 11.150** Clause 80 dealt with "**tie** Changes". In Schedule Part 1 of the contract these are defined as follows:

"'tie Change' means any addition, modification, reduction or omission in respect of the Infraco Works instructed in accordance with Clause 80 (**tie Changes**) or any other event which this agreement specifically states will be a **tie** Change but which shall not include any Small Works Change or any Accommodation Works Change" [CEC00036952, Part 3, page 0290].

- 11.151** As a subset of this, "Mandatory tie Change" was defined as follows:

"'Mandatory tie Change' means any addition, modification, reduction or omission in respect of the Infraco Works instructed in accordance with Clause 80 (**tie Changes**) which this Agreement specifically states will be a Mandatory **tie** Change" [ibid, Part 3, page 0272].

- 11.152** Clause 3.5 of SP4 included the following:

"If now or at any time the facts or circumstances differ in any way from the Base Case Assumptions (or any part of them) such Notified Departure will be deemed to be a Mandatory **tie** Change requiring a change to the Employer's Requirements and/or the Infraco Proposals or otherwise requiring the Infraco to take account of the Notified Departure in the Contract Price and/or Programme in respect of

which **tie** will be deemed to have issued a **tie** Notice of Change on the date that such Notified Departure is notified by either Party to the other." [USB00000032]

- 11.153** The base case assumptions were defined in SP4 as being the BDDI, the base tram information, the pricing assumptions and the specified exclusions. The effect of these was that if there was a divergence from the pricing assumptions, **tie** was deemed to have issued a notice of change and there was a **tie** change to be dealt with in terms of clause 80. For completeness, it should be noted that with the contract in this finalised form that would also be true whenever there was a difference from the BDDI – that is, the design information drawings issued up to and including 25 November 2007. This had the potential to catch changes that would not be caught as departures from PA1, but it does not appear that Bilfinger Berger, Siemens and CAF ("BSC") ever relied on this. Clause 80 dealt with the contractor's entitlement to additional payment where there was a **tie** change and also regulated when the works that were the subject of the change could be started.
- 11.154** The first issue is how the position came to be that the clause 80 mechanism was to be used to address the consequences of departures from the pricing assumptions. The issue of how such changes should be valued was first raised in February 2008. The first draft of the pricing assumptions provided by BBS on 4 February [CEC00592615] stipulated that the parties should seek to agree an increase or decrease in price resulting from a Notified Departure and identified the criteria as to how the valuation was to be carried out. The draft said that if the matter could not be agreed within 28 days, it could be referred for determination under the DRP. Given the way in which the provisions were drafted, it is apparent that the intention was that the works would proceed and the issue of additional price could be determined separately, and later if need be.
- 11.155** **tie**'s response on 19 February 2008 included a draft that did not incorporate any of the mechanism that had been proposed and instead said that the price would be adjusted in accordance with clause 80 [CEC00592622, page 0010, paragraph 6.3]. Mr Laing responded on 22 February 2008 with a further draft [CEC01449877]. In relation to the revised clause that stipulated that any departure from the assumptions and exclusions stated in the Schedule should amount to a Notified Departure giving rise to an adjustment of price in accordance with clause 80, he had added a note in the following terms:
- "We are not clear why the drafting proposed by BBS has not been adopted here. Clause 80 contains a procedure which in practice is unlikely to be appropriate for pricing assumptions. The reason is that clause 80 envisages a change mechanism and agreement as to the price of the change prior to the change being implemented. This, in turn, envisages that there may be circumstances where the change is then withdrawn. That would not be an option for a notified departure. If the concern is to link the valuation to the methodology set out in clause 80, the intention of the BBS drafting was to capture this principle. We will also require a discussion as to payment for actual costs as they are incurred in the event that there is a dispute as to the value of the impact of the notified departure. As has been discussed previously, BBS cannot assume the cash flow risk on notified departures." [ibid, page 0011.]
- 11.156** Mr Laing said that the concerns in relation to pricing were not how it was arrived at but how long it would take to achieve agreement during the works and who would bear the cash flow risk in the meantime [PHT00000040, pages 19–20]. As matters turned out, the concern as to whether clause 80 was appropriate was well founded

and operated to the considerable detriment of **tie**. These concerns were not, however, accepted by **tie**, and the terms of SP4 were as noted above.

11.157 The effect of this is that whenever there was a departure from a pricing assumption, BBS was obliged to deliver within 18 business days an estimate incorporating various matters including any increase or decrease in sums payable to it to implement the change (clause 80.4). The criteria for valuing the change were specified (clause 80.6). Once the estimate was received, the parties were to discuss it with a view to agreeing it (clause 80.9) and if they could not, then either could refer it to the dispute resolution machinery (clause 80.10). Clause 80.13 stated that once agreement was reached, **tie** was to issue a **tie** Change Order. In some situations, **tie** would also have the option at that stage to withdraw the notice that had given rise to the change, but this did not apply to a Mandatory **tie** Change – ie one arising under SP4. Critically, clause 80.13 also stated:

"Subject to Clause 80.15, for the avoidance of doubt, the Infracore shall not commence work in respect of a **tie** Change until instructed through receipt of a **tie** Change Order unless otherwise directed by **tie**." [CEC00036952, Part 2, page 0195.]

11.158 As the clause had appeared in the draft issued with the tender documents there was a provision whereby **tie** had a power, where works were urgent or could impact on the programme, to determine a provisional estimate with the result that BSC would be compelled to proceed with the works [CEC01650760, page 0162, clause 80.10]. Other than that, BSC was not to commence works prior to receipt of a Change Order that would be provided when the estimate was agreed or determined by the DRPs. In the contract as signed, clause 80.15 [CEC00036952, Part 2, page 0195] provided a mechanism in which **tie** might instruct BSC to carry out the change in the absence of agreement or determination of an estimate. This will be considered in more detail in Chapter 17 (Adjudications and Beyond) in relation to the disputes that arose.

11.159 In December 2007, Mr Dawson prepared material for DLA to draft clause 80 [PHT00000056, pages 53–54]. Mr Fitchie said that it was based on wording appearing in standard form contracts and had not changed much from the time of the issue of the invitation to negotiate. It is apparent from an email of 3 March 2010 from Mr Fitchie [CEC00619254] that DLA was involved in the drafting. He notes in that email that it was "heavily negotiated" and said:

"we did insist on the final words in Clause 80.13 (bear in mind that there had been various attempts by BB to entirely recast Clause 80) and there was a heated argument about this at the time – precisely, I imagine, because BB recognised it could be used to unpick their desired approach."

11.160 Mr Fitchie said that BBS had sought to rewrite clause 80 in mid-April and he had told it that this was not possible. He said that nonetheless the clause was redrafted at the last minute by Mr Gilbert and that Mr Gilbert came to him with his draft. He said that he pointed out the implications for **tie** of the revised draft to Mr Gilbert, who explained that **tie** did not wish to be exposed to BBS carrying out work without pricing certainty. Mr Fitchie considered that this change to clause 80 was at the "core of TIE's post contract award problem" [TRL00000102_C, pages 0229–0232, paragraphs 7.522–7.531].

11.161 Mr Gilbert had no recollection of having drafted or redrafted clause 80 [PHT00000023, page 206]. He noted that, had he done so, it would be in the email records of **tie**. It is apparent from what I have said above that Mr Gilbert was a

very poor witness. However, I accept his evidence in saying that had there been a redraft it would have been sent, or at least referred to, in an email, as it has been apparent from the work carried out in the course of the Inquiry that this was the normal means of communication. There is no record of any email in relation to a re-draft of clause 80 in April or May 2008, whether from the records of **tie** or otherwise – nothing sending a draft, anticipating or acknowledging a draft or even making reference to a draft having earlier been sent. Together with the email to which I refer in paragraph 11.160, this leads me once again to reject Mr Fitchie's evidence. Mr Fitchie sought to explain away the terms of the email by saying that clause 80.13 was something that he attempted to salvage from the re-draft in April 2008 [TR100000102_C, page 0231, paragraph 7.527]. I do not accept that. It is not consistent with the reference to the terms being "heavily negotiated". Had Mr Fitchie been unhappy about clause 80 and had he carried out the legal review that had been intended in the quality assurance procedure [see paragraph 11.87 above] this would have been an opportunity to give advice.

11.162 The risk presented by the interaction of clause 80 and SP4 is that there was no clear idea of the likelihood that there would be changes of design principle, shape, form and/or specification that would be Notified Departures/Mandatory **tie** Changes and therefore of the number of estimates that would have to be agreed. Requiring agreement before the work is done is quite understandable in relation to a change that is optional in the sense that **tie** could determine whether or not it wanted to make the change. Many of the pricing assumptions would not be a matter of choice. A change in the design programme or completion of the MUDFA works was simply a factual position that would arise in the absence of any volition. The same would turn out to be true of design changes. These would be made as a matter of finding solutions to problems as they arose and there would not really be a choice whether to proceed. There would be no choice as to whether these costs were incurred. It might be said that agreeing costs in advance was intended as a means to avoid the situation in which the contractors made claims that were more than had been anticipated after the works were done. What was not considered, however, was what would happen under clause 80, as drafted, if that were not to happen. The works would not be started. There was no consideration of how both parties would manage if the volume of Notified Departures was greater than they could deal with by either agreement or DRPs. If a deadlock built up at the agreement/DRP stage it would be a bar to works continuing. An agreement in which **tie** could not control when changes arose but which required agreement or dispute resolution to determine the costs of any change before work was done was always likely to be unworkable. It may be said that **tie** was not aware of how many changes were going to arise but that is exactly the point. They should have considered the matter and come to a clear and defensible view before agreeing these terms.

Additional agreements

11.163 A consideration of the progression of negotiations in this period would not be complete without some consideration of the demands made by BBS for increases to the contract price and the decisions by **tie** to accede to them. Although the agreed price rises were not of such a magnitude as to make a significant contribution to the eventual cost overrun, the demands and the decision of **tie** to enter into these agreements do shed light on the approach of the contracting parties. The increases in price were reflected in three agreements known as the Rutland Square Agreement (also known as the Rutland Agreement), the Citypoint Agreement and the Kingdom (or Brunel) Agreement. A summary of the various increases in price,

from the agreement concluded in Wiesbaden to the signed contract, can be found in [CEC00132442](#) – a document prepared by Mr McGarrity in 2009. This provides a record of increases totalling £17.4 million excluding the price increase in respect of “incentivisation bonus for achieving sectional completion dates” but, as will be explained below, the sums reflected there do not include all the payments that could fall due under the agreements.

The Rutland Square Agreement

11.164 The first agreement to arise out of a claim for additional monies was signed on 7 February 2008. [More than one copy of the agreement was referred to in evidence to the Inquiry. The versions used were [CEC00205642](#); [CEC00825620](#); [CEC01284179](#).] It was signed at DLA’s offices in Rutland Square in Edinburgh and became known as the Rutland Square Agreement or the Rutland Agreement. The principal features of the agreement were as follows:

(a) The price agreed at Wiesbaden was increased by £3.8 million. This accounts for the cost increase of £3.8 million noted in Mr McGarrity’s table referred to in paragraph 11.163 above.

(b) Clause 2 declared that:

“**tie** and the BBS Consortium agree that under no circumstances shall the Construction Contract Price of £222,062,426 be increased prior to formal signature of the Infraco Contract and Schedules (including the Employer’s Requirements and the Infraco Proposals), the Tram Supply Agreement and Schedules, the Tram Maintenance Novation Agreement and Schedules, the SDS Novation Agreement and Schedules, the Tram Supply Novation Agreement and Schedules and the Tram Maintenance Agreement and Schedules (the ‘**Infraco Contract Suite**’) except in respect of:

“2.1 the formalisation of the price for changes to the Employer’s Requirements Version 3.1; and

“2.2 the resolution of the SDS Residual Risk Issue” [[ibid.](#), page 0003].

The meaning of “SDS Residual Risk Issue” was explained in clause 4 as the provision of adequate design information:

“and particularly earthworks design by SDS and the recovery by the BBS Consortium of costs and expenses from SDS in the event that their designs are inadequate” [[ibid.](#)].

Mr Bell said that there was a question about the level of groundworks investigation that had been carried out, and earthworks were therefore a particular area of concern, but that it “may” be that the term related to design beyond that [[PHT0000024](#), page 65]. When Mr McFadzen was asked about this, he said that:

“the big thing was that the design was incomplete ... And there were big gaps in it, and particularly in earthworks and the like.” [[PHT0000034](#), pages 93–94.]

The use of the term “resolution” in clause 2.2 [[CEC00205642](#)] in relation to the “SDS Residual Risk Issue” suggests that it was a particular question that was to be dealt with rather than an ongoing problem. If the term was given the widest possible meaning, it is hard to see that, even in February 2008, it would be thought that it was going to be resolved. That being the case, it tends to suggest that the parties had in mind a narrower meaning. It is striking, however, that a clause carving out

an exception to what purported to be a fixed price was so ill defined and poorly understood. This is another example of agreement of contractual terms in the absence of a clear understanding of what they meant. The actual legal effect of the words is, however, of little importance as this aspect of the agreement was almost entirely ignored in the months that followed.

(c) The programme was extended by three months.

(d) **tie** agreed to Construcciones y Auxiliar de Ferrocarriles SA ("CAF"), the supplier of the tram vehicles, entering into the consortium with Siemens and BB.

(e) Clause 3 identified a dispute that existed as to the sum that would be due in respect of changes from the employer's requirements version 3.1. It recorded that BBS had advised that £3.2 million would be due but that **tie's** budget was £1.6 million. The agreement did not determine what sum would be due, and it was later agreed at £2.7 million [TR100000102_C, page 0028, paragraph 2.143]. Mr Fitchie said that this situation had come about because the BBS Infraco proposals were too basic to allow SDS to design the Siemens component of the Employer's Requirements **libid**, pages 0172–0173, paragraph 7.231.1]. The sums for these changes were in addition to the increase in price of £3.8 million noted in Mr McGarrity's table.

(f) The Infraco contract suite was to be closed by 1 March 2008.

(g) Clause 7 said that adherence to the terms of the agreement was a condition of BBS retaining the status of preferred bidder.

11.165 The agreement arose out of a demand for additional monies from Siemens, which accounted for the increase in the price [PHT00000045, page 53]. Mr Flynn said that this sum was to reflect a new version of the Employer's Requirements that had made changes to the scope and conditions of Siemens' work by **tie** after the discussions in Wiesbaden **libid**, page 54]. On the other hand, Mr Crosse said that Siemens had wanted £20 million for "integration issues" [TR100000031_C, page 0044, paragraph 134]. Mr Fitchie recalled that the demand had been for £8.5 million [TR100000102_C, pages 0028 and 0213, paragraphs 2.142 and 7.434 respectively] and said that Siemens was unable to justify this sum **libid**, page 0213, paragraph 7.437]. Mr McFadzen said that a big element of the justification for the agreement was to address the three-month delay in getting the contract under way, which resulted in additional costs for preliminaries [PHT00000034, pages 92–94].

11.166 The agreement was negotiated over three days [TR100000102_C, page 0028, paragraph 2.142] and at various times Mr McEwan, Mr McGarrity, Mr Crosse, Mr Gilbert and Mr Richards were involved from **tie**. Mr Gilbert led on behalf of **tie** **libid**, page 0215, paragraph 7.448]. Mr Fitchie was involved for **tie** in the drafting exercise and some of the negotiations [PHT00000017, page 102]. The negotiations extended to issues arising in SP4, and that was addressed in the agreement. Mr Fitchie said that, during the negotiations, Mr Laing said that BBS was not prepared to absorb any cost or time risk relating to post-contract signature design production and development [TR100000102_C, page 0214, paragraph 7.442] but it is of note that the agreement was negotiated just as the first draft of the pricing assumptions appeared and, in its final form, made changes to SP4. It is also apparent from what I have set out above that negotiations concerning SP4 continued thereafter for some weeks.

11.167 Although **tie** had conceded the increase in price, it was intended that the provisions referred to in paragraph 11.164(b) above should be a "line in the sand" and prevent further demands. It became clear, however, that it did not do so. It is not possible

to assess to what extent the readiness with which additional payment had been conceded on this occasion spurred BBS on to make more demands, but that is exactly what it did. Mr Fitchie noted that at no time after the Rutland Square Agreement was signed did **tie** seek to enforce the provision that there should be no further change in the price. It informed his view that it wanted to sign the contract "above all else" [*ibid*, page 0220, paragraph 7.467]. The apparent divergence of interests between **tie** and CEC that this disclosed and the effect on the professional obligations of Mr Fitchie were considered in Chapter 4 (Legal Advice).

The Citypoint Agreement

- 11.168** On 7 March 2008, an agreement was made at a meeting between Mr Bell and Mr McEwan for **tie**, Mr Walker for BB and Mr Flynn for Siemens [[CEC01463888](#); Mr Bell [PHT00000024](#), pages 85–86]. The meeting took place at **tie**'s offices at Citypoint and the agreement became known as the Citypoint Agreement. Mr Bell referred to the agreement made in March as the Rutland Square Agreement [[TR100000109_C](#), page 0043, paragraph 29(1)]. This contradicts the other available sources and I conclude that it is an error. On this occasion, legal advisers were not involved prior to the agreement being concluded and no written document was produced incorporating the agreement.
- 11.169** In terms of the Citypoint Agreement, the price was increased by £8.6 million to reflect:
- (a) an amendment to the contract programme extending the opening date for revenue service from March 2011 to July 2011;
 - (b) the impacts of version 3.5 of the Employer's Requirements;
 - (c) BBS accepting the design quality risk and consequential impact on time;
 - (d) providing compliant depot equipment; and
 - (e) provision of tapered poles for the overhead electrification lines. This was an issue of aesthetics in which CEC considered that the tapered poles looked better.
- 11.170** Mr Gallagher said that the agreement was the result of "a final negotiation on the transfer of design risk and the acceptance of the transfer by BBS" [[TR100000037_C](#), page 0103, paragraph 315].
- 11.171** It is not apparent, however, that any risk over and above the risk in relation to design quality was accepted by BBS. Mr Bell explained that this was intended to refer to the risk that the design produced under the SDS contract was not of sufficient quality to be acceptable to achieve the approval of authorities such as CEC [[PHT00000024](#), page 86]. He said that it was not a reference to the development of design, as the understanding was that this risk had already been accepted by BBS if it was normal design development and by **tie** if it went beyond that [*ibid*, pages 86–87]. I prefer Mr Bell's account and reject the construction Mr Gallagher sought to place on it. This is relevant to the understanding of the "SDS Residual Risk Issue" as used in the Rutland Square Agreement.

The Kingdom Agreement

- 11.172** After months of negotiations, at the end of April it was thought that the contract would be signed on 2 May. A meeting in Edinburgh had been attended by senior personnel from BB and Siemens and had addressed minor issues that were still outstanding and agreed the timetable for signature. Despite this, on 30 April 2008, at a meeting of Mr Flynn, Mr Walker and Mr Gallagher, BBS intimated that it was

not willing to sign the contract unless the price was increased by £12 million. Mr Fitchie claims that these demands were first tabled at a meeting on 9 April and that they were the context for the meeting note referred to in paragraph 11.134. However, other witnesses, from both **tie** (eg Mr McGarrity) and the contractors, all say that the demand was made at the last minute [[PHT00000047](#), pages 64–65]. Contemporaneous documents are also consistent with the demand having been made only at the end of April. That is the position in the presentation to the TPB meeting on 7 May 2008 [[CEC01282186](#), page 0007]. In the email exchange from 30 April that gave the news of the demand [[CEC01274960](#)], Mr Gallagher said that it had been made to him that day by Mr Walker. Mr Fitchie also stated that the demand was made shortly before contract close [[TR100000102_C](#), page 0224, paragraph 7.493]. Accordingly, I reject the evidence from Mr Fitchie that this demand was first made in early April. It is clear that a meeting did take place earlier in April. However, in his emails of 30 April, Mr Gallagher refers to a deal “negotiated and agreed on April 14th by all parties” [[CEC01274960](#)]. Information as to what was discussed at the meeting is given in the minutes of the CEC/**tie** Legal Affairs Group for 14 April [[CEC01227009](#)], Mr Fitchie’s email that day [[CEC01425364](#)] and a note of what was agreed circulated by Mr Gilbert [[CEC01451880](#); [CEC01451881](#)]. It does not relate to a substantial demand for additional monies.

- 11.173** The initial approach from **tie** to BBS’s request for a further price increase was one of hostility. The demand was viewed as brinkmanship. The initial justification given for the demand was that BB had problems with its supply chain. Mr Gallagher said that he had been told that BB claimed that the additional cost was really £17 million but that it had been brought back to £12 million. He explained that, in his view, this served to demonstrate the lack of credibility of the claim. **tie** investigated whether it would be possible to remove BB from the contractors’ consortium and replace it with another party or to re-procure the contracts as a whole [[TR100000037_C](#), pages 0103–0104, paragraph 318; [CEC01282186](#)]. However, it was recognised that there were substantial practical difficulties with these approaches [[DLA00006446](#); [CEC01373756](#)]. One of the major problems was that any such approach would take time. It was considered that anything that resulted in delay to the contract would push up the price and, as funding was fixed, there was a concern that this would make matters unaffordable.
- 11.174** As would be expected, the witnesses from BBS had a very different recollection of this to those from **tie**. When asked what the increase was for, Mr McFadzen said:
- “It was – it was borne out of our – what I think I have described in my statement as increasing alarm that this was not going to be a good project. All of the things that were coming up like the design was late, MUDFA was late, albeit that we had Pricing Assumptions that were protecting us from that, but nonetheless the reality of projects are that it looked like a job that was heading for disputes and big disputes, and big disputes are expensive.
- “That’s pretty easy to say at this stage, when it did go to lots of disputes, but this was – growing alarm to the extent that we, Bilfinger Berger, were considering whether this job was worth doing or not.” [[PHT00000034](#), pages 111–112.]
- 11.175** This gives the clear impression that the concern was a general one in relation to the contract and its profitability as a whole. This is entirely at odds with what had been said to Mr Gallagher about difficulties with the supply chain.

- 11.176** While **tie** had characterised the conduct of BBS as brinkmanship, in relation to the demand, Mr Walker referred to letters from Mr Gallagher in this period and described them as "pressurisation and bullying from **tie** who were out of their depth" [TR10000072_C, page 0038, paragraph 74]. He noted that discussions continued in the first half of May and that the line from BBS was that the design was not finished, the utilities were not finished and the price was going up **libid**, page 0037, paragraph 73].
- 11.177** There was an emergency meeting of the TPB when the demand was made, a meeting of the Principals from both sides on 5 May and a further meeting of the TPB on 7 May 2008. Following the meeting on 5 May, **tie** made a counter-proposal that there would be an increase in cost of £3 million and that it would agree a further payment of £3.2 million to BBS if phase 1b did not proceed. This was rejected by BBS and a demand for £9 million was made. Early on the morning of 7 May 2008, Dr Enenkel sent an email to Mr Gallagher [CEC01275063] in which he said that there was "no space left for negotiation anymore". According to Mr Gallagher, he was told that if the additional monies were not made available, BBS would not sign the contract [TR10000037_C, pages 0105–0106, paragraph 321]. In response, Mr Gallagher said that what he had offered was at the limit of his authorisation [CEC01275063]. The matter was taken to the TPB on 7 May 2008. The conclusion of the discussions there was that **tie** did not have much room for negotiation [CEC00080738, page 0006, item 2.11]. The decision made on 7 May was to seek the best deal in negotiations and report to the sub-committee of the Boards consisting of Mr Gallagher, Mr Renilson and Mr Mackay.¹⁸
- 11.178** At a meeting on 9 May, agreement was reached. Mr Fitchie said that after this he was told what had been agreed and he and Mr Bell prepared a document to record that. Mr Fitchie had not been involved in the negotiations as to the substance of the deal. The agreement that he prepared was signed on 13 May 2008 [WED00000023] and was known as the Kingdom Agreement after the room in which it had been negotiated. This has the following principal elements.
- (a) **tie** was to pay BBS the sum of £4.8 million by way of what was described as an "incentivisation bonus" in four instalments throughout the works. These incentivisation provisions were carried through to clause 61.8 of the Infraco contract [CEC00036952, Part 2, page 0143].
 - (b) If **tie** did not proceed with phase 1b of the project then **tie** was to pay £3.2 million to BBS to compensate it for work done in the procurement period.
 - (c) The contract suite was to be closed out on the basis of positions recorded in a summary table attached to the agreement.
 - (d) There were provisions to regulate the terms on which CAF would join the BBS consortium.
 - (e) The mobilisation and advance works contract that had been concluded between **tie** and BBS was to be closed down and BBS waived any entitlement to claim time relief or payment for the four months preceding award of the Infraco contract, which would have been compensation events if the contract had been in force at that time.

¹⁸ This sub-committee was known as the Approvals Committee and its work will be considered in more detail in Chapter 12 (Contract Close).

(f) Costs that might arise from PA12 in SP4 were to be capped at £1.5 million save for specified exceptions. This pricing assumption related to the roadworks in Princes Street, Shandwick Place, Haymarket Junction and St Andrew Square and was that full-depth reconstruction of the road would not be required. The entitlement to an extension of time arising out of departure from PA12 was limited to eight weeks.

(g) Subject to a cap of £1.5 million, BBS agreed to accept costs arising from changes related to early release of intended for construction information.

(h) Any sums due to **tie** from the reserve account established under Part 43 of the Infraco contract on issue of the reliability certificate were to be waived. Although this is stated in the Kingdom Agreement, it is not apparent that there was any entitlement on the part of **tie** to any sums within seven days of issue of a reliability certificate.

11.179 When first responding to the demand for more money, Mr Gallagher had pointed out that both because the contract involved expenditure of public funds and because it was governed by the rules on public procurement, **tie** could not simply cede additional payment to BBS without getting value in return. The presentation made to the TPB meeting on 7 May 2008 [CEC01282186] recorded that **tie** believed that a deal of £3.2 million if phase 1b did not proceed and a further £3 million could be justified. Of the proposed payment of £3 million it was said that it "buys benefit, difficult to quantify definitively but real". Mr Gallagher said:

"We also found a way of getting further improvements to either programme or risk which we could quantify and justify as adding further value to the project."
[TR10000037_C, page 0105, paragraph 321.]

11.180 In relation to the agreement that was reached, he claimed that **tie** was not "straining to accommodate BB's late request" [ibid, page 0107, paragraph 326].

11.181 Did **tie** get anything meaningful in return for the additional money? This question is not easily answered. In the Kingdom Agreement itself, the payments are said to be due within 7 days of issue of Sectional Completion "as detailed on the Contract Programme in Schedule Part 15" [WED0000023, page 0001]. On the face of this, payment is not made conditional on the completion being achieved on the programmed date. This is consistent with the views expressed by witnesses that this was not in reality an incentive payment. That they were not incentivisation payments was accepted by Mr Walker [PHT0000035, pages 106–107] and was also apparent to Mr Fitchie [TR100000102_C, page 0227, paragraph 7.507]. When this commitment found its way into the Infraco contract, however, the following proviso was added:

"except where Infraco has failed to achieve sectional completion by the Planned Sectional Completion Date and such failure is not due to a Compensation Event, Notified Departure, **tie** Change or Relief Event in which event such amounts will be paid within seven (7) days of issue by **tie** of the relevant Certificate of Sectional Completion." [CEC00036952, Part 2, page 0143, clause 61.8.]

There are echoes of SP4 in the manner in which this is drafted. It appears that the entitlement to payment of each of the sums of £1.2 million will be lost where two conditions are satisfied; firstly that completion has not been achieved by the planned date and, secondly, that the failure to complete on time is not attributed to one of the four matters specified. If the clause ended there, it would be an incentive in that if they failed to complete on time without a valid reason, the bonus would be lost. The final wording, however, indicates that the sum will be paid in any event within seven days of the date of the relevant Certificate of Sectional Completion. As this seems

to cut against the whole purpose of the proviso I have considered whether this is intended to regulate payment where the proviso does *not* apply and is merely poorly placed within the clause. In my view that is not the case as time of payment for the situation in which the proviso does not apply is dealt with in the opening words of the clause as follows:

"Within seven (7) days of the date programmed for completion of each Section in Schedule Part 15 and against the submission of a valid VAT invoice, **tie** shall pay the Infraco an incentivisation bonus with respect to the completion of each Section of the Infraco Works." [\[ibid\]](#)

So, while an initial view of the clause gives the impression that it is conditional on the works being done on time and therefore *does* provide an incentive, when it is considered in more detail I have concluded that it does not and the payments were structured in such a way that they provided no inducement for meeting any timescales. The draft Infraco contract already had incentives to encourage Infraco to complete the relevant sections by their programmed date, in respect that clause 62 permitted **tie** to recover liquidated and ascertained damages from Infraco if it failed to complete a section by the programmed date. Calling the sums covered by the Kingdom Agreement an "incentivisation bonus" was simply a device to give the impression that something had been obtained in return. This has a bearing on the description of the agreement that was given to CEC at the stage of contract close. This will be considered in paragraph 12.64 below.

11.182 It is also apparent that nothing new was given by BBS in return for the additional £3.2 million that it would be paid if phase 1b did not proceed. In some large contracts, it is the practice to offer to make payments to tenderers to encourage them to incur the possibly significant costs of preparing a bid. In these situations, however, the undertaking to make payment is made in advance and, in return, the tenderer will submit a bid. While no firm bid had been made for phase 1b by May 2008, it was not apparent that, in view of the work that had already been carried out, it would cost anything like that to submit a compliant bid. BBS was the only party that would be providing a price for the works, so this was not a situation in which bids had to be encouraged to have some competition. The only factor that would determine whether BBS was asked to undertake this work was the costs contained within its bid. Agreeing to make payment to BBS if its bid was not accepted meant that, once again, BBS was getting something for nothing. I would add that, in relation to this element of the agreement, the waters are further muddied by the statement that the sum of £3.2 million of cost had previously been transferred from phase 1a to phase 1b in order to keep the cost of phase 1a down in order to make it acceptable. For example, on 12 December 2007, in response to an email from Mr Crosse to Mr McFadzen, listing information required by midday, Mr Flynn advised Mr Crosse that "Scott [McFadzen] will prepare a consolidated formal response which will pick up items like the transfer of money from 1A price to 1B price etc" [\[CEC00547750\]](#). In relation to that email Mr Walker expressed the opinion that this was:

"TIE's attempt to reduce the price of phase 1A by moving monies for phase 1A into phase 1B because phase 1B did not seem to be under the commercial scrutiny that phase 1A was, and it was an attempt to mislead City of Edinburgh Council. There cannot have been any other reason for it." [\[TR100000072_C, page 0019, paragraph 28; PHT00000035, pages 106–107.\]](#)

- 11.183** I agree that phase 1b was not subject to the same level of scrutiny as phase 1a, not least because the grant from the Scottish Ministers was restricted to phase 1a. On 19 March 2007, Scottish Ministers had awarded CEC a grant of £60 million to "be used only for the purpose of continuing the development and procurement of Phase 1a of the Edinburgh Tram Network and for advance works, land acquisition and utilities diversions needed for that phase incurred between 1 April 2007 and 31 March 2008" [TRS00004113; TRS00004112]. The letter dated 17 January 2008 offering a grant of £500 million was also restricted to phase 1a unless the Scottish Ministers agreed to extend the scope of payment to include phase 1b in accordance with clause 2.2 of Schedule 1 [TRS00011006; CEC00021548].
- 11.184** In his evidence at the hearings, Mr McEwan suggested that the liability caps referred to in paragraphs (f) and (g) mentioned in paragraph 11.178 above were of value to **tie** but he could not recall what value was placed on the liability without the cap [PHT00000022, pages 113–114]. When considering what benefit flowed to **tie** from this agreement, as one of his points Mr McGarrity said:
- "Capping of the tie/CEC exposure for the extent of roads reconstruction required to £1.5m (the pre-existing risk allowance was £2m) and capping the tie/CEC cost for delays relating programme exposure for the extent of roads work as per pricing assumption 12 of Sch Pt4 to 8 weeks – assessed as £1.3m. This further mitigated general delay risk for which the pre-existing risk allowance was £6.6m." [TR100000059_C, page 0151, paragraph 99.]
- 11.185** The risk valued at £6.6 million was for the whole of the project and was not directly referable to the alleged benefits from the Agreement. Even taken at its highest, the benefits referred to by Mr McGarrity are far less than the payments that **tie** was to make.
- 11.186** The report on this agreement included within the Close Suite [CEC01338847] sets out what it claims are the benefits to **tie** from this agreement. It refers to the fact that it secures immediate close and therefore avoids legal and management costs. This is not a benefit in the sense that **tie** gets more for the money it is spending. It means only that a payment is being made to get the consortium to move to a position in which it is hoped that they cannot make further demands for additional payment and **tie** need not spend further time and money on the negotiations. In relation to the Mobilisation and Advance Works Contract (see paragraph 11.178(e) above) it noted that no claims had been made but there had been some difficulties in early stages "which could have given rise to claims in the hands of a determined contractor." An "outline" value of £1.7 million was put on these. In relation to the cap described in paragraph 11.178(f) above, the report notes the same saving of £0.5 million described by Mr McGarrity. The report notes a saving in relating to roads related prolongation of £1.3 million. It also notes a saving of £0.5 million in relation to "[o]ther improvements affecting contamination and design & consents risk" but it is not apparent what provision of the Kingdom Agreement this is intended to refer to. The report notes that the effect of the provision referred to in paragraph (h) mentioned in paragraph 11.178 was that **tie** was waiving payment of up to £1 million to which it might be entitled. It was noted, however, that the matter had never been accounted for in project estimates and in my view it cannot be considered as something given by BBS to **tie** in return for the additional payments. It was claimed in the Report that "[s]ome £4.6m of exposures" had been removed by the Agreement and that the elimination of exposure "substantially offsets the majority of the price amendment". The Report acknowledges that the evaluation of these matters is "judgemental". I consider that this wording conceals the truth which was that, like the value engineering savings

discussed in Chapter 9 on procurement up to the appointment of preferred bidder, they were largely illusory. It therefore appears that, contrary to Mr Gallagher's evidence, **tie** had been straining to accommodate BBS's request.

- 11.187** There does not seem to have been any express consideration by **tie** to simply call the consortium's bluff. Mr Flynn said that if BB had not been happy with the deal they would not have signed [[PHT00000045](#), page 76]. That, however, was the position also when they said that it would not go away for less than £9 million. Later, it took less. The willingness to depart from positions in which it is said that the contract will not be concluded unless a party gets what it wants is highly relevant to viewing the assertions made by BB and DLA that BBS was only content to do the deal actually reached and would not have entered into an agreement on any other basis.
- 11.188** In relation to the demand for an additional £8.5 million from Siemens in early 2008, Mr Fitchie said that he had never encountered an experienced international supplier engaging in such conduct to the same extent [[TR100000102_C](#), page 0213, paragraph 7.437]. On the other hand, Mr Crosse said that in commercial negotiations relating to large turnkey contracts such as this it was normal for parties to push back against what had already been agreed, necessitating reconsideration of the issue [[TR100000031_C](#), page 0040, paragraph 118]. The real issue is how such demands are handled when they are made. I consider that the fact that **tie** was unwilling, or considered itself unable, to stick to the line that it had attempted to draw in the Rutland Square Agreement is likely to have had an effect on the entire negotiations. In ceding ground in February and then again in March, a message was sent that further requests for additional monies would be met. Later, when the works were under way, there was a resolve to resist demands for additional payment. The problem was that, by that time, the contract had been concluded in terms that, in many of the situations that arose, created an entitlement to additional monies. The time to take a stand in order to limit liability was in the course of negotiations between January and May, when matters were still fluid. The idea that the issues could be addressed by signing the contract and then arguing about liability was fatally flawed. This should have been apparent to all concerned.
- 11.189** It is impossible to avoid the conclusion that the approach that had been taken to procurement and negotiations had put **tie** in a position in which it would be difficult to resist demands for additional payment made late in the day. In this respect, the procurement process had handed all the power to BBS. Mr Renilson said that **tie** had put itself under pressure to sign [[TR100000176](#), page 0054, paragraph 168].
- 11.190** By the time it came to concluding the Infracore contract, the SDS contract and MUDFA were already in place and considerable expenditure had taken place under each. The MUDFA works were causing disruption on the streets of Edinburgh. It would be obvious that this created pressure on **tie** to conclude the deal. So much money had already been expended that it would have been difficult to walk away. The Scottish Ministers had made it plain that there would be no money beyond the £500 million grant. It would be obvious that if a deal could not be done with BBS and it was necessary to re-start the procurement procedure, there would be questions as to whether the funding was sufficient. With a need to avoid being seen to have wasted all the money spent to date and unable to look for other contractors, **tie** was in a position in which there was only one party with whom it could conclude the contract. In that situation, unwillingness to call the consortium's bluff is more understandable. The danger is that the consortium would all too quickly call its bluff in return.

- 11.191** It may be said that the pressure on BBS was that if it did not get a deal, all the money that it had spent on putting together the bid would be wasted. I do not consider that this redressed the imbalance in the negotiating positions. **tie**/CEC had spent a far greater sum of money than BBS. If the contract did not proceed, BBS would be able to explore other commercial opportunities. For **tie**/CEC it could have been the end of the Tram project.
- 11.192** It may be said that part of the problem was the decision to give BBS preferred bidder status. Certainly, this removed any element of competition and put BBS in a very secure position. The step of appointing a preferred bidder had been supported by the Office of Government Commerce ("OGC"). It may be that at the time that it made its recommendation, OGC did not have a proper understanding of all that was left to do in order to award the contract. Although there was a concern that without the award bidders might start to lose interest, I consider that at the very least, there should have been a firmer and more defensible position in relation to pricing.
- 11.193** The decision in March to announce the formal intention to award the contract while the price negotiations were still incomplete also weakened **tie**'s position. Unlike the decision to appoint a preferred bidder, there does not seem to be any clear reason why **tie** took this step when it did.

Reporting to TEL/**tie** and TPB

- 11.194** Throughout the period from January to April 2008, the minutes of the meetings of the boards of **tie** and TEL contain no discussion of the issues arising in relation to negotiation of the contract or the three additional agreements. The minutes of the meeting on 28 January 2008 note that the discussion on risk transfer "was continuing with BBS" [[CEC01015023](#), page 0005]. This does not really give a flavour of the negotiations for SP4. The Project Director's report for that meeting recorded the conclusion of the Wiesbaden Agreement and the "[e]ffective transfer of design development risk excluding scope changes to BBS" [[ibid](#), page 0009]. The presentation for the meeting on 13 February 2008 [[CEC01480084](#)] included a presentation from Mr Fitchie. It appears from the slides that he referred to the fact that completion of the financial schedules was outstanding but there is no hint that he was unhappy with the draft of SP4 prepared by **tie** or the draft of pricing assumptions prepared by BBS. The Project Director's report to the March meeting [[CEC01246825](#), page 0010] contained nothing of note regarding the negotiations and no mention of the Citypoint Agreement. There is an agenda for a **tie** meeting on 14 April 2008, which includes "Update on Contract Negotiation" [[CEC01466890](#)], but there are no minutes of it and there is no reference to the Kingdom Agreement in the agenda for the meeting on 7 May 2008 or in the minutes of the meeting [[CEC00080738](#)], although they record that Mr Gallagher provided an update of the current state of contract close and refer to the events following the increased price demand communicated by BBS on 30 April. Even the minutes of the meeting on 3 July 2008 [[CEC01282131](#)] make no mention of the Kingdom Agreement or the discussions that led up to it.
- 11.195** A little more information was provided to the TPB and, as it was frequently the case in 2008 that the TPB met along with the **tie** and/or TEL Boards, some of that information will have been spread more widely. However, in the Project Director's report to the TPB for 13 February [[CEC01246826](#), page 0009], there is still no mention of the Rutland Square Agreement signed earlier that month. While it might be possible that it was too late for inclusion in the report, there is also no mention of the Rutland Square Agreement in the presentation to that meeting [[CEC01480084](#)]. In the

minutes of the meeting [CECo1246825], there is a comment at item 6.3 that "the level of change in prices since Preferred Bidder recommendation was expected". This was in the context of consideration of the increase in budget price and the prospect of any challenge to the procurement process from Tramlines, the unsuccessful bidder, as a result of the price increase. Nonetheless, the report to the Board from Mr Fitchie that the price change was expected is entirely at odds with the evidence to the Inquiry about the Rutland Square Agreement. Assuming that the evidence to the Inquiry was truthful, this is an example of the TPB's having been given inaccurate advice. I cannot envisage how this could have been done unknowingly.

- 11.196** In the minutes of the March meeting at item 10.1 [CECo0114831, Part 1, page 0006], there is a note that Mr McGarrity had explained that increases in project price meant that the baseline estimate had risen from £498 million to £508 million, but there is no record of any explanation of the Rutland and Citypoint Agreements. The papers for the March meeting describe it as a meeting of the TPB [CECo1246825], but the minutes state that it was a joint meeting of TPB and the **tie** Board [CECo0114831, Part 1, page 0005]. Oddly, the minutes also record the approval of the minutes of the previous meeting despite the fact that it was with TEL rather than **tie** [ibid]. The Project Director's report to the April committee meeting says nothing about the negotiations or additional agreements and the minutes of the April meeting simply record that an update was provided on progress in relation to inter alia pricing and a reference to an explanation of increased prices in the draft of the Close Report [CECo0079902, page 0006].
- 11.197** The Project Director's report to the May meeting [ibid, page 0011] indicated that a demand had been made for a further increase in price. It was said that discussions were continuing to determine the nature of the BBS requirement and "to rebuff any price increase". Although the report should be considered at the date when it was written, it is apparent from the discussion above that, by 7 May (the date of the meeting), **tie** had actually reached the decision to make payment, provided that it could be contained. The presentation to the meeting recorded that **tie** had said that it would pay a further £3 million for contractual and risk improvements and an additional £3.2 million if phase 1b did not proceed [CECo1282186]. Also, as noted above, at the meeting on 7 May it was decided to continue with negotiations for the best deal, although **tie** did not have a lot of room to negotiate [CECo0080738, page 0006]. It may be assumed that as the contract was due to have been signed by the date of the meeting, it was necessary to provide some details of what had happened to explain to the meeting why the contract had not been signed.
- 11.198** It is apparent from the above that none of the boards was kept fully informed of the process of negotiations and, on the face of it, the **tie** Board received very little information through formal channels. It is, of course, the case that it would not normally be the function of the Board to participate in the detail of the negotiations. It would, however, have an interest in determining strategy and in understanding what was taking place. The way in which risks were being addressed in the contract affected the strategy, but these were not brought before the **tie** Board. This was a material failing. The process of accounting to the Board for what was being done might have acted as a check on the actions of the negotiating team and brought home to it just how far it had strayed from the procurement strategy. On the other hand, the Board would have been in a position to tackle this matter during the negotiations instead of being presented with a fait accompli of a negotiated contract and asked to authorise signature.

Conclusions

- 11.199** In the consideration above, I have focused on how the terms as drafted affected the work that was to be carried out by BB within the consortium. That work was designed by PB and, as noted above, in December 2006 when the draft Final Business Case was approved it had been intended that designs would be available at the time that the contract was signed and that design delivery would be aligned with the Infracore contract delivery programme. However, even if that design had been fully prepared, PB prepared the design for the engineering work to be carried out by BB but did not design the work that would be carried out by Siemens. It was of a specialist nature and was to be designed by Siemens itself. SP4 did not accommodate this. If there was no design of this whole element of the works at the date of signature, it is not clear what would be included in the price. The contract did not reach the stage of disputes regarding this issue prior to the Mar Hall mediation. It is remarkable nonetheless that the drafting did not address it.
- 11.200** The use of pricing assumptions need not be a problem. Stating assumptions in a contract is a means of allocating risk. It means that a benchmark is established such that if there is a divergence from it, one of the parties has a claim against the other. Situations in which a party warrants a state of facts are an example of this. The party subject to the claim is the one who bears the risk. This is not particularly unusual – especially when pricing large works where the scope of performance is not entirely clear. It also happens from time to time that the parties are aware that a stated assumption is not in fact correct. Where this is done, the position has moved beyond allocation of a risk and becomes the allocation of a specific liability to one party or another. I would have expected this to be readily understood by any of the lawyers involved and also any person experienced in negotiation of commercial contracts.
- 11.201** While it is perhaps inevitable that in the context of negotiations of a complex contract errors will be made in the drafting, the striking and troubling aspect of the position that I have narrated above is the failure to identify the errors that were made and, if possible, take steps to correct them. The problem that was created by SP4 and clause 80 was significant. It was also foreseeable. The stages at which it could have been identified are as follows.
- (a) As the clauses were negotiated by Mr McEwan, Mr Murray, Mr Dawson and, to some extent, Mr Gilbert, where there was uncertainty as to the effect of clauses, advice should have been sought. Since 2007, there appears to have been a view within **tie** that legal advice was unnecessary. That was clearly incorrect. While it could be said that the persons within **tie** were relying on Mr Fitchie, even when he gave his incomplete advice at the end of March, there was a determination to press on and leave problems to be sorted out later.
- (b) As the clauses were negotiated, the problem could have been identified by DLA and, in particular, Mr Fitchie.
- (c) DLA does not seem to have carried out the legal quality control review, and **tie** did not demand it. The responsibility for overseeing implementation lay with Ms Clark, who should have pursued this matter with DLA. There is no record of her having done so. This was another missed opportunity to detect the problem. It is not enough to have detailed programmes and procedures; someone who has available to them the necessary information and the appropriate advice must take responsibility for what is being done. That was lacking in the drafting process.

11.202 The negotiations were marred by a lack of leadership, vision and understanding of what was to be done and how it was to be achieved. All these matters could have been prevented. Repeated changes of personnel carrying out drafting and conducting the negotiations resulted in a loss of continuity and poor understanding of the position and objectives. This was compounded by a lack of clear instruction as to what aims were to be achieved. A failure to take legal advice, coupled with a failure by Mr Fitchie to give effective advice and warnings in relation to the matters of which he was aware, meant that problems grew undetected. The persons involved did not appear to appreciate or understand their roles and there was no oversight or leadership to rectify this. Poor or non-existent reporting to the Boards meant that oversight and direction were not available from that quarter. When the negotiations drew to a close there was no adequate legal quality control review and within **tie** there was a failure to notice this and require that it be corrected. Throughout it all, and probably as a result of the above matters, there was a failure to identify the risks that were being taken on and to assess accurately the risk to **tie** and, in consequence, CEC. Within **tie**, all the parties involved must bear responsibility to some extent, but the principal responsibility rests with Mr Gallagher as Executive Chairman, Mr Bell as Project Director and both Mr Gilbert and Mr McEwan as the persons heading the negotiation team. Beyond **tie**, Mr Fitchie is responsible for his failure to give clear advice and, when it appeared that matters were continuing despite his concerns, to ensure that his advice had been understood.

Chapter 12

Contract Close

12.1 Although a decision had been taken to proceed with the Edinburgh Tram project (the "project") in December 2007, the final formal decision to sign the infrastructure contract ("Infraco contract") and the tram vehicle supply and maintenance contract ("Tramco contract") was not taken until 14 May 2008 – the day on which they were actually signed. As will have been apparent from previous chapters, between December and that date the content of the Infraco contract had developed to a material extent. It was therefore necessary that there be some means of providing the various decision makers with assurance that it was appropriate to proceed.

12.2 The decision was ultimately that of City of Edinburgh Council ("CEC") – that is, the councillors. However, there was a sequence of decisions and actions that had to be taken before signature could take place, which was as follows.

(1) The **tie** management team met and formally concluded that:

"procedures to ensure the quality and acceptability of the terms of the Infraco Contract Suite had been adequately executed and that the tie Chairman should send the letter to the CEC Chief Executive with the recommendation that completion should proceed" [[CEC01319006](#)].

(2) Following on from the above, Mr Gallagher wrote to Mr Aitchison, advising him that **tie** was of the view that the final terms negotiated were materially consistent with the terms of the Final Business Case ("FBC"), that the final terms confirmed the value-for-money proposition demonstrated by the FBC and that it was appropriate to conclude the contracts [[CEC01284042](#)]. A letter from Mr Mackay as Chairman of Transport Edinburgh Limited ("TEL") was sent in parallel [[CEC00079774](#), page 0007].

(3) The Policy and Strategy Committee of the Council authorised the CEC Chief Executive:

"to instruct **tie** Ltd to enter into contracts with the Infraco and Tramco bidders in the context of recent changes detailed in the report by the Chief Executive" [[CEC01891564](#), page 0007, item 11].

(4) The CEC Chief Executive wrote to Mr Gallagher in the following terms:

"I hereby agree and confirm that tie now immediately enter into the Edinburgh Tram contracts without further adjustment to the terms, except as to minor and inconsequential changes required to complete the documentation suite which has been advised to and agreed by the Council Solicitor." [[CEC00590620](#)]

(5) A committee consisting of Mr Gallagher, Mr Mackay and Mr Renilson, Chief Executive of TEL, met and gave authority to Mr Gallagher, as **tie** Chairman, to proceed with completion [[CEC01289240](#)].

12.3 All these steps were taken on 13 May 2008, in the order listed above although the letter from Mr Gallagher was erroneously dated 12 May (see paragraph 12.70 below). There was also a meeting of the Tram Project Board ("TPB") in order to finalise novation of the System Design Services contract ("SDS contract"), but that is not considered further in this chapter.

- 12.4** In order to consider whether this was an appropriate way to conclude the contract it is necessary to consider what information was available to each of the decision-making bodies and what scrutiny they were able to apply to the issues before them.

tie management team meeting

- 12.5** The **tie** management team consisted of Mr Gallagher, Mr Bissett, Mr Bell, Ms Clark, Mr McEwan and Mr Murray. Although each member of the team would have been familiar with the Infraco Contract Suite, the minute of their decision [CECo1319006] notes that "adequate information had been provided on which to competently proceed" and records that the following material had been considered by them "[t]he

- ... Close Report prepared by tie Limited
- A letter from DLA Piper Scotland LLP ("DLA") providing an opinion on the legal competence of the Infraco contract suite and including a comprehensive risk matrix
- Supporting papers prepared by tie Limited addressing:
 - Detailed Infraco Contract Suite terms and conditions
 - Procurement process and risk of challenge
 - The final deal terms and relationship to value for money and the risk of challenge ...

"1. A summary of the quality control process undergone in relation to all significant documents.

"2. Confirmatory letters from the members of the bidding consortium that they were prepared to sign the Infraco Contract Suite in its current form.

"3. A copy of a letter from the tie Chairman to the Chief Executive of CEC requesting confirmation in relation to the tie Operating Agreement that the references to the Final Business Case should reflect the final terms of the Infraco Contract Suite and recommending that the completion of the Infraco Contract Suites should proceed."

[[ibid](#)]

- 12.6** As well as informing the **tie** team's deliberations, materials noted in the first three points mentioned above were used to inform other decisions in relation to the contract close, so it is appropriate to look at them in a little detail to assess the contents of the material and the means by which it was produced.

The Close Report

- 12.7** The Close Report was a document prepared over several months and several drafts, considered by Mr Bissett to be in double figures [TR10000025_C, page 0063, paragraph 172]. The process of drafting it and the other contract close documents was started by an email from Mr Bissett dated 15 January 2008 [TIE00020436]. Of the people already referred to in this report his email was addressed to Mr Bell, Mr McGarrity, Mr Crosse, Mr Sharp (who had by this time left Transport Scotland and joined **tie**), Mr McEwan, Mr Murray and Mr Hamill. It was also addressed to Mr Sim (Interface Manager for CEC), Ms Kinloch (formerly Insurance Manager for **tie**) and Mr Rimmer (formerly Traffic Management Director for CEC). It was copied to Ms Clark, Mr Gilbert and Mr Fitchie. It is apparent from the email that the Close Report was to be drafted by a number of **tie** personnel. Mr Gallagher confirmed that the **tie** management team would have contributed to the document [PHT00000037, page 119]. Although it was produced later, the table that set out the quality assurance/

quality control ("QA/QC") process [CEC01431195] identified individuals responsible for the various parts of the report and for reviewing it once complete.

12.8 Mr Bissett's email contained the following statements as to the intended function of the Close Report:

"The purpose of the Report is to provide a comprehensive view of all important aspects of the work done to support Financial Close. The recipients will be the Tram Project Board, TEL Board, tie Board and CEC officials (for use, as they wish, to support their own internal reporting) ...

"The focus is on the final/current position, but it is important that material changes from the position reached as of 20 December 2007 are explained and justified. Currently open areas must be clearly reflected with explanation of next steps to close such matters down ..." [TIE00020436]

12.9 In his statement, Mr Bissett said that this document:

"attempted to capture all of the important technical and commercial information as it evolved over that period in the run up to Financial Close in May 2008" [TR100000025_C, page 0060, paragraph 164].

12.10 It was intended that the first drafts of the report would be prepared by 18 January 2008, but this was with the intention that the contract close itself would be achieved by the end of January. As was noted above, that would turn out not to be the case.

12.11 The final version of the Close Report was attached to an email from Mr Bissett, which was sent on 12 May 2008 at 19:49 [CEC01338846]. This was sent to Ms Lindsay, Mr N Smith, Mr McGougan, Ms Andrew, Mr Coyle, Mr David Anderson, Mr Fraser and Mr Conway at CEC. It was copied to Mr Fitchie, Mr Mackay, Mr Gallagher, Mr Renilson, Mr Bell and Ms Clark. The email presents the attachments as a "final set of our internal approval documents". Although this was sent after office hours on the day before the completion was due to take place, copies of many of the drafts had been supplied to the recipients during the drafting process [see, eg, email of 10 March 2008 from Mr Bissett in CEC01428730]. They had also been considered at the meetings of CEC's Internal Planning Group ("IPG") [see, eg, IPG report of 29 February 2008, CEC01246993]. The final versions attached to the email of 12 May included both clean copies of the various documents and versions marked up to show revisions from previous drafts. The clean version of the Close Report [CEC01338853] had the following notable features.

(a) It noted that it and the report from DLA provided a comprehensive view of the principal terms of the contracts and related documents, and that "[s]pecific issues of interest to CEC are addressed in each document" [ibid, page 0001]. This put it beyond doubt, despite the attempts of Mr Fitchie in his oral evidence to say otherwise, that it was anticipated that CEC would rely on what was being done both by **tie** and by DLA.

(b) The report stated that "[i]t is understood that the Council will prepare appropriate papers for its own approval purposes" [ibid]. This seems at odds with the preceding statement. It might have been intended to refer simply to the report to CEC that was prepared by the Chief Executive, as was standard practice with significant items considered by the Council. CEC was not obtaining any other reports to inform its decision-making, and this was known by the parties involved.

(c) The report noted, at page 0004, that there had been an increase in the price of the Infraco contract of £17.8 million, and it said that this was a result of, among other things, "substantially achieving the level of risk transfer to the private sector anticipated by the procurement strategy". As has been noted in Chapter 11 (Contract Negotiations), and as became apparent once the works had started, the risks had not been transferred in the way intended. Mr Fitchie acknowledged that this was misleading [**PHT00000017**, pages 188–189]. Mr Bissett said that it was his understanding, from discussions with the commercial team at **tie**, that it had substantially achieved the level of risk transfer to the private sector that had been anticipated in the procurement strategy [**PHT00000028**, page 208]. As I noted in Chapter 11 (Contract Negotiations) in relation to the issue of negotiation of Schedule Part 4 ("SP4"), no advice had been taken on the issue of whether risk had been transferred. To make a statement that the contract had achieved transfer of risk on the basis solely of statements by the persons involved in the discussions on that very issue is not a proper basis upon which one should be satisfied that risk transfer had in fact been achieved. Reliance upon such statements alone was, at best, illjudged.

(d) Under the heading "Tramco relationship with Infraco programme" [**CEC01338854**, page 0007], the report said:

"Programme version V31 will be contained within the SDS novation agreement. Any variance between V26 and V31 which has an impact on the BBS programme will be dealt with through the contract change process."

The marked-up version of the Close Report [**ibid**] reveals that this had been included only in the final draft. Its placing is misleading. This was not an issue of the relationship between the Infraco and Tramco programmes; it was a reference to the Notified Departure that might arise because the design delivery programme referred to in the contract had already been superseded by that time. This referred to one of the major risks that faced the contract but, by putting it in the wrong section and putting no value on the risk, any sense of warning is lost.

(e) Under a heading relating to risk, there was a sub-heading "Price Certainty Achieved" [**ibid**, page 0026]. It referred to a breakdown of the price, consisting of £227 million of "firm costs", a deduction of £12.9 million in respect of value engineering and £19.4 million for items that remained provisional. The conjunction of "certainty" and "firm prices" gave rise to the clear view that the price would not change. This was reinforced by the apparent contrast with provisional prices so as to give rise to a clear inference that these prices would not change [Mr Bissett **PHT00000028**, page 175].

(f) Under the same heading relating to risk, there was a further sub-heading, "Infraco price basis and exclusions" [**CEC01338854**, page 0027], which stated:

"The Infraco price is based upon the Employers Requirements [sic] which have been in turn subject to thorough quality assurance and the significant areas where post contract alignment of the SDS design will be required. Crucially the price includes for normal design development (through to the completion of the consents and approvals process – see below) meaning the evolution of design to construction stage and excluding changes if [sic] design principle shape form and outline specification as per the Employers Requirements [sic]. The responsibility for consents and approvals is further considered below."

There was then a note of works that were specifically not included in the Employer's Requirements and therefore were not included in the price. Mr Bissett said that this wording as to normal design development was part of SP4 [PHT00000028, page 176], but this is incorrect. As the contract was drafted, any reference to the inclusion of normal design development in the price had been removed. The contract stated clearly what was *not* covered but made no statement as to what *was* covered. The report gives no indication of the particular matters that the contract specified would *not* be considered to be normal design development. In effect, the report contained a statement of what **tie** had intended, instead of being an account of and assessment of what had been agreed.

(g) There was a section entitled "QRA and Risk Allowance" that described the quantitative risk analysis [CEC01338854, page 0028]. It referred to risk allocation matrices, which it was said that **tie** had maintained and reviewed as procurement had progressed and reflected the risks retained by the public sector. It then noted:

"The only material change in the Risk Allocation Matrices between Preferred Bidder stage and the position at Financial Close is in respect of the construction programme costs associated with any delay by SDS in delivery of remaining design submissions into the consents and approvals process beyond Financial Close." [ibid, page 0029.]

The matrices themselves are considered in paragraphs 12.15 onwards in the context of the DLA letter. However, in so far as this conveys the impression that there had been no change in allocation of risk since preferred bidder stage, it is incorrect [see, eg, Mr McGarrity in PHT00000047, page 179]. At preferred bidder stage, **tie** intended that the risk of cost increases arising from development of designs would be borne by Bilfinger Berger Siemens ("BBS"). As negotiated, the contract put the risk substantially on **tie**. SP4 had also placed the risks of changes in the design delivery programme and the risks of cost increases arising from delays to the Multi-Utilities Diversion Framework Agreement ("MUDFA") works on **tie**. These were material changes in risk allocation. It might be said that many of the issues that arose as a result of the wording of SP4 were not the subject of direct consideration in the risk allocation matrices. That is true, and can be considered a failing of the matrices. What matters for the present purposes is that the impression created in the report was one that was untrue. Moreover, the statement, in the paragraph within the "QRA and Risk Allowance" section following the passage quoted above, that the decrease in the risk allowance by £17 million (from £49 million at FBC to £32 million at Financial Close [CEC01338854, page 0029]) reflected successful achievement of risk transfer to the private sector in the Infraco contract – is also misleading for the same reasons. There had been no such risk transfer. When taken with the statements noted above, they compound the picture that price certainty had been achieved.

(h) The report noted [ibid] that increases in costs might arise from:

"[s]ignificant changes in scope from that defined in the Employers Requirements [sic] – whether such changes were to emerge from the consents and approvals process or otherwise"; and

"[s]ignificant delays to the programme as a result of the consenting or approving authorities failing to adhere to the agreed programme ... or any other tie/CEC initiated amendment to the construction programme which forms part of the Infraco contract".

In reality, there were numerous bases on which the price might increase, but they were not stated. The first paragraph, in particular, misrepresented the potential causes of price increases by referring specifically to "[s]ignificant" changes. The way in which SP4 had been drafted meant that it was not just significant changes that would increase the cost.

(i) The report stated [\[ibid\]](#), page 0030] that the risk allowance of £32 million:

"adequately reflects the risks identified and the change in such risks retained by the public sector since approval of the FBC in December 2007".

No allowance had been made for any of the new risks assumed in the negotiations of SP4. It may be pointed out that the statement concerned only the "risks identified" and that the SP4 risks had not been identified. Nonetheless, this statement was clearly intended to convey the impression that the allowance made was adequate, when in fact it was not. Mr McGarrity accepted that the statement was not accurate and that this risk should have been provided for separately [\[PHT00000049\]](#), page 79].

(j) Appendix 1 to the report considered the risk that arose from the fact that the design period and the construction period now overlapped. The report noted that this had not been anticipated when the SDS contract was concluded in 2005. This appeared to be a recognition that matters had in fact changed, but there the various risks that it presented were not spelled out, still less assessed or valued. Within this appendix, risks that the design packages still to be approved would not be provided in time or would not be of sufficient quality were identified [\[CEC01338854\]](#), page 0035]. This was the only section of the report that gave any consideration to the unanticipated risks that were going to arise because it had become impossible to adhere to the agreed procurement strategy as a result of the late delivery of design. These risks were summarised in a few lines [\[ibid\]](#), page 0035, points B, C, D and E]. There was a statement that the option of delaying financial close until autumn 2008 was "unattractive", but no consideration of the value of the risks arising as a result of proceeding on the original timescale. There was instead a statement that measures had been identified as the primary means "by which these risks can be contained, through an effective management process controlled by tie/CEC" [\[ibid\]](#), page 0036].

12.12 It is notable that there is no general explanation of the pricing assumptions in SP4 in this narrative, despite the fact that they clearly fell within the category of "important technical and commercial information" noted by Mr Bissett [\[TR100000025_C\]](#), page 0060, paragraph 164]. Mr Bissett said that the contributors to the report were happy that the pricing assumptions would hold true except where specific provision had been made [\[PHT000000028\]](#), page 201]. If that was correct, it would be very surprising. The change in the design delivery programme had not been the subject of express consideration. In addition, however, it should have been apparent by this time that the MUDFA works would not be complete as assumed and that the design would not remain unchanged as assumed. Mr Fitchie, who reviewed the draft before it was finalised, acknowledged that in considering the draft of this report he had overlooked the need to have mention of the risks represented by SP4 [\[PHT000000017\]](#), pages 195–196].

12.13 Mr Bissett had responsibility for managing the preparation of the Close Report, although not for the technical element of the contents. He noted that successive drafts of the documents including the Close Report were circulated, with changes marked up, to the entire drafting group. He said that the responsibility for accuracy was a "team effort". While formal responsibility for the contents lay with the Board, in terms of practical delivery, accuracy depended on the team doing their individual jobs properly [\[PHT000000028\]](#), pages 160–161]. There is, however, no record of formal

approval by any of the Boards. On one view, it is not surprising that there was no formal Board approval, in that it was a document that was to be used by it to inform its decisions. However, this conflicts with what Mr Bissett thought was the ultimate approval mechanism, and indicates that there was no clear decision process to determine that it was appropriate that the report be released for others to rely on.

- 12.14** In his examination of Mr Fitchie, counsel for DLA sought to have him identify that, notwithstanding the paucity of information about risks, CEC officials would have been aware of this anyway. In this context, Mr Fitchie repeated his view that **tie** management was aware of the risks inherent in Notified Departures. Mr Fitchie also said that CEC officials knew of the risks, even if they did not like them. The officials' state of knowledge may be relevant to the extent to which they complied with their obligations to advise councillors and the Chief Executive of CEC when he was acting on behalf of councillors under delegated powers. It is clear from the evidence of Mr C MacKenzie that, prior to 30 April 2008, he considered the letters from DLA dated 12 and 18 March and 28 April, and that he and Mr N Smith expressed their concerns in an email dated 30 April [CEC01246045]. Mr C MacKenzie explained that his concerns related to design risk and the resultant cost implications for CEC [PHT00000026, pages 111–113]. Before contract close he had also considered the pricing assumptions in SP4 and recognised that paragraphs 2 and 3 excluded "a fair amount from the certainty of the fixed price", and he wished to know whether the quantitative risk analysis ("QRA") made adequate provision for that [TR100000054_C, page 0096]. He also anticipated that there would be an immediate Notified Departure shortly after the contract was signed. It does not appear that he shared his concerns about risks to CEC arising from SP4 with Ms Lindsay, and he accepted that he ought to have done so [PHT00000026, pages 93–97]. As indicated in Chapter 13 (CEC: Events during 2006 and 2007), Mr C MacKenzie and other members of the "B team" wished CEC to obtain independent legal advice about the contract. There seems little doubt that if the Solicitor to CEC had accepted the need for independent legal advice and had sought such advice on the terms of the contract before recommending that it could be signed, the risks inherent in SP4 would probably have been identified and reported to CEC.

Letter from DLA and risk matrices

- 12.15** As with the Close Report, there had been several iterations of a formal advice letter from DLA. The final version was dated 12 May 2008 [CEC01033532]. It was addressed to Ms Lindsay at CEC and Mr Gallagher at **tie**, which confirms that advice was being provided by DLA to CEC. The final version referred to letters of advice of 12 and 18 March 2008, copies of which were appended for ease of reference, and stated that the former was the baseline for the update that it contained. The letter dated 12 March, which was addressed only to Ms Lindsay at the Council [CEC01351479], in turn was described as having been intended as an update on matters that had been addressed in a report of 16 December 2007. In fact, this appears to be a typographical error, as the letter of advice from DLA to Ms Lindsay from around that time is dated 17 December 2007 [CEC01500975]. To obtain a proper impression of the DLA advice, it is necessary to consider all three letters together.
- 12.16** In relation to risk, the letter of 17 December said:

"the contractual allocation of risk and responsibility between **tie** Limited and the competitively selected private sector providers remains broadly aligned with the market norm for UK urban light rail projects, taking into account: the distinct

characteristics of the Edinburgh Tram Network, its technical and commercial state of readiness at ITN issue in October 2006 coupled with the development of scheme engineering and data design since that date" [ibid](#), pages 0002–0003].

- 12.17** It noted that further refinement of the Contract Suite was required, but that it was not expected either materially to alter the risk allocation or to adjust core contractual rights and responsibilities. The letter of 12 March 2008 [[CEC01351479](#)] repeated the statement as to conformity of the risk allocation with the market norm. However, it went on to note that the fact that work was still required on the Employer's Requirements meant that:
- "technical ambiguity (and therefore delay/cost risk) may exist in the interplay between design, scope and method of execution".
- 12.18** It expressed the view that contractual mitigation of this risk was available, and did not offer any view on the scope or value of the risk. By this date, the pricing assumptions – in particular, Pricing Assumption 1 ("PA1") – were quite well developed and it should have been clear that risk was being retained by **tie**. I consider that the matter went far beyond "technical ambiguity", and I do not think that the letter properly reflected the position faced by **tie** and CEC.
- 12.19** The letter of 12 May [[CEC01033532](#), page 0002, paragraph 1.1] said:
- "No issues have arisen since we last reported which have resulted in any adverse alteration (of consequence) to risk balance."
- 12.20** Although that letter said that the letter of 12 March [[CEC01347797](#)] was the baseline from which **tie** had been able to issue its notification of intent to award the Edinburgh Tram Network ("ETN") contracts, the last report provided was actually that of 18 March [[CEC01347796](#)]. However, it did not say anything about this element of risk. For completeness, I add that the letter of 18 March opened by stating that its purpose was to update Ms Lindsay on "our report yesterday" [[ibid](#)]. In fact, there was no report of 17 March. The heading of the letter dated 18 March referred to the contract suite as at 13 March. It appears that the 18 March letter was drafted then and that the reference to "yesterday" was intended to denote 12 March. The need to correct this was not noted before the letter was sent days later.
- 12.21** The letter of 12 May [[CEC01033532](#), page 0003, paragraph 5] also had a further separate section on risk, which stated:
- "Following on from our letter of 12 March, we would observe that delay caused by SDS design production and CEC consenting process has resulted in BBS requiring contractual protection and a set of assumptions surrounding programme and pricing.
- "**tie** are prepared for the BBS request for an immediate contractual variation to accommodate a new construction programme needed as a consequence of the SDS Consents Programme which will eventuate, as well as for the management of contractual Notified Departures when (and if) any of the programme related pricing assumptions fall."
- 12.22** This wording at least acknowledged the assumptions and the scope that they have for giving rise to claims, but it is nonetheless misleading as to the scale of the risk. In conjunction with what had been said about risk in the earlier letters, by saying that **tie** was prepared for the immediate contract variation, the impression was given that this could be resisted and that it did not present a significant risk. Although there was

reference to the possibility of other Notified Departures, it was limited to "programme related pricing assumptions", which gives no warning of the issues that might arise out of PA1 when the design was developed or as a result of delay in MUDFA.

- 12.23** When taken with the earlier reports that are referred to, the earlier statement in the letter that there had been no alteration to risk balance gave the impression that there had been no adverse movement in the risk allocation since December 2007. At that time, drafting of SP4 had not even begun. In view of everything that had happened in relation to SP4 since negotiations commenced in January 2008, the statement made was clearly false. It seems to me that this is not a matter of opinion or judgement: there is simply no basis on which it could sensibly be maintained that what was said in the letter could be correct.
- 12.24** As noted above, Mr Fitchie was adamant that he was fully aware of the risk presented by PA1, in terms of both the likelihood that claims would be made and the possible scale of the claims. If that is so, his failure to make reference to them here was inexplicable, irrespective of whether he should have noted that they were not referred to in the Close Report. This was precisely the context in which it would be expected that a clear and unambiguous warning would be given. By saying nothing, any person who was aware of the warning in his email of 31 March 2008 (mentioned in paragraph 11.71) would reasonably consider that the issue was no longer live. Far from giving proper notice of the risk that was present, the DLA letter gave a false impression that all was well. In addition to the effect that this would have had on the Council, it might have had a bearing on the employees of **tie** in giving rise to, or confirming, their views that risks had been transferred.
- 12.25** In questioning by counsel for DLA, Mr Fitchie's attention was also drawn to the DLA advice letter of 17 December 2007 [CEC01500975]. He was referred to passages on the final page, where there were references to safeguards in the penultimate paragraph, commencing with the words "These agreements" [PHT00000018, pages 110–111]. His evidence was that what he had written was correct when he wrote it. His attention was not drawn, however, to the context of the passage put to him. This paragraph appeared in the last section of the letter [CEC01500975], entitled "ETN Third Party Agreements". It was concerned with agreements with third parties reached at the parliamentary stage or later and recognised that the project programme and budget would be "to some degree vulnerable to any of these stakeholders seeking redress within the limits of their commitments/rights" [ibid, page 0004, paragraph 3]. It was therefore wholly irrelevant to the issue of disclosure of risks in the Infraco contract. In a similar vein, Mr Fitchie was referred to his letter of 12 March 2008 [CEC01312366] and the passage in it about the risk arising from the fact that the design was not aligned with the Infraco proposals and the Employer's Requirements [PHT00000018, page 112]. This was a problem that had emerged only in 2008 and required some time and expense to correct. It was, however, an issue of programme and a different matter from PA1 and the general need for design development. In his evidence, Mr Fitchie sought to suggest that this paragraph in the letter of 12 March concerned "the entire resistance to risk on design which was coming from BBS and had been coming from BBS consistently since BAFO [Best and Final Offer]" and "I was referring there to the fact that the SDS design would – I say could have an impact on project programme" [ibid]. This is patently not what the letter said and is an example of Mr Fitchie attempting to reconstruct matters to say things that they did not. These points made in questioning of Mr Fitchie were not repeated in the submissions for DLA. That is not surprising.

12.26 The risk allocation matrix consisted of a table in which the first column identified a risk and gave the clause or schedule number [[CEC01347795](#); [PHT00000018](#), page 34]. For each obligation, one of three boxes in the column to the right was ticked. The choice of box was to indicate whether the risk was allocated to the public sector, was allocated to the private sector or was shared. The description of the "risks" in the left-hand column is of some importance. Rather than consider risks that might be envisioned – for instance, contractors' insolvency, increase in price of raw materials, industrial action, fire, sabotage etc – and indicate which party was to bear the financial consequences, in essence it paraphrased the wording of provisions of the contract and then identified the party on which the obligation was placed. So, on the first page of the matrix, there was an entry:

"[6.8] Failure to procure the attendance of any of the Infraco Parties as required by **tie** at the quarterly meetings described in 6.5 above; failure to invite **tie** to Tram Supply and/or Tram Maintainer meetings." [[CEC01347795](#), page 0001.]

12.27 Clause 6.8 of the contract [[CEC00036952](#), Part 1, page 0017] was in the following terms:

"6.8 As required by **tie**, the Infraco shall procure the attendance of any of the Infraco Parties at the meetings described in Clause 6.5. The Infraco shall provide **tie** with reasonable notice of any regular progress meetings regarding performance of the Tram Supply Agreement and the Tram Maintenance Agreement and **tie** shall be entitled to attend such meetings where **tie** or **tie's** Representative have a right to attend such meetings (the Infraco using reasonable endeavours to secure such attendance) pursuant to the Tram Supply Agreement and the Tram Maintenance Agreement and, if **tie** reasonably requires to attend any other meeting, the Infraco shall use reasonable endeavours to facilitate such attendance."

12.28 It can be seen that the risk allocation matrix merely echoed the terms of the contract and was not in fact identifying a risk. This can be demonstrated further by consideration of a risk identified in relation to the novation agreement. On page 0007 [[CEC01347795](#)], under the heading "Novation and Other Key Interfaces", the first entry was "[11.1] [f]ailure of the Infraco to execute the novation agreement".

12.29 Clause 11.1 of the contract made execution of the System Design Services ("SDS") Novation Agreement a condition precedent. BBS was obliged to enter into the agreement and **tie** was required to execute it and procure that Parsons Brinckerhoff ("PB") executed it. Overall, it seems to me that the exercise of producing this matrix was mechanistic and purely formal. As Mr Fitchie said in his evidence, risk matrices such as these are a standard project tool ([TR100000102_C](#), page 0351, paragraph 11.118). Nonetheless, the way in which it had been completed might give rise to the danger that a person, knowing there is a risk matrix, might think that there has been an analysis and assessment of risk, when in fact there has not.

12.30 SP4 was not mentioned expressly in the risk allocation matrix. There was very limited discussion of pricing assumptions and Notified Departures. On page 0022 [[CEC01347795](#)], under the heading "Risk: Relief Events (time) and Compensation Events (time and/or costs)", the first and fifth entries were:

"[Definition of Compensation Event] Pricing Assumption does not hold good."

"[Definition of Compensation Event] Execution of Utilities Works or MUDFA works."

- 12.31** These risks were allocated to the public sector. The entry above was the only one to mention pricing assumptions. It did not give any indication of the scale and scope of those assumptions. Without information about that, no real indication was given of the nature or magnitude of risk that had been allocated to the public sector (in practice, CEC). The reader was given no notice that any change of shape, form and/or specification to the Base Date Design Information or the fact that a failure to complete MUDFA works prior to the commencement of Infraco might be at CEC's risk. It was also misleading to refer to this in the context of a compensation event. SP4 stated that a non-compliance with the pricing assumptions was a Notified Departure and Mandatory **tie** Change rather than a compensation event. The provisions of the Infraco contract concerning **tie** changes were different from those concerning compensation events. It does not appear, however, that this particular mischaracterisation had any practical consequence. On page 0026 [CEC01347795], there was an entry as follows: "[80] tie changes, Mandatory tie Changes and Notified Departures". It indicated that this risk fell on the public sector but, again, no indication was given as to the content of these risks. In both this entry and the one quoted above, the entry in the matrix said much less about the underlying contract clause than most of the other entries.
- 12.32** There was a note on page 2 of the report that since its terms had been finalised a further round of negotiations had taken place and that the detail behind them was contained in the report entitled 'Close Considerations and event history'. I consider that report in paragraph 12.46 below. The first page in the report [CEC01338851] stated:
- "Appropriate quality control procedures have been applied to finalisation of the Infraco contract suite."
- 12.33** In fact, as noted above in relation to SP4, it is apparent that the QA/QC process was not carried out. The report also stated:
- "In broad terms, the principal pillars of the ETN contract suite in terms of scope and risk transfer have not changed materially since the approval of the Final Business Case in October 2007. The process of negotiation and quality control has operated effectively to ensure the final contract terms are robust and that where risk allocation has altered this has been adequately reflected in suitable commercial compromises." [ibid, page 0001.]
- 12.34** Even allowing for the qualification that the statement was made "in broad terms", this was materially inaccurate. The procurement strategy described in the FBC had envisaged a transfer of risk to the private sector [CEC01395434, Part 1, pages 0018–0019, paragraphs 1.77 and 1.82] although it recognised that the risk arising from delayed completion of MUDFA works, from changes to the scope or specification and obtaining consents or approvals would remain with **tie**. The effect of SP4 had been to make a significant transfer of risk to **tie**/CEC. This was a material change to one of the "principal pillars" and there was no "commercial compromise" to counterbalance that. Mr Gallagher claimed that the additional payment was justified by BBS having taken on the design development risk [PHT00000037, page 120]. That does not accord with what was said in the report. Reading the words quoted above as a whole, they considered where the risk had moved in a way *adverse* to **tie**, and it was claimed that in this situation there had been commercial compromises. It is clear that in some respects the risk balance had moved against **tie**, but there had been no counterbalancing commercial compromise.

12.35 In relation to the contract price, this report stated:

"A contract price has been agreed. The detailed contract price and pricing schedules for carrying out the Infraco Works is contained in Schedules to the Infraco Contract. A substantial portion of the Contract Price is agreed on a lump sum fixed price basis. There are certain work elements that cannot be definitively concluded in price and therefore Provisional Sums are included. A number of core pricing and programming assumptions have been agreed as the basis for the Contract Price. If these do not hold, Infraco is entitled to a price and programme variation known as 'Notified Departure.'" [CEC01338851, page 0004.]

12.36 In relation to legal provisions in construction contracts, a "fixed price" is one that can be stated at the time of the contract, as opposed to a re-measurement contract in which the quantity of work to be done is not known at the time that it is made, or provisional sums as described above. Even in a "fixed-price" contract as so understood, the price may change if difficulties are encountered or there is a change in the works. The difficulty is that the reference to "fixed price" in this context is more likely to be read in an ordinary, everyday sense. When viewed in that way, the passage above gives a false impression as to the degree to which the project price was fixed. Although, as with the documents above, there was reference to the possibility of a Notified Departure, there was no indication of the risk presented by this, in terms of probability or potential size of claim. Reading this part of the report gives no impression whatsoever of the scale of the liabilities that were inherent in the contract. The danger that the terms used might not be understood in the technical sense was identified in an email sent by Mr Bissett on 12 October 2007 [CEC01624078] to Mr Gallagher, Mr Crosse, Mr Gilbert and Mr McLauchlan. In it, he said that it would be useful to have some clarity as to "the extent to which 'fixed price' means 'fixed price.'" He noted that a lay audience might assume that this meant fixed with no risk. He said:

"We know the circumstances in which this might not be true and we should have a statement ready which explains fairly what the position is without involving a detailed risk analysis."

12.37 In a follow-up email dated the same day [ibid], Mr Bissett attached a spreadsheet giving what he described as a "layman's commercial view of the risk analysis and relationship to the risk allowance" [CEC01624079]. This noted that 51 per cent of the project cost was "[l]imited or no risk", 37 per cent was "[s]ome risk but at the margin" and 12 per cent was "[i]nherently risky but subject to control". This gave a very different picture as to risk from the statements in the report. What was said in the emails as to the understanding of a layman was an important point and one that should have been picked up and acted on. Although the Inquiry has found no record of express consideration of the point, it is apparent that this was not done. While this could be a matter of oversight, it is relevant to note that at the joint meeting of the TPB and the **tie** Board on 13 March 2008 a decision was taken to "stress the achievements of the proposed deal in all communications" and that this included "the fact of fixed pricing" [CEC00114831, Part 1, page 0007, item 11.3]. This suggests that there was a calculated desire to present the price as "fixed". I consider that Mr Bissett's view was correct and that the terms should have been revised.

Report on Procurement Process and Risk of Challenge

12.38 As its name suggests, this report [[CEC01338850](#)] largely dealt with the issue of whether there was a chance that a decision to award the contract to BBS in May 2008 might be challenged under the public procurement rules. However, it did make a number of comments in relation to the contracts. These comments would have been bound to have affected the understanding of anyone reading the reports as a whole and it is therefore necessary to consider the contents of the report.

12.39 It stated in relation to the overall outcome that the current position was summarised for the TPB on 12 March 2008. The date of 12 March is that stated on page 2 of the report, but in fact the meeting was on 13 March [see Minutes, [CEC00114831](#), Part 1] It also stated that the Board had concluded that:

“the outcome of the contractual negotiations was in line in all material respects with the Business Case which supported the selection of the Preferred Bidders in October 2007” [[CEC01338850](#), page 0002].

12.40 As I have considered above, that was the meeting of the Joint Tram Project Board (“TPB”) /**tie** Board which approved the issue of the notification of award. The suggestion that the TPB reached the above conclusion is not supported by the minutes of that meeting [[CEC00114831](#), Part 1, pages 0005–0009]. Item 11.1 of the minutes records that Mr Bissett summarised the position in relation to the forecasts in the FBC and a reference to a summary being given below. It is not clear, however, what entry in the Minutes this is referring to for the summary. The most likely is item 11.5, which states:

“WG provided a summary to the boards to approve for the project to proceed on the basis of:

- total project budget at £508m;
- programme to commence revenue operations Jul 2011;
- that the SDS novation and Network Rail APA [Asset Protection Agreement] are non-negotiable requirements for proceeding
- scope and risk profiles as previously presented; and
- all other matters as presented at the TPB 23rd Jan;

with delegation of authority to DJM/WG/NR.” [[ibid](#), Part 1, page 0007.]

12.41 Item 14.1 states:

“WG requested the boards to formally notice the following;

- recognition that the achieved position is a result of extensive efforts
- documents are moving into acceptable form
- changes to programme and budget are within acceptable tolerances and compare sufficiently closely to the FBC
- no major changes are anticipated, but a rigorous quality control process will be implemented.” [[ibid](#), Part 1, page 0008.]

- 12.42** It is apparent from this that the Board was presented with a conclusion that there was compliance with the FBC rather than carrying out any consideration of the issue itself. The statement in the report that the position had been approved by the TPB was likely to give rise to a view that it had been properly evaluated by the Board rather than that this was a statement made to it. The report recognised that there had been further amendments to the contractual terms since March, but considered the effect of these only from the standpoint of procurement challenge.
- 12.43** In relation to risk, the report stated:
- "It would be normal to expect that the risk profile will change as contracts are concluded, but only to a marginal degree. This is the case for the Infraco/Tramco contracts and risk profile. One specific area requires more detailed assessment – the risks arising from the overlap of design and construction." [CEC01338850, page 0003.]
- 12.44** The statement that the risk has changed only to a marginal degree is misleading when viewed against the background of the transfer of risk envisaged in the FBC. It might be said that the effect of the Wiesbaden Agreement was to transfer risk to some extent. However, this report made statements about the agreement to the contrary effect. The Appendix to the report noted that it had been difficult for BBS to firm up the provisional elements of its bid. This was attributed to the SDS design taking longer to be completed than had been anticipated, the emerging design departing to a greater extent than anticipated from the preliminary design and BBS not being sufficiently resourced to turn emerging designs into quantities and prices. The report noted that BBS had eventually agreed to fix its price with qualifications, which led to negotiations in Wiesbaden. When referring to the "Wiesbaden Fixed Price" and the increase in price as a result of those discussions, the table at the end of the Appendix noted:
- "Increase relates to design completion risk and would have also been priced by Tramlines. The amount would have been based on negotiation tactics and judgment." *ibid.*, page 0008.]
- 12.45** When read with the other statements in the report, this gives the clear impression that the "design completion risk" in the final form of the contract had been passed to BBS. This was not correct.

Financial Close Process and Record of Recent Events

- 12.46** The title above is that which appears on the document [CEC01338847]. However, when attached to emails, the Word file was called "Close Considerations and Event History" and it therefore appears to be the document referred to in the Report on Infraco Contract Suite.
- 12.47** This document was intended primarily to consider the events in the final few weeks before close, when BBS demanded a further increase in price. It referred back to the contents of the Council report for the meeting of 1 May [CEC00906940], which had been prepared prior to the last-minute demands for further money. This Council report indicated that work had been undertaken to minimise the Council's exposure to financial risk, with significant elements of risk being transferred to the private sector. It reported that 95 per cent of the combined Infraco and Tramco costs were "fixed", with the remainder being provisional sums. The contrast between "fixed" costs and "provisional sums" suggested that these terms were being used in their technical sense. Understood in that way, the "fixed" costs might change, for many

reasons defined by the contract. However, this was not explained and, without some additional information being given, I very much doubt that this was the sense in which they were understood by the intended recipients of the report. If the two terms are understood in their ordinary sense, a clear impression is given that the "fixed" costs would not change. Indeed, it is clear from the evidence of the councillors that they understood the reference to "fixed" costs to mean that they would not increase beyond the sum specified other than in "extreme circumstances" [Councillor Dawe [PHT00000001](#), page 96]. Councillor Aitken, for instance, considered that the prices were fixed and that the element that might change to make up the overall costs was the provisional part [[PHT00000002](#), page 155]. With this understanding, the councillors said that it was important to them that it was fixed cost. Returning to the report, in relation to the change between the report for the Council meeting and the position as at 12 May, it stated:

"As was noted in the recent Council Report, underlying costs have been subject to the firming up of provisional prices to fixed sums, currency fluctuations and the crystallisation of the risk transfer to the private sector as described in the project's Final Business Case. The finalisation of the contracts required further amendment for similar reasons and supply chain pressure on the bidding consortium has been accommodated in the marginal increase over the most-recently reported cost estimate. Offsetting the increased cost is a range of negotiated improvements in favour of tie and the Council, in the areas of programme delay mitigation, cost exposure capping and more advantageous contractual positions." [[CECo1338847](#), page 0001.]

- 12.48** As noted above, it is not apparent that there were a "range of negotiated improvements" or "more advantageous contractual provisions" referred to in this report.

Report on Infraco Contract Suite: Conclusions on materials available

- 12.49** Taking the above-mentioned documents together, I consider that they presented a materially misleading picture. Adopting the purpose of the Close Report outlined by Mr Bissett in his email of 15 January, in no way could the Close Report be said to have provided a comprehensive view of all aspects of work done to support financial close or to explain material changes from the position as at 20 December 2007 [[TIE00020436](#); paragraph 12.8 above]. I agree with the statement by Ms Andrew that:

"While providing useful background, these documents did not allow CEC to fully understand the contractual position and the risks to which the Council was exposed." [[TR100000023_C](#), page 0061, paragraph 65(2).]

- 12.50** The clear impression was given that risk had been transferred in the way intended in the FBC and that the price for the Infraco works was fixed. The references to the change of programme were played down so as to suggest that it could be controlled, and the absence of mention of anything else, when taken with the statements as to fixed price, gave the impression that there was little risk to the public purse.
- 12.51** Further, the assumption as to completion of MUDFA works would, by itself, have merited mention. In his statement, Mr McGarrity said that the fact that MUDFA works were not complete at commencement of the Infraco works was reported in the Close Report [[TR100000059_C](#), page 0155, paragraph 109]. Although there is a statement of the fact that the MUDFA works were not completed, they were described only as an

"early start constraint for INFRACO" [CEC01338853, page 0006] and it was said that regular reviews of MUDFA progress would be carried out "to ensure no conflict with Infracore works" [ibid, page 0030]. What was lacking was any statement that this was in conflict with a pricing assumption that, in turn, would give rise to a Notified Departure and the ability of BBS to make claims. The approach of Mr McGarrity to what was sufficient to disclose the position might be indicative of the mindset that lay at the root of the problem.

- 12.52** The DLA letter dated 12 May 2008 also failed to make clear the position in relation to risk allocation and, in particular, the change that had taken place between December 2007 and May 2008 [CEC01033532]. The references in the various letters to earlier versions mean that the letters have to be read together. Doing so gives a clear representation that the position had not worsened since December 2007, when in fact the opposite was true. Although there is reference to the pricing assumptions and to the possibility of Notified Departures, in no way could it be considered to convey the breadth of the risk that was being assumed or the consequences that were possible or even likely. The risk matrix did not add to this.
- 12.53** The issue then arises as to whether the various contributors to the documents were aware of the situation. As I have set out above, Mr Fitchie was clear that he did know of the dangers. This carries with it a conclusion that he must have been aware that the DLA letter and the other elements of the Close Suite that he examined did not accurately portray the position. He had accepted that DLA had a duty of care to CEC and was aware that CEC intended to rely on these documents in making a decision to enter into the contracts. Despite this, he did nothing to correct the DLA letter or express any concern in relation to the remainder of the Close Suite.
- 12.54** Mr Fitchie said that he had told the **tie** officials of his concerns, but they have consistently denied this. I have considered this in Chapter 11 (Contract Negotiations). There is some awareness in the responses of Mr Gilbert within **tie** to the emails from Mr Laing dated 26 and 31 March 2008 [CEC01548431; CEC01466394] that there was a risk in relation to the design delivery programme, but it is not clear that there was an understanding of the much broader risk that was being undertaken [CEC01465933]. I consider that, with the possible exception of Mr McEwan, the project team within **tie** was not aware of the risk inherent in SP4/PA1. However, it should have been aware of the risk that was presented by delays in the programme resulting from design slippage and delays that were becoming apparent in the MUDFA programme. The Project Director's report to the TPB meeting of 9 April 2008 noted that while the plan was that 12,112 metres of utilities should have been moved, by that time only 10,081 metres had been, and further that of 104 chambers planned to have been moved, work had been done on only 54. This was said to represent a delay of six weeks, although recovery plans were being finalised [CEC00114831, Part 1, pages 0012–0013.] In the papers for the meeting on 7 May, there was no table on MUDFA progress. However, it was noted that progress had reduced from the previous period, although revised recovery plans were under way [CEC00079902, page 0012]. Similarly, in the presentation provided to that meeting it was noted that there had been further slippage in the progress of the MUDFA works, but the critical path delay remained at two weeks [CEC01282186, page 0015]. The lack of success with earlier recovery plans should have cast doubt on the suggestion that the delays could be mitigated. On any view, I consider that before **tie** made statements to CEC concerning risk transfer that it knew would be relied upon to decide whether to proceed with the contracts, it was incumbent upon the persons who collectively authorised the making of that statement to have verified the position. This would

have entailed having sought advice before making statements that the risk had been transferred. To make statements on a matter that **tie** must have known was of considerable importance to CEC, without having checked whether they were true, was reckless. It had not taken adequate steps to put itself in a position of being properly advised or informed to be in a position to make these statements. It simply did not know whether or not what was said was true. Although Mr Bissett had the responsibility for managing the preparation of the Close Report, the contents of it were prepared by members of the management team, and I consider that any shortcomings, including inaccurate or reckless statements, were the collective responsibility of everyone involved in that process. The fact that he was aware of the risk that CEC was taking means that the position of Mr Fitchie is different. His own evidence is to the effect that he had knowledge that was inconsistent with what I consider is the only sensible way in which to read the Close Suite. He therefore had actual knowledge that the documents would misrepresent the position to any persons or bodies to whom they were provided.

- 12.55** In addition to these documents being used to inform the decisions of the TPB, they were relied upon by CEC and the Approvals Committee. In that context, the point has been made in submissions to the Inquiry that these documents were not the only information available to CEC and that it therefore should not be viewed in isolation. It has been maintained that there was awareness within the CEC Solicitor's Department of the shortcomings of the contract. On the evidence, I am satisfied that, on 15 April 2008, Ms Lindsay, Mr C MacKenzie and Mr N Smith were sent an email with SP4 attached to it [[PHT00000026](#), page 89; [CEC01245223](#)]. Mr C MacKenzie, at least, read it and understood its significance (see paragraphs 14.77, 14.81 and 14.84). He was concerned to know whether the figures in the accompanying QRA were sufficient for all foreseeable risks, and he asked Mr Coyle about that [[PHT00000026](#), pages 89–92; [TR100000054_C](#), page 0077, paragraph 165]. He accepted Mr Coyle's response and did not report his concerns to Ms Lindsay. It is clear that CEC was not advised about SP4 by anyone within the Council Solicitor's office. Obviously, the members of the Approvals Committee also ought to have been aware of the background circumstances and that the Close Suite might not contain the full story.
- 12.56** Whatever level of understanding there might have been in any of these bodies cannot justify or excuse the errors in the Close Suite. These were formal documents that were expressly intended to draw together information in relation to the contract and to form the basis for the decision whether it was appropriate to enter into the contracts. They were not intended to make the case for trams or to encourage a decision one way or the other. Their purpose and the context in which they were to be considered required that they were objective and gave an account that was complete and factually accurate. It should not be necessary to look behind them to different channels of communication to uncover risks and possible problems. As a sequence of decisions to be taken, it was also important that when the decisions earlier in the process were viewed it was apparent what they had taken into account. This mattered not only for having a proper record of the basis for earlier decisions in a contract involving a large amount of public money but also because later decisions by others needed to refer to, and understand the reasons for, the earlier decisions. I now turn to consider these remaining parts of the process and these further decisions.

Letters from Mr Gallagher and Mr Mackay to Mr Aitchison

- 12.57** These letters [[CEC01284042](#); [CEC00079774](#), page 0007] were sent in compliance with the decision of the **tie** management team as recorded in the minute of the meeting on 13 May 2008 [[CEC01319006](#)]. They refer to the Close Report and the

DLA advice letters, to provide a summary of the final terms of the contract. The letter from Mr Gallagher on behalf of **tie** states, in relation to the Contract Suite, that certain matters have been concluded that are "marginally different" from the terms set out in the FBC, including a revision in cost from £498 million to £512 million, for phase 1a. As I have noted above, in fact the risk allocation was materially different from that in the FBC, and this was true even without knowledge of the liability present in PA1.

CEC Policy and Strategy Committee meeting

- 12.58** In order to provide context for this meeting and a proper understanding of the information available to CEC and the decision taken, it is necessary to have regard also to the decision made at the meeting of CEC on 1 May 2008 and the material that was available to it for that decision.
- 12.59** The approval for the Chief Executive to instruct **tie** to enter into the contracts was initially sought at the meeting of 1 May 2008 but following upon the last-minute demand for more money by BBS, it was considered appropriate that there be a further decision of CEC.
- 12.60** The reason for consideration of the Tram project by the meeting of the full Council on 1 May 2008 was to note the changes from the FBC approved in December 2007 and to refresh the delegated power given to the Chief Executive to authorise **tie** to enter into the contracts. The report for the meeting was signed by Mr Aitchison [CEC00906940]. It contained the following elements:

(a) It recorded that a substantial amount of work had been done to minimise CEC's exposure to financial risk, that significant elements of risk had been transferred to the private sector and that, as a result, 95 per cent of the Tramco and Infraco costs were "fixed", with the remainder being provisional sums **libid**, page 0001, paragraph 2.3]. This was a repetition of what has been said in the document Financial Close Process and Record of Recent Events provided by **tie** and considered above [paragraph 12.46 et seq]. Later in the report, the reference was to 95 per cent of the costs being "firm" **libid**, page 0002, paragraph 3.4]. The transfer of risk to the private sector was said to be one of the reasons that the price had increased **libid**, page 0002, paragraph 3.5]. The conclusions included the following statement:

"A significant level of risk has been assumed by the private sector considerably reducing the Council's exposure to future uncertainty." **libid**, page 0003, paragraph 5.1.]

(b) It noted that:

"As a result of the overlapping period of design and construction a new risk area has emerged which has been the subject of extensive and difficult negotiation. **tie Ltd** advise that the outcome is the best deal that is currently available to themselves and the Council. Both **tie Ltd** and the Council have worked and will continue to work diligently to examine and reduce this risk in practical terms" **libid**, page 0003, paragraph 3.10].

And:

"A written statement from **tie Ltd** has been provided stating that they are satisfied that £32m is an adequate level of risk allowance" **libid**, page 0003, paragraph 3.11].

The minute of the meeting records that the councillors acted in accordance with all the recommendations in the report but that they also noted that the increase

in cost might impact on the proposal to deliver line 1b and instructed the Director of Finance to investigate and report to councillors on the likely financial impacts of the construction period on businesses on Leith Walk and Constitution Street [[CECo2083356](#), Parts 1–2].

- 12.61** The report to the Council did not accurately reflect the underlying position. Stating that risk had been transferred and that this had resulted in costs being 95 per cent fixed misrepresented the nature of the proposed contract. There was always a possibility that the costs under a construction contract such as the Infraco contract could increase. Further, the terms of SP4 meant that it was likely that they would increase and that such an increase would be substantial. It is not entirely clear where the reference to 95 per cent came from, but it is notable that it was the figure provided by Mr McGarrity to the TPB meeting on 13 March 2008 [[CECo0114831](#), Parts 1–2]. Mr Aitchison said that his understanding of the position was based on the above-noted letter from **tie** and on comments from the Directors of City Development, Finance and Corporate Services and the Council Solicitor [[TRl0000022_C](#), pages 0045–0046, paragraphs 120, 123–124]. The terms of the report to the Council [[CECo0906940](#)] indicate that it is likely that it was also informed by the Close Suite of documents. Although the final versions were completed later, earlier versions had been sent to CEC officials [see, eg, [CECo1393819](#) on 10 March 2008; [CECo1312358](#) on 28 April 2008].
- 12.62** As noted above, the increase in cost caused by the last-minute demand for additional money meant that it was considered appropriate that it was councillors rather than CEC officials who approved the change [Mr Aitchison [TRl0000022_C](#), pages 0047–0048, paragraph 130]. There was a desire to have matters approved as soon as possible. Mr Aitchison took the decision to report the matter to the Policy and Strategy Committee. He explained that it was composed of senior elected members of all parties, including the leader of the Council, the leader of the opposition and the leaders of the political groups and that if the Committee was concerned about the proposal, it would be open to it to continue it to another meeting of the Committee to allow more time for its consideration of the matter or to refer the decision to a meeting of the full Council.
- 12.63** The report to the Policy and Strategy Committee on 13 May 2008 [[USB00000357](#)] was prepared by Ms Andrew and signed by Mr Aitchison on the day of the meeting. The minutes of the meeting [[CECo1891564](#)] record that notice that the project was to be considered by the Committee had been given to members only at the start of the meeting. This gave the members no notice of what they would have to decide. The report noted that a final decision was required “with immediate effect to allow an immediate financial close” [[USB00000357](#), page 0001, paragraph 2.5]. An email circulated on 9 May 2008 by Mr Gallagher had noted that the contract was to be signed at 2pm on Tuesday 13 May 2008 [[CECo1231125](#)]. Mr Aitchison said that had approval not been given at the meeting, the signing of the contracts would not have gone ahead [[TRl0000022_C](#), pages 0048–0049, paragraph 131]. While that is no doubt true, the extreme urgency recorded in the report would have created the impression that this was not an opportunity for any detailed scrutiny of the recommended course of action. The lack of time available for councillors to scrutinise this item on their agenda is highlighted by the fact that eight other items of business were considered at the same meeting. I appreciate that members of the committee could have deferred consideration of this issue or referred it to a meeting of the full Council. While subsequent events have shown that that would have been the more advisable course of action, that option should be seen in light

of the prevailing circumstances at that time. This was the most significant capital project in Edinburgh. Progress had been delayed for a variety of reasons and there was a significant amount of public and political disquiet about the cost and the disruption already caused, which would increase if the project were delayed. When councillors had authorised the Chief Executive to authorise **tie** to sign the contract under delegated powers granted on 1 May there had been a further delay due to the last-minute demands from BBS. In these circumstances councillors might have considered that the Chief Executive must have been satisfied that CEC's interests were protected by the terms of the contract that the Chief Executive had intended to authorise **tie** to sign. As is clear from the Chief Executive's recommendations in his report, the only issues for their determination were to approve the increased costs, to authorise the Chief Executive to instruct **tie** to enter into contracts reflecting those changes, to refresh the delegated powers to the Chief Executive and to note the consequential amendment to the FBC. When considered in that light, councillors had to be satisfied about the nature and extent of the increased costs, as well as the reasons for them, together with the nature and extent of any benefit accruing to CEC following the increased costs. The basis upon which they could be so satisfied was the report by the Chief Executive, dated that day and tabled at the commencement of the meeting, supplemented by questions addressed to the Chief Executive and other senior officials, including the Director of City Development and the Director of Finance. It is axiomatic that the report had to be accurate and that the Chief Executive was sufficiently familiar with the issues in it to answer such questions.

12.64 The report explained the increase in price in the following terms:

"Capital Cost and Quantified Risk Allowance

"2.8 The estimated capital cost of phase 1a, as reported to the Council on 1 May 2008, was £508 million, consisting of base costs of £476m and a Quantified Risk Allowance (QRA) of £32m.

"2.9 Following the introduction by Bilfinger Berger Siemens (BBS) of additional cost pressures late in the due diligence process, **tie** Ltd held negotiations with BBS to substantiate its requests for contract price increases and to seek to limit the increase. To help reduce the risk of programme delays, the price increase agreed will be paid as a series of incentivisation bonuses over the life of the contract, on achievement of specified milestones. This approach should minimise the risk to businesses and residents of Edinburgh of delays to the agreed programme of works. These changes increase costs by £4m to £512m, but have corresponding advantages by further transferring risks to the private sector. In addition, part of the package negotiated entitles BBS to an additional payment of £3.2m, should the Council decide not to construct phase 1b of the tram network.

"2.10 The combined effect of these changes, therefore, is to increase the estimated project cost of phase 1a to £512m, with a further contingent payment of £3.2m due, if phase 1b is not built.

"Benefits of the final deal

"2.11 In return for the financial amendments, **tie** Ltd has secured a range of improvements to the contract terms and risk profile. Currently, these areas are regarded as highly confidential but, subsequent to contractual close, a more detailed report will be submitted to the Tram Sub-Committee." [[USB00000357](#), page 0002.]

- 12.65** Apart from the above paragraphs, paragraph 2.7 [\[ibid\]](#) repeated the assertion contained in the Financial Close Process and Record of Recent Events [\[CECo1338847\]](#) that the increase in costs had been offset by a range of negotiated improvements favouring **tie** and the Council to reduce the risk of programme delays. As will be noted in paragraph 14.155, this assertion was untrue because the incentive instalment payments were payable whenever a section of the route was completed, irrespective of the time taken for completion. The reference in paragraph 2.9 of the report to incentive payments totalling £4 million is an error because it is clear from the Financial Close Process and Record of Recent Events mentioned above that the correct figure was £4.8 million [\[CECo1340805, page 0004\]](#). The significance of this error in the Chief Executive's report to the Policy and Strategy Committee is that it is an indication of a lack of scrutiny by him of the draft report submitted to him for approval and signature. Although Mr Aitchison stated that the draft report had been prepared by officials within the Departments of City Development, Finance and Legal Services [Mr Aitchison [TR10000022_C](#), page 0051, paragraph 148], the report does not include any official within Legal Services as a contact. I have concluded that only officials from the departments of City Development and Finance were involved in the drafting of the report and that Mr Aitchison was mistaken when he included officials from Legal Services in that exercise. As noted above, the Council Solicitor and the director of each of the two departments of City Development and Finance were present at the meeting. Each of them was aware that the figure of £4 million was incorrect because, at 07.49 that day, an email was sent on behalf of Ms Lindsay to these two directors [\[CECo1222437\]](#). It attached a draft report for the three of them to sign to provide comfort to the Chief Executive as he authorised **tie** to close the deal following the committee meeting later that day. It requested intimation of any proposed changes. The draft document referred to "additional incentivisation payments of approximately £4.8m" [\[CECo1222438\]](#). As the report from the three senior officials had been requested by the Chief Executive, it is difficult to imagine that he did not approve of its contents, although the Inquiry has not found direct evidence that he received it before the committee meeting. This is addressed below. On any view, three senior officials who attended the meeting were aware that the correct figure was £4.8 million. Their failure to correct the report to committee is an indication of the lack of scrutiny that they exercised in respect of the report.
- 12.66** It is apparent from the paragraphs quoted above that the report does not describe the whole of the deal done, concessions made and revisions to risk allowance. It may be that it was considered that those matters were covered by the reference to "improvements to the contract terms and risk profile", but it is hardly a full report of the position. While I accept that there was a general concern about leaks of information and the actions of BBS to take advantage of them, the fact that the report was provided very late and the contracts were to be signed within hours meant that, in reality, there was little risk of a leak. As already noted the additional payments amounting to £4.8 million were not structured as an incentive. Accordingly, the statement that the new approach should minimise the risk to businesses and residents of Edinburgh of delays was simply not true. Equally untrue was the assertion that there were corresponding advantages to the increase in price by securing a further transfer of risk to the private sector.
- 12.67** Mr Aitchison said that the recommendations to the Committee "were based on the considered, and consistent, advice from TIE and senior Council colleagues" [\[TR10000022_C, page 0049, paragraph 143\]](#). These senior colleagues, the Directors of City Development and Finance and the Council Solicitor, had been involved on his behalf in undertaking contract due diligence after December 2007, and the

draft report prepared by the Solicitor for signature by the two officials mentioned by her and mentioned in Mr Aitchison's statement [[ibid](#), page 0050, paragraph 144] was the culmination of a work programme over many weeks. During that period Mr Aitchison had been in discussion with them, participated in briefings and had been involved in discussions at the IPG [[ibid](#), page 0050, paragraph 145]. The recommendations were principally to approve the new final costs and authorise the Chief Executive to instruct **tie** to enter into the contracts. While it is apparent that these would have reflected the advice from **tie** officials – who had, after all, concluded the new deal – the origin of the statements of fact in the report is not clear. As was noted above, Mr Aitchison received a report dated 13 May, from Mr McGougan, Ms Lindsay and Mr David Anderson, which supported the statement from **tie** recommending imminent financial close [[CEC01244245](#)]. Mr Aitchison said that he had advised all three that he would not consider approving the document for signing until he had written assurance from them that it was appropriate to do so [[TR10000022_C](#), page 0050, paragraph 144]. While the Inquiry has not found any direct evidence that Mr Aitchison received the report before the committee meeting, I think that it unlikely that he would have signed the report to the Policy and Strategy Committee, seeking approval for immediate financial close, and which involved the signature of the contract at 2pm that day, unless he had been satisfied that a written assurance in acceptable terms would be available for him immediately after the committee meeting. Only he could confirm that the report to him in that regard was in acceptable terms. On balance, I have concluded that, before the Policy and Strategy Committee meeting, Mr Aitchison had seen and approved the terms of the report to be signed by the three senior officials and given to him. Remarkably, he said that he did not recall having seen the Close Report and letters from DLA to the Council and **tie** referred to above. As to the basis for the contents of his report, Mr Aitchison said:

"Two Council Directors were members of the TPB and saw all the documentation going there. They, in turn, were able to bring that documentation/information back and share it with colleagues at the Council. There was, therefore, a thorough awareness of the main documentation going from TIE to the TPB. Colleagues on the TPB had the opportunity to challenge their counterparts in TIE and seek clarification or further information where and when appropriate. Reports to Council were able to draw on all this analysis and information." [[ibid](#), page 0051, paragraph 149.]

- 12.68** It is not correct to state that members of the TPB – which was a sub-committee of the **tie** or TEL Board – were entitled to bring information back from their deliberations and share it with other CEC officials. The suggestion that members of the TPB were able to challenge their counterparts in **tie** showed that he did not have an understanding of the membership of these bodies and how they operated in practice. On any view, however, it was the responsibility of Mr Aitchison to satisfy himself that what was said in his report was correct. This responsibility was all the greater when the urgency meant that councillors would have little chance to look beyond his report when making their decision. It is not possible to say that the decision would necessarily have been any different had a more detailed account been given of the position, but it is another example of inadequate reporting and the councillors not having full information when taking decisions relating to the project.
- 12.69** Mr Aitchison said that there was a very lengthy spell of questioning of Mr David Anderson, Ms Lindsay, Mr McGougan and himself by way of scrutiny of the issue. The contents of that discussion are not recorded, so it is not possible to say whether there was elaboration or qualification of the contents of the report. At the conclusion of their deliberations, the Committee made a decision in line with the recommendations in the report.

Letter from Mr Aitchison to Mr Gallagher

12.70 On the basis of the decision of the Committee, Mr Aitchison wrote to Mr Gallagher, confirming that **tie** should immediately enter into the contracts [CEC00590620]. In error, this letter was dated 12 May 2008, but it was in fact sent after the meeting.

The Approvals Committee

12.71 Following CEC's decision in December 2007 to proceed, in January 2008 **tie**, TEL and the TPB created delegated authority arrangements in relation to the process to be followed to contractual implementation [see minutes of joint meeting of the TPB, **tie** and TEL of 23 January 2008 in CEC01246826, page 0008, and the draft Resolutions at pages 0037–0040]. They established a committee consisting of Mr Gallagher, Mr Renilson and Mr Mackay. It was to be a committee of the Boards of **tie**, TEL and the TPB and was known as the Approvals Committee. In terms of the Resolutions it would approve final execution by the Chairman of **tie** of the Notification of Intention to Award, the Infraco Contract Suite and any necessary related agreements. In terms of the resolutions establishing the Approvals Committee this authority to approve in relation to **tie** was to be on condition that:

- (1) the final terms of the contractual arrangements were within the terms of the FBC, subject to slippage of up to one month in programmed revenue service in 2011, and
- (2) it unanimously concluded that it was appropriate to do so, and
- (3) approval had been received from the CEC Chief Executive to proceed to execution of the Infraco Contract Suite.

12.72 The conditions of approval for the committee, in so far as it was a sub-committee of the Board of TEL and the TPB, are slightly different in that the unanimous conclusion and the approval from the CEC Chief Executive need relate only to the execution of the Infraco Contract Suite. In fact, there is no record of this committee having approved the issue of the Notification to Award prior to its issue in March 2008, and instead it appears that the decision was taken at the joint meeting of the TPB and **tie**'s Board on 13 March 2008 [CEC00114831, Part 1, page 0008, paragraph 14.2].

12.73 The decision to make the Approvals Committee a sub-committee of the Boards of **tie** and TEL and the TPB may reflect a degree of uncertainty or confusion due to the convoluted governance procedures as to which body should decide to sign. It is worth pausing, however, to consider the situation once the Approvals Committee had been set up. **tie** was a subsidiary of TEL. Officially, the TPB was a committee of the Board of TEL. This meant that, in addition to the decision to proceed being taken by a sub-committee of the Board of **tie** – which would be perfectly natural – a sub-committee of a sub-committee of the Board of the parent of **tie**, and a sub-committee of that same Board of the parent of **tie**, would also be pivotal in instructing **tie** to enter into the contract. This is a clear illustration of how complex and confused the governance of the project had become.

12.74 Although the form of the decision-making was unsatisfactory, the real problems lay in the substance of what was done. In this regard it is appropriate to look at the evidence of the three members of the Approvals Committee on 13 May 2008 in a little detail, but before doing so it is necessary to examine the minute of the meeting of the Committee [CEC01289240]. Although he was not part of the Committee, the

minute was prepared by Mr Bissett in advance of the meeting to which it relates. It included a note that:

"The Committee and each member individually noted that adequate information had been provided on which to competently proceed. In particular, the terms of the Infraco Contract Suite and all key related information had been set out in successive versions of:

- The Close Report prepared by tie Limited
- A letter from DLA providing an opinion on the legal competence of the Infraco contract suite and including a comprehensive risk matrix
- Supporting papers prepared by tie Limited addressing:
 - Detailed Infraco Contract Suite terms and conditions
 - Procurement process and risk of challenge
 - The final deal terms and relationship to value for money and the risk of challenge" [\[ibid, page 0001\]](#).

12.75 These are the same first three items that were before the **tie** management at the commencement of the closure process considered above. The minute then noted that "the final contract terms had been approved at a meeting of the Council's Policy & Strategy Committee earlier in the day" [\[ibid\]](#). This did not accurately reflect what had been done by the Policy and Strategy Committee, whose purpose had been to consider the Chief Executive's report and, if appropriate, approve his recommendations. The minute of that meeting disclosed that there was an approval of a price increase and not the contract terms. Nonetheless, when I asked Mr Mackay whether that approval influenced the committee's consideration of the issues, he said: "It would help our decision-making." [\[PHT00000038, page 54\]](#). The minute of the Approvals Committee meeting referred to the various formal items of correspondence referred to above. It then concluded that:

"The terms of these draft documents was noted as in acceptable form by all parties. The Committee and each individual member confirmed that authority should thereby be given to the tie Chairman to proceed with completion."
[\[CEC01289240\]](#)

Mr Mackay

- 12.76** As a member of the Approvals Committee, Mr Mackay said that its remit was to run through the contract once again to see whether there was anything that troubled the committee or would prevent it from going ahead and signing [\[PHT00000038, page 51\]](#). He said that it was there to test the material and it was not a "rubber-stamping exercise" [\[ibid, page 59\]](#). Part of the remit was for it to be satisfied that the final arrangements fell within the FBC and, as described there, the strategy involved the transfer of design, construction and maintenance risks to the contractor.
- 12.77** Mr Mackay could not provide a clear picture of what material was available to the committee and what it did to test the reports. He could not recall whether there had been any verbal presentation to it in addition to the documents referred to in the minute. He thought that it might have been talked through the contract but, when asked who had done this, he said, "Perhaps Graeme Bissett" [\[ibid, page 53\]](#). From the evidence that I have heard of Mr Bissett's involvement, I do not believe that he would have provided a narrative of the contract. Mr Mackay was asked what information he had to support the view that there had been a transfer of risk as required by the strategy in the FBC, but his answer was unclear and unsatisfactory. He said that he

asked questions of senior executives, lawyers and Mr McGougan, as well as officials in Transport Scotland even after the decision of Scottish Ministers to withdraw officials in Transport Scotland from the project [libid](#), pages 79–83], but there is no record of this. He said that some of the information for the committee to rely on was coming from Mr Gallagher [libid](#), pages 72–73]. This produces a position that Mr Gallagher is both part of the decision-making body and the provider of information to that body. He said that he was told by Mr Gallagher and others that the design risk “would not be a major difficulty” [libid](#), pages 73–74 and 86]. That, of course, is a rather different matter from concluding that it had been transferred to the contractor as envisioned in the FBC.

- 12.78** No records were kept to the effect that any information was provided in addition to the documents narrated in the minutes. Mr Mackay’s response was to say that the committee did not need to have a record as it had been satisfied with the papers and the answers that it was given to its questions [libid](#), pages 60–61]. That is false logic. If the committee was *not* giving approval, with the result that nothing was to happen, then it might not have been necessary to keep a record. When giving approval for a very substantial public contract, however, I consider that it was critical that a record was kept as to what material was relied upon.
- 12.79** Mr Mackay said that he had never had any doubts that the contract was not fixed price in the sense that the payment could not change because design was incomplete, MUDFA was running late, there were extensions of time and CEC kept wanting changes [[TR100000113_C](#), page 0040, paragraph 143], but he did not raise this when reviewing reports [[PHT00000038](#), pages 85–86]. There were a number of other respects, however, in which it was clear that Mr Mackay did not fully understand the position. Mr Mackay was not aware of the contract assumption that the MUDFA works would be complete, and that assumption was wrong. If he had been aware of it, it would have been a matter of concern. Nor was he aware of the terms of SP4, which expressly stated that the facts were in some respects at odds with the assumptions, and he said that if he had been aware, “[i]t would have made a big difference” [libid](#), pages 68–69]. He was aware that changes of design principle, shape, form and outline specification would be at **tie**’s risk but that he thought that the risk allowance would cover it [libid](#), page 78]. In fact, as I note above, no addition had been made to the risk allowance to reflect the terms of SP4. He was under the impression that the novation of the contract would transfer the design risk from **tie** [libid](#), page 74]. The lack of information and understanding was material. Mr Mackay said that if he had been aware of how onerous the design changes would be he would not have agreed to proceed [libid](#), page 67]. I have concluded that if Mr Mackay had understood the terms of the contract, particularly SP4, it is probable that he would not have agreed to its signature. Indeed, had he authorised the contract signature with a proper understanding of its terms and the likelihood that it would fail to deliver the project on time and within budget, questions would justifiably be asked about his integrity if he had failed to alert CEC to the risks to which it was exposed.

Mr Gallagher

- 12.80** Mr Gallagher said that the committee had not met prior to the meeting on 13 May 2008. His evidence was that this committee was a purely formal step to approve the work of others in writing and drawing together the Close Suite, and that it carried out no independent review of the materials before it [[PHT00000037](#), page 142]. When asked how the committee discharged its remit to check that the contracts were within the FBC, Mr Gallagher said that there would have been a review as part of the preparation of the Close Suite [libid](#), page 141].

12.81 In relation to the issue of whether the price might change, Mr Gallagher would have been aware, on the basis of the email from Mr Bissett sent to him the previous October [CECo1624078 referred to in paragraph 12.36 above], that the statement that the price was "fixed" did not denote that it would not increase, but this was not a matter that he raised in the context of the work of the Approvals Committee.

Mr Renilson

12.82 Mr Renilson said that he had no clear recollection of whether the Approvals Committee met prior to 13 May 2008 [PHT00000049, page 28]. His evidence seemed to amount to a statement that the committee members worked in close proximity to each other in the **tie** offices and that the discussions were:

"just part of everything, of the general high tension activity that was in place in the run-up to contract close" [ibid, page 33].

12.83 At first, he said that he thought that the three committee members would "almost certainly" have got together to apply their minds to the issue of whether the contract came within the FBC, but he could not actually recall it [ibid, page 34]. However, he later said that the issue of departure from the procurement strategy and additional costs were discussed at the TPB, but he could not recollect any discussion in the Approvals Committee and doubted that it had happened [ibid, pages 37–38 and 45].

12.84 He said that the Approvals Committee was dependent on information provided largely by **tie**, with some from TEL [ibid, page 40]. He said that he was concerned about the MUDFA progress and felt that he was not able to get information about it [ibid, page 35]. He said that it was a "big concern" that this could generate liability, but also that he was "not convinced that it would produce a deviation from the agreed price" [ibid, page 36]. This was on the basis that he was being told by **tie** employees that there were ways around the problem. His approach to the Close Suite appeared to be quite cavalier and he said that he would not have read the DLA letter [ibid, pages 39–40].

12.85 He believed that the risk of incomplete design lay with BBS [ibid, page 46]. He had "doubts" as to the statement that BBS was to bear the lion's share of risk [TR100000068_C, page 0074, paragraph 250; PHT00000049, page 47]. Despite having doubts, he did not investigate or request someone else to investigate this matter. He said that he would not have understood what he was told if he had caused it to be investigated [ibid, page 48]. He did not have an understanding that the price would change if the pricing assumptions did not hold good, and he thought that, barring adverse weather or unforeseen ground conditions, or "CEC's planners' moods", the price was fixed [ibid, page 68]. Like others, he believed that the effect of the novation was that the risk of design change lay with BBS [ibid, page 50].

12.86 He was not confident that the contract should be awarded, but he felt pressurised to sign off on the contracts [TR100000068_C, page 0076, paragraph 259]. He said:

"I felt I might be told that, if I didn't sign, an immediate Board meeting would be convened and I would be removed from the Board." [PHT00000049, page 51.]

12.87 He said that the pressure came from a number of senior people and that Mr Aitchison had said that signature of the contract had to go ahead. He felt that if he had taken a stand it would not have stopped the project but that he would have been removed and therefore would not have been present to contribute to dealing with some of the problems that arose later.

Conclusions

- 12.88** While Mr Mackay said that there was discussion as to whether the contracts fulfilled the requirements of the procurement strategy, he could not recall the details. I do not accept his evidence in this regard. It is my view that, in certain respects, what was proposed did not accord with what was outlined in the FBC. I consider that the problems – in particular with transfer of risk – should have been apparent at the time. Even if the view had been taken that it could, on some basis, be said that the necessary conformity with FBC was still there, I would have expected those present to have been able to recall the discussions even now if the issue had been discussed. The meeting of the Approval Committee was a pivotal one and led to **tie** undertaking a commitment of hundreds of millions of pounds. As such, at least the outline of the discussions would tend to stick in the participants' minds even if the detail did not. The absence of any recollection is therefore telling.
- 12.89** I do not accept Mr Mackay's evidence that the Approvals Committee ran through the contract or tested the material. The absence of any records of additional material or information being provided to the committee, the minute and the evidence of Mr Gallagher and Mr Renilson indicate that giving approval was a mere formality. I conclude that no material was before the Approvals Committee in addition to that narrated in the minute. There was no advance consideration of the issues to be decided and, when the committee met, it did not even scrutinise the limited materials available. It did not go beyond checking that the various documents actually existed and the assumption was that problems would have been ironed out in the TPB before matters reached the committee. It is apparent that it did not even check that the QA/QC process had been concluded as, had it done so, it would have been apparent that parts in relation to SP4 were missing. It does not appear that there was any discussion of the issues or the understanding of each committee member. If there had been any such discussion, I would have expected that the committee members would have had a greater awareness of the differences in their understanding of the position and how that could have a bearing on the issues that they were to consider. An example lies in Mr Mackay's evidence that he was aware that changes of design principle, shape, form and outline specification would be at **tie**'s risk but that he nonetheless believed that there had been no change from the strategy in the FBC. If there had been a discussion in which all three members understood that **tie** bore this risk, it seems unlikely that, collectively, they could have concluded that the contract fell within the FBC. Such an exercise might have produced a situation in which they would have become aware of potential problems such that they would at least have started to ask appropriate questions. This would in turn have increased their awareness of the pitfalls of the contract. Instead, I consider that the members of the committee never applied their collective judgement to the issue of whether the contractual arrangements were within the terms of the FBC.
- 12.90** Having been able to form an impression of Mr Renilson in the course of his giving evidence to the Inquiry, and having heard the evidence from Mr Mackay, I do not accept that Mr Renilson would allow himself to be bullied into giving approval if he did not think that that was what should happen. I also reject the allegation that he was subjected to the bullying tactics to which he refers.
- 12.91** The result of the above is that the way in which the Approvals Committee performed its role meant that it provided no effective oversight of, or check on, the close process. It would have been preferable to have had a much simpler decision-making process that made it absolutely clear which person or body had the responsibility for being satisfied as to the appropriateness of signing the contract. This could not

guarantee that there would not be a failure to identify problems, but I consider that clear responsibility would make it much less likely. It would have avoided the situation in which each person thought that someone else had determined that it was in order to proceed.

- 12.92** There were many elements or stages to the Close process that I have described in this chapter, but the merits of the position were not properly examined at any of them. There was a process-driven approach that relied on boxes being ticked rather than any independent assessment of the merits of the proposal. In some situations, it is reasonable to conclude that, provided that a process has been followed, all will be well. That will be the position where implementation of the process will inevitably rectify or at least detect problems. That is not the case here. Nothing in the various steps towards contract close required a person or persons with sufficient independence from those who had negotiated the contract to apply their minds to the issue of whether the contract conformed to the FBC, to identify what material was available and what conclusions ought properly to be drawn from it, to make a decision and, importantly, to keep a record of all that they had done. The necessity for keeping a record not only means that after the event it is possible to see how decisions were made and what information was available; it also acts as a discipline or focus to ensure that responsibilities are properly discharged. The lack of a substantive check on the contract meant that it slipped through the various close stages; the problems that had first arisen in December 2007 went unnoticed; and in May 2008 the last chance for CEC to make an informed decision as to whether it wished to take on the associated liabilities was lost.
- 12.93** The fact that all the steps in the close process were planned in advance is not, of itself, a problem. It would clearly not be practicable for the person or persons making the decision to sit and read the contract and all related material fully at the last minute and then make decisions. Here, as in other commercial transactions, there were a number of participating bodies from whom approval would be required. The only practical way in which such decisions can be taken is for the work to be done in advance and all the various strands brought together at the last minute. The very fact that it will not be possible for there to be detailed consideration of all the issues on the day means, however, that it is necessary that all parties involved have been fully informed, have fully studied the issue and have made a considered decision in advance of the completion day. That did not occur.
- 12.94** Would a more thorough approach have made any difference? As I have noted above, the argument is made by some of the Core Participants that the deal that was done was the only one available. Accordingly, unless CEC wanted to abandon the project, this is the contract that was going to be concluded. That, however, is not the point. In taking a decision to commit to substantial expenditure of public funds, it is necessary that it is taken in an appropriate and defensible way. I doubt that this was the only basis on which a deal could be done. However, even if it was, it is essential that any decision to spend public money is taken by politicians, accountable to the electorate or by their appointed delegate, on a properly informed basis and in the full knowledge of the likely cost. Otherwise, the very situation that arose with the Tram project will be created, in which there is disillusionment with the project and public outrage as to the cost.

Chapter 13

CEC: Events during 2006 and 2007

Introduction

- 13.1** In the immediately preceding four chapters I have considered the evidence relating to events from the publication in 2005 of **tie**'s intention to seek tenders for the infrastructure contract ("Infraco contract") to the appointment of Bilfinger Berger Siemens ("BBS") as the preferred bidder and thereafter until contract close in May 2008. These chapters were concerned principally with the actions of **tie** Limited ("**tie**"), Transport Edinburgh Limited ("TEL") and the Tram Project Board ("TPB") during that period. This chapter and Chapter 14 (CEC: January–May 2008) will consider the actions of the City of Edinburgh Council ("CEC") in respect of the Edinburgh Tram project (the "project") between 2006 and 2008.
- 13.2** The respective roles of CEC and **tie** are outlined in the overview in Chapter 1 (Introduction and Overview). In short, CEC was the promoter, owner, funder and financial guarantor of the project, with grant support from Scottish Ministers, and **tie** was responsible for procuring and delivering it. CEC was the statutory body consisting of councillors who had the strategic role of determining policy, including budget priorities within their local authority, and deciding at all stages whether to proceed with the project. Its role should be contrasted with that of CEC officials who were responsible for advising councillors and implementing their decisions. Throughout the Report, that distinction is maintained, although the actions of officials are relevant to the extent that they influenced CEC decisions.

Draft Final Business Case

- 13.3** Mr Holmes, CEC's Director of City Development, submitted a report for consideration of CEC at the Council meeting on 26 January 2006 [[CEC02083547](#)]. The report noted that it would be necessary to phase construction of the tram network, because the total estimated cost for both lines 1 and 2 was £634 million, in contrast to the estimated available funding of £535 million, being a £45 million contribution from CEC and £490 million (£375 million index linked) from the Scottish Ministers. The line from Edinburgh Airport to Leith Waterfront, via Haymarket and Princes Street, gave the greatest benefits and was the optimum first phase (phase 1a). The total cost of phase 1a was estimated at £429 million. The additional contingency for optimism bias requested by officials in Transport Scotland would take the estimate for construction to £484 million, which would be comfortably within the anticipated available funds of £535 million. Members accepted the recommendations in the report and approved the development of the Airport to Leith Waterfront sections of lines 1 and 2 as the first phase of the network, noting that the extension of tram line 1 from Haymarket via Roseburn to Granton Square (line 1b) would be within the first phase of development, providing that funding and construction costs permitted [[CEC01891456](#)].

13.4 Mr Holmes and Mr McGougan, CEC's Director of Finance, submitted a joint report for CEC's consideration at its meeting on 21 December 2006 [CECo2083466]. The report updated councillors on progress to date and sought approval of the draft Final Business Case ("FBC") dated November 2006 [CECo1821403]. The estimated cost of phase 1a had increased from £484 million to £500 million. The Executive Summary of the draft FBC, attached to the report, contained the following observation in relation to cost estimates:

"Based on the estimating methodology used, the level of certainty and confidence associated with the updated estimate is considered to be relatively high. Nearly 98% of the costs have been estimated based on rates and prices from firm bids received, known rates applied to quantities or based on market rates applied to quantities derived from Preliminary Design. The level of confidence is reinforced by benchmarking against other tram schemes and the relatively high allowance for risk included in the estimate." [CECo2083466, page 0028, paragraph 1.57.]

13.5 It was considered that there was a 90 per cent chance that costs would come in below the risk-adjusted level [ibid, pages 0028–0029, paragraph 1.58].

13.6 The report said that the following actions were required to maintain control over the capital cost of the project:

- enabling works, including utility diversions, should be authorised to proceed on a timetable that would not disrupt the main infrastructure programme; and
- negotiations with bidders should continue, with a focus on achieving a high proportion of fixed cost in the final contracted capital cost [ibid, page 0012, paragraph 4.32].

13.7 The report included a table (taken from the draft FBC) showing the principal milestone events in the final stages of the procurement and construction of the tram system. It was envisaged that utility diversions under the Multi-Utilities Diversion Framework Agreement ("MUDFA") would commence in April 2007, approval of the FBC would be sought from CEC and from Transport Scotland in September 2007 and the Infraco contract and the tram vehicle supply and maintenance contract ("Tramco contract") would be awarded in October 2007. Construction of phase 1a should commence in December 2007, and be completed in July 2010, with the line becoming operational in December 2010 [ibid, page 0015].

13.8 The most significant risks affecting the timely completion of the project within budget were reported to be those arising from the advance utility diversion works, changes to project scope or specification and obtaining consents and approvals [ibid, pages 0007 and 0011, paragraphs 4.2 and 4.28]. The strategy for minimising such risks was part of the procurement strategy outlined in the Executive Summary of the draft FBC, including:

- "Transfer design, construction and maintenance performance risks to the private sector."
- "Minimise the risk premia (and/or exclusions of liability) that bidders for a design, construct and maintain contract normally include. Usually at tender stage bidders would not have a design with key consents proven to meet the contract performance obligations and hence they would usually add risk premiums for this."
- "Mitigation of utilities diversion risk (i.e. potential impact of delays to utilities diversion programme on Infraco works)." [ibid, page 0032, paragraph 1.77.]

- 13.9** The above strategy would result in the System Design Services ("SDS") contractor providing design up to the detailed design stage and obtaining all necessary approvals, with responsibility for both of these as well as consequential risks transferring to the Infraco contractor upon novation of the System Design Services contract ("SDS contract"). While it was expected that all design up to detailed design would be 100 per cent complete at the date of signature of the Infraco contract, **tie** was also seeking to complete the key elements of the detailed design prior to selecting the successful Infraco bidder in summer 2007, thereby reducing the design risk allowances normally included by contractors.
- 13.10** The draft FBC said that reduction in risk associated with the conflict between the diversion of utilities and the progress of the Infraco contract would be achieved by scheduling utilities work to start in 2007 and end in summer 2008. This would result in significant utilities diversion works being completed prior to commencement of "on-street" works by Infraco so that potential conflicts between the utilities and infrastructure works would be minimised. Any remaining time overlap could be managed so as to avoid programme conflicts on the ground [[CEC01821403](#), page 0090, paragraph 7.77].
- 13.11** In relation to the Infraco contract, the draft FBC noted that the principal attributes of the procurement approach included the transfer of design liability "by novation of SDS contract into Infraco" as well as a "[l]ump sum price for delivery into service of the tram system" [[ibid](#), page 0093, paragraph 7.97]. It was noted that the creation of the Infraco contract as a "lump-sum contract" transferred the pricing risk to the private sector, and basing the lump-sum price on SDS detailed design significantly reduced the scope and performance risk pricing premium that would otherwise be necessary in a conventional design and build or private finance initiative approach [[ibid](#), page 0098, paragraph 7.125].
- 13.12** I note in passing that the report to CEC on 21 December 2006, and the draft FBC, made no mention of the difficulties and delays with design that, as discussed elsewhere, had already become apparent by this time. The draft FBC was approved by CEC on 21 December 2006 [[CEC02083464](#), page 0006, paragraph 2(b)]. CEC also approved the continuation of contract negotiations for the award of the Infraco contract and the Tramco contract, subject to there being no significant adverse changes to the figures upon which the business case was based.

Concerns expressed in the first half of 2007

- 13.13** Various senior officials within CEC had responsibility for the project, including Mr Aitchison, the Chief Executive. He chaired an Internal Planning Group ("IPG"), to ensure that there was adequate internal co-ordination within CEC in respect of the project. The IPG was attended by senior officials in the Council with responsibilities for the Tram project, namely: Mr Aitchison, Mr Holmes, Mr McGougan, Mr Inch (Director of Corporate Services) and Ms Lindsay (Council Solicitor). A number of more junior (albeit experienced) officials in relevant departments assisted by briefing their superiors and attending meetings as required. As was mentioned in paragraph 4.28, these junior officials came to be known as the "B team", which included Mr Fraser (City Development Department), Ms Andrew and Mr Coyle (Finance Department) and Mr C MacKenzie and Mr N Smith (Legal Services). Mr Coyle was a finance official who operated as a finance manager in the City Development Department.

13.14 Throughout 2007, members of the “B team” raised concerns in relation to the project. In April 2007, Mr Fraser and Ms Andrew responded to comments by Transport Scotland on the draft FBC [CEC01559060; CEC01559061]. As well as largely agreeing with them, Mr Fraser and Ms Andrew made a number of additional comments, including that:

“CEC have some concerns over how project is being managed. Need to build in independent ‘Project Assurance’ reporting to TPB, to give comfort on tie-produced reports” [ibid, page 0003].

13.15 They agreed with the comment by Transport Scotland that there was a general concern that the programme was tight, with little float, and only proceeded on a “best case” scenario, and they added:

“We are also concerned by the drive to achieve milestones prior to completion of critical activities. For example, failure to complete detailed design before commencing MUDFA is likely to cause contract variations and substantial additional costs. This will be compounded if Infraco is also let before design is complete. There is also a risk that Infraco could be delayed by MUDFA delays due to incomplete designs. All delays and changes increase costs and threaten quality. It is also worth noting that the procurement strategy required advanced design and diversions to ‘derisk’ the project – commencing MUDFA and potentially Infraco prior to design completion is potentially building that risk back into the project. TIE should consider whether it is necessary to review the programme, build in more slack and if necessary delay project completion.” [ibid, page 0007].

13.16 Ms Andrew gave evidence that it was good practice to obtain independent project assurance. Her evidence in that regard was supported by the requirements of Office of Government Commerce (“OGC”) PRINCE2 project management guidance, which will be mentioned in Chapter 23 (OGC and Audit Scotland). Moreover, she did not consider that those sitting on the TPB, or CEC officials, had the necessary experience and expertise to check independently the accuracy of what was being reported by tie.

13.17 Ms Andrew’s concern about the need for independent project assurance was heightened by her views about the project itself. In particular, she considered that slippage in the SDS contract and MUDFA indicated deficiencies in tie’s ability to manage contractors and to deliver projects on time and within budget. She considered that tie’s management of other capital projects (eg Ingliston park and ride, and Fastlink) did not compare favourably with similar projects managed directly by CEC. She was also concerned that tie was over-optimistic and too quick to dismiss legitimate concerns raised by CEC and Transport Scotland. She had reservations about tie’s transparency and co-operation with CEC officials [PHT00000005, pages 20, 25–26, 63–65 and 92–93; TR100000023_C, pages 0020 and 0029].

13.18 Ms Andrew expressed her concerns in a briefing paper provided to Mr McGougan for the meeting of the IPG on 17 April 2007 [CEC01559075]. Her greatest concern was the expected delay in MUDFA of five months, extending to 11 months if line 1b was to be undertaken. While this would have cost implications, tie had not reported on this. Her comments on programming were in the following terms:

“As you know key parts of the programme are slipping (notably detailed design and MUDFA) and I, along with colleagues in City Development, am becoming increasingly concerned on the impact on costs.

"The procurement strategy was founded on the basis that the design was done in advance to 'derisk' the project and therefore reduce the risk premium built into the Infraco and Tramco and MUDFA contract prices. Similarly utilities diversions were to be done in advance to 'derisk' Infraco. This process meant that risks were being retained by **tie** to manage and potentially abortive design and diversion costs have been incurred as this was required to reduce costs and risks in the overall project.

"However, what has happened is that the MUDFA contract has been let and will shortly commence in earnest with detailed designs only 50% complete, due to SDS slippage. This means that MUDFA is likely to take longer than planned and could require numerous variations. This will undoubtedly lead to claims from the contractor. The contract price for MUDFA is £45m with a risk element taking the total cost to £61m (it should be noted that the risk element is for unforeseen diversions, not contract mismanagement!). City Development (unofficially) would not be surprised if the final cost of MUDFA was as high as £100m.

"Infraco is scheduled to be let by 30th September. If this is also let without detailed design in place, tie could be leaving us open to much larger claims. There is also the risk that as MUDFA has started late with inadequate designs that it could delay Infraco, leading to further claims. Given that the Infraco contract is about £300m, a 10% [cost] overrun could cause costs to rise by £30m.

"The TPB need to be considering these issues urgently." [libid](#), page 0003.]

- 13.19** Ms Andrew's concerns, shared by Mr Fraser, were clearly legitimate and were of such significance that they merited a considered response and action to address them. However, she gave evidence, which I accepted as credible, that she did not feel that her concerns were being properly addressed by the TPB. Rather, she would raise issues one month and then, in the next month's papers, nothing would seem to have changed [[PHT00000005](#), page 44]. Further support for the existence of concerns about the project in the first half of 2007 can be found in Mr C MacKenzie's evidence that although **tie** repeated a "mantra" that the project was "on time and on budget", from about late spring into summer 2007 it was becoming apparent to him, and other officials in CEC, that that was not the case [[PHT00000026](#), page 5]. As will be noted later in this chapter, their fears were realised to the extent that the programme anticipated in paragraph 13.7 above was not achieved. In particular, the contract was not awarded in October 2007 and construction did not start in December 2007.

The withdrawal of Transport Scotland

- 13.20** Following a debate and vote in the Scottish Parliament on 27 June 2007, the Scottish Ministers announced that funding for the Tram project would be capped at £500 million, with any cost overrun being borne by CEC. As was noted in Chapter 3 (Involvement of the Scottish Ministers), this was not a material change in the funding arrangements, as the original offer of a grant of £375 million had been index linked and capped. When rounded up, that produced the figure of £500 million at 2007 prices. Of more significance was the reaction of the Cabinet Secretary (Mr Swinney) to the parliamentary vote. He instructed Transport Scotland to "scale back" its direct involvement in the project, including relinquishing its seat on the TPB and ceasing to attend TPB meetings in any capacity. Instead, Transport Scotland would meet CEC on a four-weekly basis in order to receive a progress report on the project, and CEC was to provide confirmation, on a quarterly basis, that the grant conditions were being complied with. Furthermore the grant conditions were varied so that there was less

scrutiny of the project by Transport Scotland. For example, there was no longer a requirement for Transport Scotland to approve the FBC [letter dated 2 August 2007 from Dr Reed, Chief Executive, Transport Scotland, to Mr Aitchison – [CECo1566705](#)]. This was considered in more detail in Chapter 3 (Involvement of the Scottish Ministers).

- 13.21** In paragraph 3.125 I referred to the disappointment of various CEC officials about the withdrawal of Transport Scotland from the project and their various descriptions of consequential adverse consequences for CEC. For the purposes of this chapter it is useful to repeat these concerns. It left a gap in expertise and experience that CEC was unable to fill because it was hard to replicate the input of a national organisation [Mr Aitchison [PHT00000041](#), pages 71–72]; Transport Scotland had brought experience in relation to major projects from the client's perspective, which was not matched elsewhere, and the individuals involved had made significant contributions to the general discussion and debate; CEC had been reliant "[t]o a considerable extent" on Transport Scotland's experience and expertise in delivering major transport infrastructure projects. CEC had not been able to fill the gap in experience and expertise left by Transport Scotland's withdrawal [Mr Holmes [PHT00000042](#), pages 2–4]; Transport Scotland had provided an additional check on **tie** but after its withdrawal from the project its role changed to that of simply funder [Mr McGougan [ibid](#), pages 135–137; [TRl00000060_C](#), page 0146]. Prior to its withdrawal, Transport Scotland, representing Scottish Ministers as the major funder of the project, had taken the lead role in scrutinising the capital costs and bids. It had a wide pool of specialists and access to experience that had been available to CEC, but its withdrawal greatly increased the challenges on CEC, which did not have the same level of expertise or resources with which to scrutinise the project [Ms Andrew [PHT00000005](#), page 49; [TRl00000023_C](#), pages 0013 and 0020].
- 13.22** Following the withdrawal of Transport Scotland, Mr Inch produced a briefing paper for Mr Aitchison on the governance arrangements for **tie**, in which he expressed a number of concerns [[CECo1566497](#)]. **tie** had no assets but had procured contracts in its own name with little or no input from CEC, although CEC indemnified it in respect of all sums due under the various contracts. The paper noted that although there was a general operating agreement between CEC and **tie**, dealing with various transport projects, there was no operating agreement specific to the Tram project, with the result that:
- "there is no satisfactory detailed level of control over TIE and its activities as 'agent' for the Council in matters such as procurement, contracting and incurring expenditure" [ibid](#), page 0001, paragraph 2.3].
- 13.23** It was also noted that, increasingly, CEC officials had found it necessary to take a much closer and more proactive role in seeking to protect CEC's interests and that "[i]t cannot always be said that TIE's close focus on the tram project, and the Council's wider interests, are at one" [ibid](#), page 0001, paragraph 2.4]. The current governance arrangements were noted to be "complex". The report concluded:
- "Against the background of the funding cap set by Transport Scotland, and a greater financial risk to be borne by the Council, it is imperative that far more rigorous financial and governance controls are put in place by the Council." [ibid](#), page 0002, paragraph 2.6.]

13.24 In relation to the respective interests of CEC and **tie**, Mr C MacKenzie (who had drafted the briefing paper mentioned in paragraph 13.22 above) gave evidence that CEC had a number of different roles and functions in relation to the Tram project that it required to consider. He said,

"Not only was it the sponsor and promoter of the tram project, but it was also going to be giving a financial guarantee.

"It [also] exercised various statutory powers such as the Planning Authority, Roads and Bridges Authority." [[PHT00000026](#), page 10.]

In contrast, **tie** was focused only on delivering the Tram project.

13.25 By a report dated 15 August 2007, for CEC's consideration at its meeting on 23 August 2007, Mr Aitchison advised councillors of recent developments in relation to the Tram project, following the vote in the Scottish Parliament on 27 June and the subsequent confirmation by Scottish Ministers that work on the project should continue [[CECo2083490](#)]. He sought CEC's approval for proposed future governance arrangements. The report noted that approval for the project to proceed and the revised funding situation had highlighted the need to re-assess the current governance arrangements associated with the project. These included the relationship between CEC, TEL and **tie**, the role of the TPB and the necessity for the appropriate involvement of councillors in decisions associated with the project. Against the background of the funding cap set by Transport Scotland, and the greater financial risk that would now be borne by CEC, he considered that it was imperative that rigorous financial and governance controls were in place to manage the next crucial phases of the project. CEC's authority was sought to conclude operating agreements with **tie** and TEL. It was recommended that a Tram Sub-Committee (being a sub-committee of the Council's Environmental and Infrastructure Committee) be set up to review and oversee decisions in respect of the Tram project. At its meeting on 23 August 2007, CEC noted the contents of the report, instructed the Council Solicitor to conclude Operating Agreements with **tie** and TEL and established a

"subcommittee of the Transport, Infrastructure and Environment Committee with a remit to review and oversee decisions with respect to the Tram Project" [[CECo1891408](#), Part 2, page 0031, paragraph 22].

13.26 To the extent that the report implied that the decision of Scottish Ministers to cap the grant at £500 million revised funding arrangements and transferred greater financial risk to CEC, it is incorrect. As was discussed in Chapter 3 (Involvement of the Scottish Ministers), both CEC and **tie** were aware, long before the election in 2007, that the proposed funding of £375 million with indexation was capped. When indexation was applied to £375 million, the appropriate sum in 2007 was £490 million, which was rounded up to £500 million. Although the Chief Executive's recommendation to review governance arrangements was predicated upon a transfer of greater financial risk to CEC, I consider that the decision of Scottish Ministers to withdraw the technical support that officials in Transport Scotland had hitherto provided to CEC and **tie** in relation to the project was of more significance. It was essential in those circumstances that governance arrangements should be reviewed. I also consider that it was also important to replace the technical expertise that Transport Scotland had provided to CEC before its withdrawal from the project in scrutinising the capital costs and bids. As that expertise did not exist at CEC, the replacement of that expertise could be provided only by the private sector. In particular, it was necessary to instruct a suitably qualified independent firm of multi-disciplinary engineering,

transport and project management consultants to scrutinise the FBC when it became available, to scrutinise the evolving Infraco contract and generally to advise CEC on its risk exposure. Although that was not considered at this stage, it later became apparent that there was the need for such expertise in the context of reviewing CEC's risk exposure. This will be discussed in more detail in paragraph 13.61 below and subsequent paragraphs. However, I consider that, through its officials, CEC ought to have considered the need to replace the technical expertise of Transport Scotland, particularly in view of officials' awareness of the adverse consequences for CEC of its withdrawal, mentioned in paragraph 13.21 above.

- 13.27** Mr Aitchison submitted a subsequent report to the Council meeting on 20 September 2007, in which he referred to its decision on 23 August to establish a Tram Sub-Committee, with a view to enhancing councillors' oversight of the project, and he recommended that the sub-committee should meet every six-to-eight weeks. His recommended remit for the sub-committee included the receipt of reports on progress of the project from CEC officials, TPB, **tie** and TEL as well as "regular reports from the Director of City Development on the performance of **tie** with respect to the Operating Agreement" and the regular review of "the risk profile for the Council" [CEC02083455, page 0002, paragraph 13]. CEC approved the proposed remit for the sub-committee [CEC01891423, Part 1, page 0018, paragraph 8].
- 13.28** In the event, however, and as will be discussed in Chapter 22 (Governance), the Tram Sub-Committee met infrequently and did not exercise the oversight and scrutiny role intended for it. It did not receive regular reports on progress of the project or on the performance of **tie**. Thus the need for effective governance as a check on **tie**'s assessment of capital costs, including CEC's risk exposure, was not achieved. As will be noted below, CEC also failed to replace the expertise of Transport Scotland in scrutinising CEC's financial exposure.

Independent legal advice

- 13.29** Between August and November 2007, a difference of opinion arose between the Council Solicitor, on one hand, and Mr C MacKenzie and Mr N Smith, as members of the "B team", on the other, relating to CEC's need for independent legal advice from a source external to CEC on the risks to it arising from the Infraco contract. Ms Lindsay considered that it was sufficient for CEC to rely on the advice of **tie**'s legal advisers, DLA Piper Scotland LLP ("DLA"), together with any legal advice from within CEC's legal department but Mr C MacKenzie and Mr N Smith were of the view that CEC should have separate external independent legal advice.
- 13.30** As the Council Solicitor, Ms Lindsay was head of CEC's legal department within the Department of Corporate Services, whose director was Mr Inch. Mr Inch was responsible for all "back office functions", including legal services, and in that respect was the line manager of the Council Solicitor. Although Mr Inch was Ms Lindsay's line manager, he was not qualified to give legal advice to CEC. That was the sole prerogative of the Council Solicitor, who owed a duty of care to her client, CEC, and to all its constituent departments. The unique role of the Council Solicitor within the Department of Corporate Services is illustrated by CEC's instruction on 23 August 2007, issued directly to the Council Solicitor, to conclude Operating Agreements with **tie** and TEL. To assist her in the performance of her duties as Council Solicitor a number of solicitors in CEC were under her management, including Mr C MacKenzie and Mr N Smith.

- 13.31** The circumstances of the dispute about CEC's need for independent legal advice and the decision of the Council Solicitor to overrule the concerns of Mr C MacKenzie and Mr N Smith in that regard were discussed more fully in Chapter 4 (Legal Advice). Apart from discussions within the Solicitor's Department about this matter, other senior officials at CEC considered it, notably Mr Holmes, Mr McGougan and Mr Inch. Mr Holmes deferred to the views of the Council Solicitor and Mr Inch, who were best placed to know what resources were available within the Department of Corporate Services [PHT00000042, pages 10–15; TRI00000046_C, page 0052, paragraph 193]. Mr McGougan gave evidence that the Council Solicitor was clear that independent legal advice on the contract was not required and that he was happy to accept her view on that matter [PHT00000042, pages 139–140]. Although Mr Inch stated in his evidence that he thought that the appointment of independent solicitors would have been a good idea, he deferred to the opinions of his fellow directors and the Council Solicitor [PHT00000007, pages 167–168]. It was not unreasonable for senior officials to defer to the opinion of the Council Solicitor on this matter, as she was in the best position to assess the need for independent legal advice.
- 13.32** Although the dispute as to whether to seek external legal advice took place between August and November 2007, when the parts of the contract that were to cause so much difficulty later had not been drafted, an external adviser would have scrutinised the terms of the contract as it developed until it was concluded in May 2008, to assess their potential effect on CEC. As was mentioned in Chapter 4 (Legal Advice), I am satisfied that if there had been external legal advice on the evolving contract, which considered the interests of CEC, it is likely that the problems that later came to light would have been detected before signature of the contract.
- 13.33** In Chapter 4 (Legal Advice) I have concluded that it was necessary to instruct external legal advisers to ensure adequate protection for CEC's interests. Indeed it is my view, expressed in that chapter, that, if DLA were to represent **tie** and CEC, CEC should have been the primary client of DLA because it ultimately bore the financial consequences arising from the various contracts necessary for the construction and operation of the Tram project. If any conflict arose between CEC and **tie**, DLA should have ceased to act for **tie** and required it to obtain separate legal advice from another firm of solicitors. Moreover, in the context of the arrangements that actually existed where DLA treated **tie** as the client from whom it took instructions, I consider that Ms Lindsay should not have relied exclusively upon DLA for advice, having regard to the terms of engagement proposed by DLA. In view of the value of the contract and the obvious potential exposure for CEC, it was a clear error of judgement not to have sought independent legal advice at the outset as well as later when concerns were expressed in that regard by members of the "B team".
- 13.34** As a separate but related issue, I have considered whether there was a misunderstanding about the role that Ms Lindsay wished Mr C MacKenzie and Mr N Smith to perform in reviewing the tram contracts. Ms Lindsay considered that Mr C MacKenzie and Mr N Smith were both well able to undertake the role that they had been instructed to do, which was not to draft, negotiate, revise or agree the terms of the contracts, but to become sufficiently familiar with the contracts so that they could support and challenge **tie**. In fulfilling that role, they could draw on the expertise of DLA and **tie** as required [PHT00000027, pages 21–23]. The purpose of such an exercise could only have been to ensure that CEC's interests were protected. The fact that Ms Lindsay anticipated that Mr C MacKenzie and Mr N Smith could rely upon the expertise of DLA and **tie** in fulfilling their role of challenging **tie** illustrates the inadequacy of such arrangements. There could be no effective independent

assessment of CEC's risk exposure from the contracts if the challengers had to rely upon the expertise of **tie**, the person being challenged, or **tie**'s solicitors who had provided advice to **tie** and had assisted in the drafting of the contracts that were to be reviewed.

- 13.35** Mr C MacKenzie stated that he was of the view that nobody in the CEC legal team had the necessary specialist expertise and experience to advise CEC on such risks. These were technical and bespoke contracts of high value and potentially giving rise to substantial risk for CEC [PHT0000026, pages 7 and 18]. Mr N Smith gave evidence to a similar effect. He felt strongly that it would not have been professionally appropriate for him to have advised on the terms of the contract, and that to have done so might have given others in CEC the false impression that it had been appropriately reviewed from a legal perspective. He also stated that it would be usual to go outside CEC to get such legal expertise [TR10000071_C, pages 0003 and 0019–0020; PHT0000005, pages 140–141]. I recognise that Mr C MacKenzie and Mr N Smith ought to have been able to identify concerns about certain contractual positions and, as will be noted in Chapter 14 (CEC: January–May 2008), Mr C MacKenzie did so in the context of the pricing provisions in Schedule Part 4 ("SP4"). That is not the same as having the ability to identify concerns about all the unusual conditions in a bespoke contract that could delay the progress of work and expose CEC to additional risks and consequent costs.
- 13.36** Ms Lindsay's expectation that they could rely upon the expertise of **tie** and DLA discloses a failure to appreciate that an independent review was impossible if it relied upon the expertise of those responsible for the documents under review. In paragraph 13.30 I have explained the role of Ms Lindsay from which it is clear that she did not hold the position of a Director in the Council but was the Solicitor to CEC. As Solicitor she had responsibility for providing legal advice to CEC and to its officials, including its Directors. In that capacity she had responsibility, along with the Director of City Development and the Director of Finance as the directors responsible for the project, for advising the Chief Executive whether he should authorise **tie** to issue the Notice of Intention to award the Infraco contract and the Tramco contracts on 18 March 2008 and to sign these contracts on 14 May 2008. Before providing such advice she had to satisfy herself, independently of any advice from **tie** or DLA, that it was appropriate for the Chief Executive to give the necessary authority to **tie**. In that regard she ought to have obtained a report from Mr C MacKenzie, whom failing Mr N Smith, the solicitors whom she had appointed to act full time as part of the project team, confirming that it was appropriate for the Chief Executive to authorise **tie** to issue the NIA and to enter into the Infraco contract.

The culture in the department of the Council Solicitor

- 13.37** The evidence available to the Inquiry also caused me to consider the culture and the working relationships within the Council Solicitor's department in the context of the tram project. I recognise that the Council Solicitor had numerous responsibilities and managed a large department but my comments about the culture and working relationships are confined to those involving Mr C MacKenzie, Mr N Smith and Ms Lindsay. There was evidence available to the Inquiry that Ms Lindsay provided some support to Mr C MacKenzie [for example, CEC01400013; CEC01400439] and I accepted that evidence. However, the examples cited in the following paragraphs suggest that there was a lack of mutual respect between the Council Solicitor, on one hand, and Mr C MacKenzie and Mr N Smith, on the other, which was not conducive to the efficient performance of their professional obligations to provide legal advice to, and act in the best interests of, CEC. This impression will be

reinforced in Chapter 14 (CEC: January–May 2008), in which I consider the action taken in relation to the draft SP4 of the Infraco contract.

- 13.38** By email dated 27 August 2007, Mr C MacKenzie advised Mr N Smith that he had been “directed” by Ms Lindsay to instruct him to read through the draft Infraco contract that had been supplied by **tie**, with a view to reporting “on the implications for the Council on risks, liabilities, step-in rights etc”. The report was to be produced within two days and was for internal purposes only [CECo1567527]. This email was copied to Ms Lindsay and Mr Squair, a senior solicitor with CEC.
- 13.39** From Mr N Smith’s reply, by email dated 28 August 2007, it appears that the documentation sent to him by Mr C MacKenzie consisted of almost 1,000 pages, which Mr C MacKenzie expected him to review and thereafter prepare a report within 36 hours. Not surprisingly, Mr N Smith thought that this was an impossible task. Moreover, he stated that he agreed with the comment in Mr C MacKenzie’s previous email to Ms Lindsay that CEC’s Legal Services department had neither the experience nor the manpower to review the contract documentation. Mr N Smith continued:
- “As discussed with you at length, anything less than a comprehensive review of risks and obligations would not in my view be in the Council’s best interests and I would be failing in my professional obligations if I did not raise this issue with you.” [CECo1564795]
- 13.40** Mr N Smith stated that, as a result, he would not be able to comply with Mr C MacKenzie’s request to review the contractual documentation, but would assist with “other more appropriate matters” [ibid] in relation to the Tram project. Although this email was copied to Mr Squair, Mr N Smith did not send a copy to Ms Lindsay. The Inquiry has found no written intimation of this decision to Ms Lindsay. Mr C MacKenzie’s evidence about telling Ms Lindsay was not clear, but he doubted that he “would have left it lying because obviously there was a timescale put on it by Gill Lindsay in her instruction” [PHT00000026, page 44]. I accepted Ms Lindsay’s evidence that she was unaware of this email until she received a copy of it from the Inquiry for comment. I also consider that it is unlikely that Mr C MacKenzie told her of Mr N Smith’s response, because I suspect that she would have taken some action, particularly as she said that Mr C MacKenzie had told her that he was having difficulty in getting Mr N Smith to produce work [Ms Lindsay PHT00000027, pages 48–49].
- 13.41** It is a poor reflection on the working relationships within CEC’s legal department that Mr N Smith elected not to copy his email to Ms Lindsay when she had been a recipient of the originating email from Mr C MacKenzie. It is also unsatisfactory that Mr C MacKenzie did not advise Ms Lindsay of Mr N Smith’s response but was content to rely upon the non-production of the report as sufficient intimation to the Council Solicitor. This incident also suggests poor management by Ms Lindsay. Although she never received the required report from Mr N Smith, it does not appear that she followed up her request, because she was unaware of Mr N Smith’s decision contained in his email until the Inquiry sent her a copy of it.
- 13.42** The discussions surrounding the letter of engagement of DLA and the action taken in that respect provide another indication of the poor relationships within the legal department and its management.

- 13.43** Following a discussion about the issue of obtaining independent legal advice, Ms Lindsay sent Mr C MacKenzie an email dated 24 August 2007, in which she stated:
- “We agreed that the letter [of engagement] from DLA would be revised and finalised this week. Please ensure this is actioned without further delay. I will not be utilising time in addition to meetings to revisit issues. The DLA letter must be concluded now.” [CEC01567522, page 0001.]
- 13.44** The issues to which she was referring related to the need for independent advice and her view that it was unnecessary. From that email it was clear that Ms Lindsay considered the completion, and presumably the signature, of the final version of the letter of engagement to be important and urgent.
- 13.45** By email to Ms Lindsay, dated 27 August 2007, Mr C MacKenzie noted that he had been instructed to revise the draft letter by DLA, notwithstanding his concerns about the need for CEC to obtain independent legal advice [ibid]. He proposed certain comments and amendments to DLA's draft letter.
- 13.46** It appears that the proposed letter from DLA to CEC confirming the basis on which DLA agreed to provide advice to CEC was never agreed or signed. That is despite further emails from Mr C MacKenzie to Ms Lindsay in late 2007 and early 2008, asking whether a signed version of the letter was available [see emails dated 20 and 21 September 2007 from Mr C MacKenzie to Ms Lindsay, CEC01567660; email dated 7 December 2007 from Mr Fitchie to Mr C MacKenzie, CEC01545855; and email dated 18 January 2008 from Mr C MacKenzie to Ms Lindsay, CEC01400601]. It appears, from the emails dated 20 and 21 September 2007, that in response to a request for a copy of any signed letter of instruction Ms Lindsay cryptically responded: “Present situation is as advised re DLA at present.” [CEC01567660, page 0001.] Mr C MacKenzie did not understand that response, and he told Ms Lindsay so. On 18 January 2008, Mr C MacKenzie was still asking Ms Lindsay whether a duty of care letter was in place. He also gave evidence that he never saw an agreed letter of engagement [PHT00000026, pages 33–37]. CEC did not produce any signed letter to the Inquiry and, indeed, Mr N Smith (who, by the time of the Inquiry, had become CEC's Head of Legal Services) gave evidence that CEC had never found a signed letter setting out the agreed basis on which DLA would act for CEC [PHT00000005, page 147].
- 13.47** Counsel to the Inquiry suggested to Ms Lindsay that, on receipt of Mr C MacKenzie's email dated 18 January 2008, she would have been aware that the terms and conditions on which DLA had agreed to act on behalf of CEC had not been agreed and signed. Ms Lindsay denied that suggestion and stated that Mr C MacKenzie was very aware of the arrangement that had been made and that she probably regarded Mr C MacKenzie's email in January as simply another attempt to open up what had already been agreed (ie that DLA would advise CEC as well as tie) [PHT00000027, pages 44–46].
- 13.48** I reject Ms Lindsay's evidence in that regard. I consider that it is perfectly clear from the terms of Mr C MacKenzie's email of 18 January 2008 that he was not aware whether an agreement had been reached with DLA relating to the provision of legal services to CEC and, if so, what its terms were. The purpose of his email was to seek clarification of that from Ms Lindsay, together with a copy of any signed letter or agreement in that regard for record purposes. The absence of any signed letter from CEC's records justifies his concerns in that regard. It is disappointing that Ms Lindsay sought to dispute in her evidence what was the very clear meaning of Mr C MacKenzie's email. I consider that this indicated her reluctance to admit what was

essentially a failure on her part, as Council Solicitor, to ensure that a signed letter was obtained, setting out the agreed terms on which DLA would provide advice to CEC. That failure was particularly remarkable given the previous omissions to obtain such a letter in 2003, and again in 2005.

- 13.49** The foregoing paragraphs call into question the adequacy of internal due diligence within the Council Solicitor's department. Ms Lindsay ought to have been aware that she had not signed any letter of appointment on behalf of CEC. Even if she had inadvertently omitted to finalise and obtain a letter of engagement signed by both parties, she ought to have been alerted to that omission by Mr C MacKenzie's emails to her, mentioned in paragraph 13.46 above. Had she given proper consideration to them, she would have noted her omission to sign the letter and could have rectified it. Rather, her unfounded dismissal of his request for a copy of the signed letter of engagement as simply another attempt to open up discussion about the need for independent legal advice exposed CEC to the risk that DLA might claim that it was not bound by the draft letter of appointment.
- 13.50** As it transpired, that risk was avoided not by any action on the part of the Council Solicitor or departmental procedures but by a concession given to the Inquiry by senior counsel for DLA that the position of DLA was that it considered itself bound by the draft letter sent with Mr Fitchie's email of 16 August 2007, regardless of whether the letter was signed [*ibid*, page 34]. From CEC's perspective, however, it is self-evident that a signed letter ought to have been obtained that clearly set out the agreed basis on which DLA provided advice to CEC. That is particularly so given the evidence of Ms Lindsay herself. In August 2007, when she received Mr Fitchie's draft letter, Ms Lindsay was of the view that it should be revised to provide greater clarity on certain matters, including express terms that DLA was to act in, and take into account, the best interests of both **tie** and CEC and that DLA would bring any conflicts of interest to the attention of CEC [*ibid*, pages 40–42].

Discussion

- 13.51** Although legal officials in CEC reported on the existence of high-level risks relating to existing delays in design, it appears that they did not review or advise on the detailed terms of the evolving Infraco contract during 2007, and accordingly did not consider any risks arising from them. That approach can be contrasted with Mr C MacKenzie's consideration of SP4 at a much later stage in 2008, as will be discussed in Chapter 14 (CEC: January–May 2008). The result was that the only assessment of risks arising from the provisions of the draft Infraco contract that was available to CEC emanated from **tie** and DLA.
- 13.52** The culture in CEC's legal services division was not conducive to the efficient performance of its duties. Although I understand Mr N Smith's reaction to Mr C MacKenzie's email dated 27 August 2007, his failure to copy it to Ms Lindsay or to speak to her about his concerns is indicative of poor communication in the department. The same can be said for Mr C MacKenzie's evidence about whether he told Ms Lindsay about Mr N Smith's decision not to accept her instruction. He could not recall doing so, but "probably would have" [*PHT00000026*, page 44]. I have reached the conclusion that he did not tell her, otherwise it is probable that he would be able to have recalled doing so, as well as her reaction to Mr N Smith's refusal to comply with her instructions. Moreover, as he had received a written instruction from Ms Lindsay to direct Mr N Smith to undertake the work specified in his email to Mr N Smith, and as the work was of importance to the Council Solicitor, I would have expected Mr C MacKenzie to have advised Ms Lindsay of the position in writing.

- 13.53** The failure of Mr N Smith to produce the required report at any time, far less within the impossible timescale prescribed in the email, reflects badly on the management in the department. Although Mr C MacKenzie was Mr N Smith's line manager, and was aware of his refusal to act upon the instruction, he took no further action to ensure that Mr N Smith produced the report, albeit later than had been requested by the Council Solicitor. Moreover, although I have accepted Ms Lindsay's evidence that she was not aware of Mr C MacKenzie's and Mr N Smith's position that, as a matter of principle, they would not review or advise on the Infraco contract, I consider that, as Council Solicitor, she ought to have been aware of the work that the solicitors within her department were (and were not) undertaking, particularly given the high profile, and financial risks, of the Tram project. The fact that Ms Lindsay was not aware of the position of Mr C MacKenzie and Mr N Smith on such an important matter is surprising and indicates a lack of proper communication in, and management of, the legal services division.
- 13.54** It is also surprising that Mr Inch and Mr McGougan appear to have been under the mistaken impression that CEC's legal services division, including Ms Lindsay, was undertaking a greater review of the contract documentation than was, in fact, the case. That might also indicate communication failures, but I am unable to conclude who should bear responsibility for any such failures. On any view, however, had Council directors been aware of the limited role that the Council Solicitor and the solicitors in her department were undertaking in respect of reviewing the main contracts, they might have wished to reconsider whether an independent legal review of the main contracts was required in order to protect CEC's interests properly.

Concerns about the QRA process

- 13.55** **tie** followed a quantitative risk analysis ("QRA") process that involved **tie** entering the estimated cost and likelihood of more than 400 risks contained in the project risk register into specialist computer software. They then carried out a 'Monte Carlo' analysis in which software was used to undertake a range of detailed calculations to arrive at an assessment of probabilities of various out-turn costs from which a risk allowance could be derived for the project assuming a particular percentage probability.
- 13.56** As will appear from the paragraphs that follow, the difficulty for CEC officials involved in the oversight of the QRA process was that they were not in a position to verify independently whether the "inputs" to the QRA process and, therefore, the "outputs" (ie the risk allowance) were correct.
- 13.57** Mr McGougan gave evidence that CEC officials were not expected to have 100 per cent understanding of all the risks in the project that might arise, but were expected to satisfy themselves that a proper process had been undertaken, ie that, in general terms, risks (and risk owners) had been identified and mitigation plans put in place. CEC officials had an oversight of the QRA and the risk process, and the TPB considered the risk register on a regular basis. He expected the QRA process and methodology to continue to be followed until contract award [**PHT00000042**, pages 152–156].
- 13.58** Ms Andrew gave evidence that she was reliant on **tie** to ensure that the figures that it put into the QRA were correct. The key to the analysis was whether the inputs were correct. For the QRA to be an effective tool, it had to include all the project risks, and these risks had to be correctly quantified in terms of financial value and likelihood.

If the inputs to the QRA were not correct, the risk allowance was worthless.¹⁹ She felt that in the Tram project there was not the sort of proactive risk management process that she had experienced in other projects (ie whereby the risks, mitigation measures and the effectiveness of the mitigation measures were regularly reviewed and updated) and, instead, the whole focus appeared to be on the "black box" of the QRA, and the outputs from it [PHT00000005, pages 102–106; TRI00000023_C, pages 0007 and 0019].

- 13.59** Ms Andrew also stated that although the QRA in the Tram project seemed to provide a comprehensive list of the risks, she was concerned that the impact or likelihood of some of the more significant risks might have been understated. That could then have led to the understatement of the risk allowance when the statistical modelling exercise was carried out. She was also concerned that the analysis might not have taken account of risks being linked (eg if risk A occurred, the probability of risk B occurring might increase). Another of her concerns was that the management of each of the risks was not always described and she could not see a process for monitoring the effectiveness of mitigation measures [ibid, pages 0028–0029].
- 13.60** Mr Fraser and Mr C MacKenzie gave similar evidence to the effect that they did not know how the figures in the QRA had been arrived at and, essentially, had to rely on what **tie** told them. There was no independent review of **tie**'s analysis and quantification of risks [PHT00000004, pages 84–85; PHT00000026, page 107].

Independent review of risk

- 13.61** Having regard to the above concerns, and in light of the lack of internal expertise in CEC to review **tie**'s risk assessment, Ms Andrew and Mr Fraser recommended to their directors, Mr McGougan and Mr Holmes respectively, that CEC should instruct a suitably qualified independent firm of multi-disciplinary engineering, transport and project management consultants to carry out a detailed review of the risks arising to CEC from the Tram project, the quantification of these risks and whether the existing risk allowance was adequate.
- 13.62** An email dated 23 August 2007 from Ms Andrew to Mr McGougan explained:
- "We are looking for an analysis of the retained risks from the contract and what is the potential financial impact, should they materialise.
- "We don't think we have sufficient internal resource in CEC to get this, and Andrew [Holmes] and Gill [Lindsay] are both reluctant to engage external advisers ...
- "Having said that, DLA have written to say they will also act on the Council's behalf and will produce a risk matrix, which will help. However, external advice will probably give us greater comfort, particularly as DLA are using a pro forma contract, which is unfamiliar to CEC lawyers.
- "What is your view on this, and how do you think we should approach tie? We are not seeking to challenge tie's work, simply to get a better idea of the amount of Head room we need." [CEC01560815]
- 13.63** A subsequent email dated 28 August 2007 from Ms Andrew to Ms Lindsay stated that Mr McGougan was keen that CEC was able to understand the risks and quantify them as a matter of urgency [CEC01560895].

¹⁹ This will be considered further in Chapter 21 (Risk and Optimism Bias).

- 13.64** Ms Andrew gave evidence that, at the stage of the draft FBC, Transport Scotland had commissioned a similar external review and had found it useful. CEC did not have the skills in house to review **tie**'s work, and **tie** had not engaged independent advisers to review its own assumptions. Ms Andrew understood that Mr McGougan and Mr Holmes were in agreement on instructing external experts to review the project [[TR10000023_C](#), page 0027].
- 13.65** Mr Fraser gave evidence that:
- the scale and complexity of the Tram project were greater than those of any other project in which members of the "B team" had previously been involved;
 - none of the members of the "B team" had been involved in the project from the start;
 - they did not have access to confidential documents; and
 - they had to rely on advice from **tie**.
- 13.66** Mr Fraser found it slightly uncomfortable to be in that position, given the importance and value of the project and the main contracts. He felt it important that members of the "B team" understood the risks with regard to legal issues, contract matters and financial issues, so that they could better inform the directorate on what they thought were salient matters. He was of the view that an independent review by external consultants was required in order to provide the best information to councillors, who would ultimately be asked to decide whether to authorise **tie** to enter into the contracts [[PHT00000004](#), pages 30 and 43].
- 13.67** The matter was set out in a report to the IPG on 30 August 2007, as follows:
- "Currently tie is preparing the final business case. The outcome of the Government decision to make the Council 'Funder of Last Resort' significantly changes the risk profile of the Council. Consequently it will be incumbent upon the Council working with tie to determine the risks inherent in the bespoke Infraco contract ... and assess what headroom is to be recommended for budgeting purposes. The time available to do this is very short, because the FBC requires to be reported to the Full Council on 25 October 2007.
- "It can be anticipated that there will be scrutiny from members of all parties as to the affordability and liability of entering into this contract. The Council currently does not have this information, as it was not party to the development of the Infraco contract nor negotiations. Guidance is sought as to the procurement of resources necessary to provide a risk assessment and analysis of the Infraco contract for the Council ..." [[CEC01566861](#), pages 0008–0009.]
- 13.68** In an email dated 31 August 2007, Ms Andrew noted that the cost of procuring external consultants to analyse and quantify the risks in the tram business case, in order to give some comfort on the work carried out by **tie** and its advisers, was unlikely to exceed £25,000 [[CEC01566895](#)].
- 13.69** In an email dated 12 September 2007, Ms Andrew advised Ms Clark, of **tie**, that the Directors of both City Development and Finance supported the procurement of external advisers to advise upon and quantify the risks to CEC from the outstanding contracts. Ms Andrew stated in her email that the procurement of external advisers was not a criticism of the expertise or work carried out within **tie**, but simply a recognition that CEC officials did not have the appropriate experience to perform their monitoring/assurance role, particularly given the extent of the risks involved [[CEC01630955](#)].

- 13.70** On 18 September 2007, CEC published an Invitation to Tender Notice for the appointment of external consultants to review and quantify the risks to CEC arising from the proposed Infraco contract and Tramco contract [[TIE00678245](#)].
- 13.71** Mr Crosse, of **tie**, gave evidence that there was some unhappiness at **tie** when the advertisement was placed. He stated that although CEC had created **tie** as a project management company, the advertisement suggested that CEC was doubting **tie** [[TRl00000031_C](#), page 0048, paragraph 144]. An internal **tie** email dated 19 September 2007 from Mr Bissett recorded that unhappiness [[CEC01643076](#)]. In his email, Mr Bissett stated that a review by an external firm was an over-the-top and expensive option. The brief for the external consultants had been published at a very sensitive time and could be used by anyone wishing to attack the project when authorisation was sought for the FBC at the CEC meeting on 25 October. Mr Bissett's email stated that this was:
- "[a] shambles that should have been strangled at birth, or at least a week ago. We need to control this process from this point on and make sure the scope and programme are aggressively driven to minimise the wasted effort and disruption to the main programme." [[libid](#), page 0001.]
- 13.72** By email dated 24 September 2007, Mr Fraser advised Ms Clark that the Directors of City Development and Finance were in agreement with the appointment of Turner & Townsend to fulfil the brief attached to Mr Fraser's email [[CEC01652668](#); [CEC01652669](#)]. Although CEC would commission the report from Turner & Townsend, the mechanism for instructing and paying for the report was for CEC to require **tie** to do so, because all payments were made by **tie** with funds requisitioned from CEC [Mr Fraser [PHT00000004](#), pages 43–44].
- 13.73** The nature of the review envisaged by CEC officials is apparent from the expectation, expressed in the brief, that it would be undertaken "by qualified professionals with experience of similar large-scale infrastructure projects in the transportation sector" [[CEC01652669](#), page 0002]. The proposed timescale at that time for external consultants to carry out a review and prepare a report was relatively tight, given that there was a period of only a few weeks in which to provide the report before the CEC meeting on 25 October 2007. Mr Fraser gave evidence, however, that the timescale was sufficient at least to obtain an initial view from the external consultants where there was agreement with **tie**'s position and where there was a difference of opinion, if any. He confirmed that it would have been open to CEC officials (or the consultants) to have concluded that further work required to be done. In addition, a further, or follow-up, review could have been instructed as the contracts became more final, given that it was an evolving process [[PHT00000004](#), page 42]. Indeed, in Mr Fraser's email of 2 September 2007 he noted that there would require to be provision for a final review before the report to Council on 20 December 2007 [[CEC01566895](#)].
- 13.74** As with an independent legal review, I consider that a further review of **tie**'s risk assessment would have been required when the terms of the draft contracts had been agreed but before the contracts were signed, particularly if, as occurred, there were substantial changes to the documentation after the first review had been undertaken.
- 13.75** A stage 3 OGC "gateway" review of the Tram project was due to take place around this time. It appears that **tie** took the initiative in contacting the OGC review team to ask whether it could also undertake a review of the risks to CEC arising from the project (rather than that review being undertaken by a firm of external consultants, as had been CEC's intention).

- 13.76** Despite Mr Fraser's email dated 24 September 2007 advising Ms Clark that CEC intended to instruct Turner & Townsend to undertake the external review, and requesting contact details to enable him to progress the commission, Ms Clark sent an email dated 27 September 2007 to Mr Hutchinson, the leader of the OGC review team, asking whether his team would also be able to undertake a separate review of risk on behalf of CEC [CEC01567757]. By email dated 28 September 2008, Mr Crosse advised Mr Fraser that the OGC review team had agreed to add a separate assignment to its remit to undertake a risk review on behalf of CEC and that, as soon as the detail had been sorted out, he would stand Turner & Townsend down [ibid].
- 13.77** By email dated 2 October 2007 to Mr Grieve (CEC Interim Head of Transport), Ms Andrew stated that she had discovered that **tie** had engaged the OGC team to review risk, and not Turner & Townsend as had previously been understood [ibid]. Ms Andrew expressed concern that "the OGC review may be at too high a level and that our need to have comfort over the detail of the risks will not be met".
- 13.78** An OGC gateway review of the project took place on 25 September and between 1 and 4 October 2007. The OGC team produced a report of that review for the Chief Executive of CEC on 9 October 2007 [CEC01562064]. On 15 October 2007, the OGC team produced a further report, on risk, following a review carried out between 10 and 12 October [CEC01496784]. The report noted that a number of risks remained with the public sector, including those relating to delays in design or the utility diversion works causing delay to the infrastructure works. It was noted that:
- "[t]he linkage between design/approval and InfraCo is critical and will need serious attention ... It is clear that the amount of design envisaged to be delivered to support novation will not be achieved" [ibid, page 0008, paragraph 3.5.3];
- and that;
- "[o]nce FC [financial close] has been achieved fixed costs are at risk to variations in scope" [ibid, page 0008, paragraph 3.5.3].
- 13.79** In respect of the risk allowance, the review team concluded:
- "We believe that the overall headroom of £49m in the capital expenditure is a prudent provision at this stage of the project's development." [ibid, page 0004.]
- 13.80** In the evidence there was a difference of opinion about **tie**'s decision to instruct an OGC review instead of complying with the instructions of CEC to instruct Turner & Townsend. Although Mr Holmes had no recollection of any discussion about the OGC team undertaking the risk review rather than Turner & Townsend, he considered that it was reasonable to do so, given that the OGC team was very experienced and was going to undertake a review of the project in any case around that time. His view that the substitution of OGC was reasonable was conditional on the review by OGC being undertaken in terms of the brief attached to Mr Fraser's email of 24 September 2007 [PHT00000042, pages 26–27; CEC01652668; CEC01652669]. That brief included a review of the FBC, the draft FBC, the proposed Infraco contract and Tramco contract, the contract Heads of Terms and Risk Matrix prepared by **tie**'s legal advisers (DLA) and Capital Cost Estimates, incorporating best and final offers provided by bidders. In addition, meetings would be arranged with relevant personnel within CEC and **tie** as was necessary to meet the assignment objectives. Mr McGougan was also content for the review to be undertaken by the OGC team, which was experienced in the review of major public-sector projects and had experience of the Tram project, having previously undertaken gateway reviews [PHT00000042, pages 141–148].

- 13.81** Ms Andrew and Mr Fraser were of a different view. Ms Andrew explained that a review undertaken by an OGC team differed from a review by a firm of consultants such as Turner & Townsend. An OGC review was based largely on interviews with various individuals involved in the project, with limited analysis of documents. In contrast, a firm of consultants would be expected to undertake a more detailed, and forensic, examination of the project, including a detailed examination of the relevant contracts and documents [[PHT00000005](#), page 59]. She stated that she was concerned at the level of contingency in the project budget and was seeking to gain a greater understanding of the risks to determine whether the level of contingency proposed by **tie** was sufficient. She found it frustrating that **tie** was resistant to the type of independent review that she was seeking and appeared to put pressure on senior CEC management to ensure that it did not take place. Although the OGC risk review was better than no review at all, she did not consider that it went into a sufficient level of detail to give CEC the assurance that it required [[TR100000023_C](#), pages 0027–0028].
- 13.82** Mr Fraser was "slightly uncomfortable" that the OGC team was instructed instead of Turner & Townsend. When he read the OGC report on risk, he felt that it slightly underplayed the potential risk associated with design, approvals and consents being delayed. He considered that that issue was more than just a concern, and required to be addressed at the highest level. He was of the opinion that, had Turner & Townsend carried out the review, it would have gone into risk assessment in much greater detail, and undertaken its own independent review of it, which would have been invaluable for CEC [[PHT00000004](#), pages 46–49; [TR100000096_C](#), pages 0019 and 0020].
- 13.83** Mr Heath, a consultant involved in a number of OGC reviews of the Tram project including the risk review, gave evidence that a review by Turner & Townsend would probably have gone into much more detail than the OGC review and might have acted as some sort of audit on the numbers, which the OGC team was not able to do. In that sense, he considered that a review by such a company would probably have been beneficial, albeit that the length of time taken by such a review and any risk from the resultant delay might have been relevant [[PHT00000009](#), page 93].
- 13.84** In his evidence, Mr Inch said that he thought that it would have been better to obtain a review by Turner & Townsend as it had a reputation of having good specialist advisers and that, as a commercial organisation, it might bring greater clarity to the risks to CEC. However, he would have deferred to the views of those officials who had a more direct involvement in the project. In this context I infer that he was referring to Mr Holmes and Mr McGougan [[PHT00000007](#), page 169].

Discussion

- 13.85** Prior to the decision to withdraw the active involvement of Transport Scotland from the project, the necessary technical expertise required for the review of the draft FBC had been provided to CEC by Transport Scotland with support from independent professional advisers. As was noted in paragraph 13.7 above, the intention had been that Transport Scotland would be involved, along with CEC, in the approval of the FBC. After the withdrawal of Transport Scotland from that role, CEC did not put in place any procedures to assist its officials to scrutinise the FBC. I accepted the evidence to the effect that CEC lacked the necessary expertise internally to undertake a meaningful review of **tie**'s QRA and that it was essential for it to commission an external independent review.

- 13.86** Such a review ought to have been carried out for the protection of CEC's interests as the public body having the financial exposure if **tie**'s quantification of risks or if its proposed risk allowance were inadequate. CEC had no effective remedy against **tie** in that event because **tie** was wholly owned by CEC, with the result that the public purse would bear any loss arising from **tie**'s errors or omissions in the QRA. That would have adverse implications for council tax payers and businesses in the City of Edinburgh as the necessary expenditure to meet these losses or to fund any borrowing to do so would diminish the expenditure available for other local authority services.
- 13.87** Although the OGC risk review provided some reassurance to CEC, I consider that Ms Andrew was correct in her opinion that that review was at too high a level and was of too short a duration to provide what CEC required. Given the size, complexity and value of the project, the potential risks to CEC and the concerns that had been expressed, it seems to me that a longer, more detailed, forensic-type review was necessary to protect CEC's interests properly. That was what was envisaged in the brief for Turner & Townsend. In making these observations I do not intend any criticism of Mr Heath or the review team that undertook the OGC review. Mr Heath recognised that a review by Turner & Townsend would probably have gone into much more detail than the OGC review and might have acted as some sort of audit on the numbers, which the OGC team was not able to do. Although such a review would probably have taken longer than the OGC risk review, I accepted Mr Fraser's assessment that the timescale of producing a report by 14 October could have been achieved.
- 13.88** An example of the sort of review that could have been undertaken in the time available is to be found in Turner & Townsend's preliminary report on the Tram project produced after the Mar Hall mediation in March 2011 [[WED00000103](#)]. Although that review was, of course, carried out in very different circumstances and at a time when the areas of dispute that had arisen were clear, the draft report nevertheless illustrates the type of forensic review that can be undertaken in a relatively short period of time. The report consists of approximately 80 pages and was produced within a period of about 2 weeks.
- 13.89** It should also be remembered that the OGC reviews were undertaken at a time when it was hoped that CEC would approve the FBC on 25 October 2007 and that contract signature would be achieved at the end of January 2008. The OGC gateway 3 review recognised that it would be very challenging during the preferred bidder period to finalise the required list of activities and agreements as well as the areas of uncertainty of scope and price. Following both OGC reviews there were delays in contract signature due to negotiations, which continued until May 2008 when the Infraco contract was signed. If Turner & Townsend had undertaken the review originally envisaged and had expressed any reservations about the QRA or about the state of the project generally CEC could, and should, have commissioned a subsequent review of risk before the contract was signed. Even if Turner & Townsend's review had not expressed any such reservations, CEC should have instructed it to undertake a further review immediately prior to contract close if, as occurred, the negotiations extended for several months beyond the planned date for contract close.
- 13.90** In October 2007, there were already delays with design and utility diversions that could impact upon the planned progress of the Infraco works. That, in turn, might have implications for CEC's risk exposure. In these circumstances I consider that it was important for CEC to instruct a suitably qualified firm of multi-disciplinary

engineering, transport and project management consultants to undertake a detailed review of risk, along the lines of the brief drawn up by Mr Fraser. In particular, such a review ought to have covered the state of the project, the risks to CEC, the quantification of these risks and whether the proposed risk allowance was adequate.

- 13.91** Moreover, having decided to seek an independent review, CEC officials ought to have determined its nature and scope as well as the identity of the provider of the service required. The whole point of obtaining independent project assurance is that it is "independent" from the project manager. In my view it was wholly inappropriate for **tie**, as project manager, to seek to influence the identity of the reviewer or to control the process and the scope of the review, as was suggested by Mr Bissett in his email mentioned in paragraph 13.71.
- 13.92** Equally, I consider that CEC officials showed undue deference in allowing **tie** to take control of the risk review. It appears that the decision to investigate the possibility of a risk review by an OGC team instead of Turner & Townsend was taken unilaterally by **tie**. It is not entirely clear whether there was any subsequent consultation with CEC officials before instructing the OGC team or, if so, who agreed with **tie**'s decision in that respect. However, having regard to their respective responsibilities for the Tram project and their evidence to the Inquiry that they were happy for the OGC team to undertake such a review, it seems likely to have been either Mr Holmes or Mr McGougan, or both of them, if there was any prior consultation.
- 13.93** If such a review had been undertaken by Turner & Townsend, or some other suitably experienced firm of specialists, I consider that it is likely that it would have recognised the challenges identified by OGC in its gateway 3 and risk reviews mentioned in paragraph 13.78. In that event I am of the view that it is probable that it would have recommended a subsequent review immediately prior to contract signature. Mr Holmes accepted in evidence that, with the benefit of hindsight, it would have been prudent to have obtained a further independent review of risk shortly before contract award and that it was an error not to have done so [PHT00000042, page 31]. Mr McGougan, similarly, accepted that, with hindsight, a further independent review of risk, shortly before the award of the Infraco contract, is something that might well have proven to be of value [libid, page 149]. Even without the benefit of hindsight, it seems to me that there would be little purpose in instructing a review in the first instance if there was no continuing scrutiny of CEC's risk exposure as the contracts evolved between October 2007 and May 2008.
- 13.94** I consider that a further, or follow-up, independent review of risk before signature of the contract would have identified the continuing difficulties and delays with design and the utility diversion works. That is likely to have led to an examination of how these risks were dealt with in the Infraco contract. In addition, the person reviewing the documentation for this purpose would have been aware of CEC's sensitivity to price increases and its objective of maintaining the total cost of the project within the available budget of £545 million. Accordingly, any review would have considered CEC's risk exposure arising from the pricing assumptions in SP4 of that contract, which will be discussed in Chapter 14 (CEC: January–May 2008). Had that been done, CEC would have been better informed of its risk exposure and could have considered the options available to it, including delaying signature of the contract until the risks had been reduced to a manageable level, deciding to truncate the line to be built as a first stage of the project, as ultimately occurred, or deciding not to proceed with the project at that stage altogether.

Information provided to councillors

13.95 During the last quarter of 2007, CEC had to take significant decisions at its meetings on 25 October and 20 December in relation to the FBC and whether to authorise **tie** to enter into the Infraco contract and the Tramco contract. As was normal practice, senior officials provided councillors with reports to assist them in reaching their decisions. In addition, members were given other information in a number of forms, as will be discussed below. Having considered the documents and other evidence, a question has arisen as to the accuracy of the information provided to councillors to assist their deliberations. That issue will be considered in the paragraphs that follow.

CEC meeting on 25 October 2007

13.96 At the CEC meeting on 25 October 2007, councillors were asked to approve version 1 of the FBC [[CECo1649235](#), Parts 1–11]. The principal report to members, prepared by Mr McGougan and Mr Holmes, explained that the assumptions in the draft FBC held good for the FBC [[CECo2083538](#), page 0001, paragraph 2.3]. Version 1 of the FBC would be updated for any material changes arising during the final period of negotiations up to contract close, and CEC's approval would be sought on 20 December 2007 for the updated FBC, leading to contract award in January 2008 [[ibid.](#), page 0002, paragraph 2.8]. Mr McGougan and Mr Holmes also provided members with a supplementary report on the procurement of the Infraco contract and the Tramco contract [[CECo2083539](#)]. In subsequent paragraphs, references to the report are to the principal report.

13.97 The report stated that **tie**'s procurement strategy had been given the "seal of approval" by the Auditor General of Scotland, who had reported that procedures were in place actively to manage risks associated with the Tram project and that **tie** had implemented a clear procurement strategy aimed at minimising risk and delivering successful project outcomes [[CECo2083538](#), page 0005, paragraph 3.17]. The Auditor General's report will be more fully discussed in Chapter 23 (OGC and Audit Scotland).

13.98 The report noted that the SDS team had prepared preliminary designs and was currently finalising the detailed designs for all the components of the tram system. It was anticipated that the SDS contract and the Tramco contract would be novated to the provider of the infrastructure works, which meant that significant elements of the responsibility for the design and vehicle provision and the associated risks would be transferred to the private sector [[ibid.](#), pages 0006–0007, paragraphs 3.22 and 3.27].

13.99 In relation to capital costs of the project, the report observed that:

"The infrastructure costs are ... based on the fixed prices and rates received from the recommended infrastructure bidder. However, there is scope for this cost to move slightly, prior to contract close as further design work is required to define more fully the scope of the works to allow a firm price to be negotiated. There is a risk allowance to take account of these variations."

It was reported that the significant majority of contracts were either fixed price or fixed rate, meaning that any inflation costs would be borne by the contractors [[ibid.](#), page 0009, paragraphs 4.3 and 4.7].

13.100 The report explained that there was a risk allowance of £49 million, which had been calculated based on the perceived cost and likelihood of more than 400 risks in the project risk register. A statistical analysis had been carried out at a 90 per cent

probability level, which had concluded that there was a 90 per cent chance that final costs would be within the risk allowance of £49 million. The report concluded that "[t]his demonstrates a higher than normal confidence factor for a project of this scale and complexity." [libid](#), page 0010, paragraph 4.10.]

- 13.101** The report also referred to the recent reviews of the project by the OGC team, and advised councillors that the gateway 3 review had given the project the green light. Although that review recognised that the project faced a challenging period over the next three months, requiring the appointment of a preferred bidder, the finalisation of due diligence, novation of contracts and the provision of evidence of formal funding support, nevertheless **tie** had procedures and work streams in place to address these issues. In addition to the identification, allocation and mitigation of risk, described in the FBC, CEC had sought a further review from OGC to assess and quantify the risks to the project. That review had concluded that **tie**'s risk management was well developed and reflected best practice and that the current risk contingency in **tie**'s budget was sufficient [libid](#), pages 0013–0014, paragraphs 4.28–4.29].
- 13.102** The report concluded that although the total project cost estimate remained at £498 million, it was acknowledged:

"that there are a number of design related matters which have yet to be finalised but allowances have been included for these in the estimate. Consequently there is the potential for some variation to capex out turn costs. Fixed price and contract details will be reported to the Council in December 2007 before contract close in January 2008." [libid](#), page 0016, paragraph 5.3.]

Tram operations were expected to commence in February 2011.

- 13.103** Appendix 2 to the report contained the Executive Summary of version 1 of the FBC [libid](#), page 0022]. The Executive Summary stated that:
- "The procurement of the principal contracts has reached a stage where all material terms are agreed, including the capital, operational and maintenance costs." [libid](#), page 0022, paragraph 1.3.]
- 13.104** It said that the risk allowance represented a prudent allowance for cost uncertainty and reflected the evolution of design and the increasing level of certainty and confidence in the costs of phase 1a as procurement had progressed through 2006/2007 and "fixed price bids" for the Infraco contract and the Tramco contract had been received [libid](#), page 0032, paragraph 1.68]. As had been reported in the draft FBC dated November 2006, it was, again, noted that the objectives of the procurement strategy included the transfer of design, construction and maintenance performance risks to the private sector, the minimisation of the risk premium (and/or exclusions of liability) that bidders for a design, construct and maintain contract normally included to reflect the absence of a design with key consents and the mitigation of risk associated with the diversion of utilities diversion [libid](#), page 0034, paragraph 1.77]. The main risks to the delivery of the project on time and within the capital cost estimates remained those arising from the utility diversions, changes to scope or specification and obtaining consents and approvals. In relation to the utility diversion works, it was stated that the current programme of utility diversions "is fully aligned with the preferred Infraco bidder's programme of works" and that progress to date had been "excellent with no major issues encountered so far" [libid](#), page 0036, paragraph 1.85].

- 13.105** In appendix 3 to the report its authors set out the main project and operational risks [[ibid](#), pages 0042–0044]. The most significant risks affecting the timeous completion of the project within budget were, again, noted to arise from the advance utility diversion works, changes to project scope or specification and obtaining consents or approvals [[ibid](#), page 0042, paragraph 2]. Appendix 3 stated that the Infraco contract was a “substantially fixed price contract”. Any scope changes after financial close would have to be implemented using a variation order, which would add costs to the project. It was, therefore, important that changes were kept to a minimum and there were clearly defined, tight change control procedures supervised by the TPB [[ibid](#), page 0042, paragraph 4].
- 13.106** It was also recognised that designs were not yet complete and that some design assumptions might be different to the aspirations of CEC and/or other third parties (eg Forth Ports). It was noted that:
- “[i]f the designs are built into the contract at contract close and the decision is made to change them at a later date, this will lead to additional costs and potential delay” [[ibid](#), page 0042, paragraph 5].
- 13.107** It said that, in order to reduce that risk, further work would be done on design prior to contract close [[ibid](#)].
- 13.108** Linked to that risk was a risk that planning approval might not be given to the designs for reasons of visual amenity as a result of which the designs would need to be reworked. This would also result in additional cost and delay. The planning prior approvals programme was expected to be complete by March 2008, which was post contract close. To minimise the risk of planning approval being withheld post-contract close, SDS and **tie** were involving planning staff in the design process so that concerns could be addressed at an early stage [[ibid](#), page 0042, paragraph 6].
- 13.109** To supplement the report, Mr Gallagher, Mr Renilson and Mr Holmes gave a joint presentation to councillors. Mr Gallagher informed members that 99 per cent of the capital costs were now firm, meaning that they were fixed or based on agreed rates. There was very limited exposure to cost overrun if CEC and **tie** adhered to the programme and scope. Design was a private-sector responsibility, and the risk management and mitigation measures already in place included robust contracts with unambiguous risk allocation [[CEC02083536](#), pages 0014–0017].
- 13.110** In his evidence to the Inquiry Mr Aitchison described Mr Gallagher’s presentation as “upbeat and confident”. Mr Gallagher’s message was that the contract would be close to a fixed final price, with almost all risk transferred to the private sector, and that there was very limited exposure should things go wrong in the contracts. Those views coincided with the views of Mr Aitchison’s colleagues in CEC who were involved in the project. Like Mr Gallagher, they considered that the cost of the project would be about £498 million or £500 million. Mr Aitchison was reliant on his colleagues who were heavily involved in the project and he had no reason to have any different view from them [[TR100000022_C](#), page 0021, paragraph 53].
- 13.111** Members duly approved version 1 of the FBC and endorsed **tie**’s procurement process and selection of the preferred bidders for the Infraco contract and the Tramco contract [[CEC01891412](#), page 0005, paragraph 3].

Discussion

- 13.112** In considering advice given to councillors, one must remember the distinction between their roles and the roles of officials. Councillors require sufficient and accurate information provided to them by officials to enable them to take strategic decisions about a project. These include policy decisions on whether to undertake the project in the first instance and, thereafter, at critical stages, whether to continue with the project in light of evolving circumstances and bearing in mind the cost implications for the local authority's budget. It is not necessary for them to be aware of the details of every issue being addressed by officials or the company charged with the implementation of their decision to proceed with a project. In contrast to councillors, officials have the responsibility, either alone or in conjunction with the delivery vehicle (in this case **tie**), for the implementation of the policy decisions taken by councillors.
- 13.113** Information necessary for councillors to take an informed decision included issues such as the likely capital cost of the project, as well as reassurance that the procurement strategy was being achieved because that was fundamental to the degree of price certainty and aversion of risk required by CEC. Officials and **tie** had a duty to report any uncertainties or difficulties relating to such matters to CEC.
- 13.114** I have considered whether there was any failure by officials and/or **tie** or its executive chairman, Mr Gallagher, in that regard because the information provided to councillors was misleading. The statement in the Executive Summary of the first version of the Final Business Case ("FBCv1"), contained in Appendix 2 to the report, that the procurement of the main contracts had reached a stage where all material terms, including the capital costs, were agreed, was inaccurate. Although there was price certainty in respect of expenditure incurred to date, as well as confidence of achieving price certainty in the Tramco contract and agreement about certain fixed rates in the Infraco contract, the main terms, including the pricing and risk allocation provisions, and the capital costs of the Infraco contract, were not agreed at that time. They were not agreed until May 2008.
- 13.115** Moreover, Mr Gallagher's statements that the contract would be close to a fixed final price, with almost all risk transferred to the private sector, that there was very limited exposure should things go wrong in the contracts, and that the cost of the project would be about £498 million or £500 million, must have provided councillors with considerable reassurance. Unfortunately, such statements were incorrect. This aspect was considered in more detail in Chapter 10 (Events between October and December 2007).
- 13.116** However, the stage reached in contract negotiations and the context in which officials were seeking the approval of councillors are relevant, as is the other information provided to councillors. The report was seeking approval of FBCv1, which would be updated for any material changes arising during the final period of negotiations up to contract close, and CEC's approval would be sought on 20 December 2007 for the updated FBC and to proceed to contract award in January 2008. Although it was no doubt the aspiration of Mr Gallagher and CEC officials, as well as **tie**, that agreement would be reached about capital costs, it was clear that negotiations were still ongoing. Moreover, the supplementary report to CEC, seeking approval of **tie**'s selection of the preferred bidder for each of the Tramco contract and Infraco contract, confirmed that further negotiations would take place in advance of final offers being made and presented to CEC at its meeting on 20 December. That report

disclosed that negotiations in the Infraco contract would address the following issues:

- "Resolving outstanding design issues"
- "Assessing Value Engineering proposals for additional cost savings"
- "Novation of SDS and Tramco Contracts to the Infraco"
- "Finalising contract terms and conditions, including risk allocation" [[CEC02083539](#), page 0004, paragraph 3.15].

- 13.117** Nevertheless, councillors were entitled to conclude that the expected capital cost of the project was as reported to them and that if there was any significant change in that respect they would be notified of it.
- 13.118** Although the above list of issues referred to the need to resolve outstanding design issues and allocate risk, it did not mention the difficulties and delays that had been experienced with the diversion of utilities. That was an issue that could affect the capital cost of the project if **tie** failed to achieve the procurement strategy of clearing utilities from sections of the route in advance of construction work to be undertaken there by Infraco.
- 13.119** Although the supplementary report did not list the issue of the utility diversion works, the Executive Summary of FBCv1 did. It stated that **tie** would "manage the interface between utility diversions and follow on works by Infraco" [[CEC02083538](#), page 0036, paragraph 1.85]. It recognised that delay in handing over work sites to Infraco could result in significant financial penalties for which CEC would ultimately bear responsibility. To address that risk, work had started on the diversion of utilities, and progress to date had been "excellent with no major issues encountered so far" [*ibid*]. This was certainly misleading because, as was discussed in Chapter 8 (Utilities), there had been a number of difficulties and delays with the utility diversion works throughout 2007. By way of example, the monthly progress reports between October 2006 and October 2007 submitted to **tie** by Alfred McAlpine Infrastructure Services Limited ("AMIS"), the MUDFA contractor, noted concerns in relation to the lack of availability and the accuracy of Issued for Construction ("IFC") utility drawings and supporting information. In the report submitted to **tie** on 8 October 2007, relating to progress in September 2007, AMIS repeated that concern and noted that around 35 IFC detailed utility drawings were unavailable along with associated supporting documentation. In addition, in section 1A (between Newhaven Road and the foot of Leith Walk) the scope of work had increased by 134 per cent due to additional diversion works and underground obstructions not identified in the drawings supplied to them. The report noted, under areas of concern, that there was an "overall trend in relation to future emerging MUDFA works not previously identified by SDS Provider" and "[e]xcessive underground congestion of utilities and impact on cost and timescales" [[CEC01684924](#), pages 0004, 0007–0009].
- 13.120** Following the OGC risk report and prior to the CEC meeting, Mr Fraser identified three critical issues, one of which related to delays in utility diversions. In an email dated 19 October 2007 to Ms Andrew, he stated:
- "Mudfa works are behind programme which has a direct impact both on the cost of these works and the potential time thus cost impact on Infraco– action for there to be enough drawing to enable planned works to be carried out with sufficient lead time" [[CEC01399632](#), page 0002].

- 13.121** His concerns at that time coincided with the latest AMIS monthly progress report mentioned in paragraph 13.119 above. This is in stark contrast to the suggestion in the report to councillors that progress had been excellent and that no major issues had been encountered. Moreover, there was a significant risk that these difficulties and delays would become worse as the more difficult, on-street utility work sites were opened up in late 2007 and early 2008.
- 13.122** It is difficult to assess the full significance of this misstatement at that time, because the intention was that councillors would have a further opportunity to consider a report on the draft contract in December and to decide whether to authorise its signature. Nevertheless, I consider that it was unacceptable for a report to councillors to be misleading in this material respect. Moreover, insofar as **tie** was responsible for the production of FBCv1, the suggestion in that document, that progress with the diversion of utilities had been excellent and that no major issues had been encountered, was not only inaccurate and withheld from councillors relevant information when considering FBCv1, but was known by **tie** to be false. In addition, the report to the Council noted that the designers were "currently finalising the detailed designs for all of the Tram components" [CECo2083538, page 0006, paragraph 3.22] of the tram system. That statement, when read in isolation, was misleading in that it failed to inform members of the chronic difficulties and delays that had beset design, the fact that few, if any, approvals and consents had been obtained and that there remained considerable uncertainty as to when detailed design would be complete.

Events following the report to the Council on 25 October 2007

- 13.123** Members of the "B team" continued to express concerns in relation to the project. In an email to Mr Holmes dated 20 November 2007, Mr Fraser stated that the original basis for obtaining a fixed price from the Infracore contractor was that detailed design would be complete and all approvals and consents would have been obtained. The situation at that time, however, was that only some of the designs had been completed in detail, none of the designs had been technically approved and only 4 out of the 61 packages for prior approvals had been agreed. Mr Fraser suggested, therefore, that there should be a "risk premium" of £25 million to enable changes to be made post-financial close. He anticipated that the additional cost would be less than that allowance, "thus avoiding any suggestion that the costs are not in control 'Holyrood on Wheels'" [CECo1383667]. Mr Fraser explained in his evidence that the figure of £25 million was an indicative figure, arrived at by multiplying **tie**'s risk allowance of £3 million for one month's design delay by eight months [PHT00000004, page 75].
- 13.124** In his evidence Mr Fraser stated that he believed that, until the designs, statutory consents and approvals process were completed, the full cost implications for the consented and approved design would be difficult to determine and evaluate, notwithstanding the QRA. He considered that the assumptions in the QRA seemed to be based on an overly optimistic, aspirational design programme rather than the actual delivery of designs to date. The aspirations of **tie** for delivery did not reflect his experience of actual delivery by SDS for consents and approvals and he did not have confidence that the planned programmed progress could be delivered in the correct quality and quantity required under the contracts [TR100000096_C, page 0032].
- 13.125** Mr Fraser also explained that, in a fixed-price contract, any change in the scope of the work after the award of the contract results in a change in the price. If design had been completed and all approvals and consents obtained before the award of the

Infraco contract, as had originally been intended, the consortium would have known the scope of the works and would have been able to price for that. Conversely, where design was incomplete and few approvals and consents had been obtained there was a risk of uncertainty over the scope of the work that the consortium had agreed to undertake and had included in its price. The QRA that had been produced by **tie** did not align with his "intuition" that there would be scope change, with a corresponding increase in price after the award of the contract, and the risk premium of £25 million that he suggested was to illustrate that point [[PHT00000004](#), pages 70, 76 and 134–135].

- 13.126** Similar concerns were expressed by Mr Fraser at a CEC Property and Legal meeting on 20 November 2007. These included how **tie**'s QRA risk register took "full account of tie entering into a fixed price contract without having any approved designs with the Council" [[CEC01397445](#)]. There was also a concern that the final price at contract close would increase for a range of reasons, including the lack of agreed technical and prior approvals and a mismatch between the current designs and BBS' assumptions. Any variation to a fixed-price contract results in an increased scope of works and delay or disruption claims, which could prejudice a best-value outcome. Pricing by BBS was based on 60 per cent of detailed design, which was unapproved. For these reasons, Mr Fraser considered that the risk premium mentioned in paragraph 13.125 should be applied, to take account of unapproved design.
- 13.127** Mr C MacKenzie expressed similar concerns. In an email dated 4 December 2007, he advised Mr Inch, during the absence on leave of the Council Solicitor, that there was concern that it might be premature to report to councillors on 20 December, since so many issues would be qualified by the time that the report was circulated on 13 December. He further noted his understanding that, following a meeting the previous day (attended by Mr Gallagher, Mr Holmes, Mr McGougan and others), the message was that "the show must go on" at the December meeting. He indicated, however, that there remained great concern in Legal Services about the pressure to report to the Council on 20 December while so many risks remained on the table, some of which had not been quantified for CEC [[CEC01400143](#)].
- 13.128** By email dated 7 December 2007, Mr C MacKenzie sent Ms Lindsay a briefing note that had been prepared by members of the "B team". He observed that the briefing note reflected the very real concern by members of the "B team" about the Council report, including whether there should be a report to the Council at all [[CEC01400190](#); [CEC01400191](#)]. The briefing note was considered at the meeting of the IPG on 11 December 2007, which will be discussed below.
- 13.129** The minutes of a meeting of CEC's Property and Legal group on 11 December 2007 noted that concerns continued to be expressed that CEC was not clear on the scope of the works and that there was uncertainty whether **tie** was clear on the scope of the works. There required to be a fuller understanding of these matters in order to enter into a fixed-price contract [[CEC01397823](#)].

The meeting of the IPG on 11 December 2007

- 13.130** Prior to the meeting of the IPG on 11 December 2007, apart from the concerns of the "B team" mentioned in paragraph 13.128 above, other information was made available to CEC in relation to risk. By email dated 3 December 2007, Mr Hamill, **tie**'s Risk Manager, sent Mr Coyle **tie**'s QRA [[CEC01500301](#); [CEC01500303](#)] and, by letter dated 30 November 2007, DLA advised Ms Lindsay on the draft contract suite [[CEC01512159](#)]. The letter confirmed DLA's view that the contractual allocation of

risk and responsibility was broadly aligned with the market norm for UK urban light rail projects, and it provided an interim report on risk generally. There had been a "predictable hardening of stance by the consortium on matters where their position had been expressly reserved or outlined only" [ibid](#), page 0002, paragraph 1]. DLA considered that risk allocation desired by CEC might not be achieved in two areas, namely consents and third-party agreements. The primary reason for this was that the consortium considered that **tie**/CEC was "best placed to manage risk associated with certain consents and full compliance with third party undertakings" [ibid](#), page 0003, paragraph 1]. DLA considered that that was:

"also the primary reason why adjusted responsibility retention by **tie**/CEC for these matters (which are essentially a project management and stakeholder interface function) may not be unpalatable" [ibid](#)].

- 13.131** The IPG met on 11 December 2007. The report to the IPG noted that further delays to the design programme were becoming apparent, with all technical reviews programmed to complete after financial close [[CEC01398245](#), pages 0004–0005].
- 13.132** The report to the IPG included, in Appendix 3, the briefing paper noted above, setting out the concerns of the "B team" in relation to the Tram project, including whether, given the outstanding issues, there should be a report to the Council on 20 December 2007 at all [ibid](#), page 0091].
- 13.133** In the section of the briefing paper entitled 'Potential Additional Project Costs' the following observations were made:
- "3.2 It is currently unclear to CEC as to the scope of the works, the timescale of the project, and the allowance for incomplete detailed design and implication for gaining approved designs (technical and prior approvals). All the above can have potential impacts on time and costs and under this form of contract potential major cost implications because of delay and disruption to the position at financial close.
- "3.3 This form of contract was adopted 'fixed price' on the basis of complete approved designs however as this is not where we are this current position requires to be reflected in the QRA and contingency allowance.
- "3.4 The underlying concern is that while it may be achievable to reach a financial close of £498m, this will result in a major challenge in managing this during the contract. It has been confirmed by **tie** that the extension of time from the current target would have a significant impact on overhead costs on this form of contract." [ibid](#)]
- 13.134** In her evidence to the Inquiry, Ms Andrew explained that she was concerned that some of the matters in the briefing note would, or could, result in a significant increase in project cost and that **tie** appeared to be rushing to achieve contract close without resolving them. Her principal concern in that respect was in relation to design, where it was not clear how the delay would impact upon the Infraco contract, including whether the completion of design would amount to a change to the fixed-price contract, allowing the contractor to claim against **tie** and resulting in a liability for CEC. She considered that the costs could increase significantly if design changes impacted upon the programme. She did not achieve clarity on these matters before contract close in May 2008, and continued to have some concerns in that regard, despite assurances being given by **tie** that "the design was more complete than it actually was, or that more risk had in fact been transferred to the contractor in

terms of completing the design than actually was" [TR10000023_C, page 0035; PHT00000005, pages 71–72].

- 13.135** Other concerns noted in the briefing paper related to delays with the MUDFA works caused by a variety of reasons, including the failure to have signed agreements with Scottish Power and Telewest despite their urgency five months previously, as well as utility companies failing to adhere to the MUDFA programme and providing inaccurate information about the location of active pipes and cables. These delays could affect the Infraco works, as could incomplete design and lack of approvals and consents. The result could be additional risks and costs for CEC, it being noted that: "[t]he fact that design is incomplete will increase the risk of variation orders, delay to MUDFA and subsequent delay to Infraco" [CEC01398245, pages 0093–0094, paragraphs 6–7].
- 13.136** In Ms Lindsay's absence on leave, Mr C MacKenzie was not satisfied that the letter from DLA provided CEC with the comfort that it anticipated, because DLA had been acting on **tie**'s instructions and he was unclear on the extent to which they reflected CEC's best interests. The briefing paper also noted that, "Council officials do not understand the contract nor have had any independent review of the contract document" *ibid.*, page 0096, paragraph 13.4]. I observe in passing that, even if Ms Lindsay had not previously been aware that Mr N Smith was not complying with her instruction to review the contract, once she became aware of the briefing paper she knew, or ought to have known, that there was a serious problem in that solicitors in her department were reporting that they did not understand the contract.
- 13.137** The briefing paper referred to the recent receipt of the QRA from **tie** for investigation on behalf of CEC. The reduction in risk allowance from £49 million to £34 million after financial close due to risks being closed out at that point depended upon there being "100% fixed price and 100% fixed time for the contract being in place at contract close" *ibid.*, page 0092, paragraph 4]. In his evidence to the Inquiry Mr Fraser explained that:
- "while there seemed to be an impression that the risks were sitting with the private sector, there was a growing realisation that might not be the case" [PHT00000004, pages 112–113].
- 13.138** The briefing paper concluded by seeking guidance from the Directors of Finance and City Development on how the issues detailed in the paper should be reported to members, including whether, given the outstanding issues, it was appropriate for there to be a report to the Council on 20 December at all [CEC01398245, page 0097, paragraph 16]. The background to that request was the observation in an earlier paragraph of the briefing note to the effect that:
- "The Council members are committing to the biggest project it has ever undertaken and as Council officers we must ensure we are presenting them with enough information to allow them to make a competent decision." *ibid.*, page 0096, paragraph 14.2.]
- 13.139** In his evidence to the Inquiry, Mr C MacKenzie explained that he was adopting a cautious approach because information was awaited from **tie** and "there were developing risks such as the misalignment between the SDS contract and the Infraco contract" [PHT00000026, page 54].
- 13.140** From the evidence given to the Inquiry by senior officials in CEC it is clear that they took the concerns of the "B team" seriously, to the extent that they concluded that it

would not be appropriate to recommend contract close until these concerns were addressed [Mr Aitchison [PHT00000041](#), page 84; Mr Holmes [TR100000046_C](#), page 0062, paragraph 230; [PHT00000042](#), page 53; Mr McGougan [ibid](#), pages 158–162; Ms Lindsay [PHT00000027](#), page 70].

- 13.141** Either at, or shortly after, the meeting of the IPG on 11 December 2007, senior CEC officials decided that a list of deliverables would be required from **tie** to address the various concerns that had been raised by members of the “B team”. Members of CEC would not be asked to authorise the award of the contracts at the meeting on 20 December and, instead, they would be asked to delegate authority to Mr Aitchison, as Chief Executive, to authorise **tie** to award the contracts subject to price and terms being consistent with the FBC and subject to all remaining due diligence being resolved to his satisfaction. Mr McGougan considered that it was preferable to proceed in this way, as opposed to withdrawing the matter from the agenda of the Council meeting, to avoid the consequent expense of a delay of about six weeks until the next meeting. He did not see any difficulty in seeking members’ approval for the FBC in advance of every outstanding issue being resolved, provided that it would be necessary to report the matter to councillors and seek their further approval if there was a subsequent change to the FBC [[PHT00000042](#), pages 172–175].

The run-up to the CEC meeting on 20 December 2007

- 13.142** On 13 December 2007, Mr Gilbert, of **tie**, gave CEC officials a presentation on risk [[CEC01494866](#)]. The presentation slides disclosed that the risk matrices had been prepared on the basis of negotiations to date and that the negotiations for the Infraco contract were “well advanced (all ‘big ticket’ issues done)” [ibid](#), page 0004]. I am unaware of what the “big ticket” issues were, but on the same day Mr Gallagher was in Wiesbaden to attempt to agree a target price against a background of negotiations that he described as having:

“unreliable outcomes, where we would think that we’d had a discussion with them, we would think that we had an agreement with them and then when we went to the next meeting things that we thought were agreed were then re-opened by predominantly Bilfinger Berger” [Mr Gallagher [PHT00000037](#), page 49].

- 13.143** Mr Gallagher was also aware that once the target price had been agreed Bilfinger Berger would need to obtain the approval of its risk committee and the relevant Board committees [[ibid](#), page 53].
- 13.144** By email dated 14 December 2007, Mr Fraser advised Mr Gilbert of certain issues that arose from the presentation, including that the QRA did not include an adequate allowance for extensions of time and that:

“[t]he scope of the works is not clear to CEC and specifically the quality and quantity and status of designs on which BBS have based their price. Also none of the designs are approved ... hence the scope is likely to change, hence provision for this should be made.” [[CEC01397774](#)]

- 13.145** In a reply dated the same day, Mr Gilbert stated that **tie** considered that the allowances in the QRA were adequate if the mitigations referred to in the presentation and in the QRA were applied. Mr Gilbert went on:

“I have previously explained the interrelationship between emerging detail [sic] design, Employer’s Requirements and Infraco Proposals works and how price certainty is obtained out of this process and are in the process of delivering such certainty. Therefore, please advise what scope changes you anticipate arising out

of the prior approvals and technical approvals. The overall scope of the scheme is surely now fixed, is it not?" [\[ibid\]](#)

- 13.146** In his evidence to the Inquiry Mr Fraser explained that the above exchange appeared to disclose a fundamental difference in understanding of what was meant by scope and scope change. He was concerned that in Mr Gilbert's reply there was an implication that the scope was not going to change, and Mr Fraser could not see how that could be the case given the incomplete design and outstanding approvals and consents. There was a risk that, as designs were completed after the award of the Infraco contract, the contractor could claim that there had been a change in scope (with consequent cost increases) because the contract price had been based upon assumptions that had changed as a result of the completed designs [[PHT00000004](#), pages 119–120 and 135].
- 13.147** By email dated 14 December 2007, Mr Hecht, of DLA, sent **tie** an Infraco Risk Allocation Matrix together with a document comparing that version with a version provided in September 2007 [[CEC01430855](#); [CEC01430857](#); [CEC01430856](#)]. The email chain included an internal email within **tie** from Mr McGarrity to Messrs Gilbert, Crosse and Bell of **tie** and Mr Richards of TEL in which Mr McGarrity sought confirmation "amongst ourselves" that the information already provided to CEC was correct that there had been no major change in risk allocation to the public sector.
- 13.148** By letter dated 17 December 2007, DLA reported to Ms Lindsay on the draft contract suite as at 16 December 2007 [[CEC01473264](#)]. The letter again noted that "[w]ork remains to translate commercial and technical positions being settled into agreed detailed drafting ..." and that DLA considered that two areas in which the CEC desired public/private risk allocation may not be achieved were consents and third-party agreements.
- 13.149** At a meeting of the CEC/**tie** Legal Affairs Group on 17 December 2007, Mr Gallagher was noted as having reported that "the Infraco Contract is now at 97% fixed price with BBS taking on design risk" [[CEC01501051](#), page 0001]. At that date, the meeting had taken place in Wiesbaden and negotiations were under way in relation to the written agreement that followed it. The timings of correspondence were such that it is likely that it was not yet apparent to them that BBS had changed its mind and would not accept design risk.²⁰ Further negotiations were to be undertaken until financial close. Ms Clark presented a paper on the deliverables that required to be in place to allow the Chief Executive of CEC to authorise **tie** to award the Infraco contract and the Tramco contract [[CEC01501053](#)].
- 13.150** The minutes of the TPB meeting on 19 December 2007 record that Mr Holmes had questioned how the risk of programme delays, specifically due to design delays, had been allowed for in the cost estimate and that Mr Gallagher had explained that a number of factors provided comfort in that matter, including that "[n]ormal design risk is passed to BBS through the SDS novation" [[CEC01363703](#), page 0006, item 5.4]. It was also noted that Mr Holmes had requested further details on the design risk being passed to BBS and that Mr Bell would provide these details. Similarly, it was noted that Mr Holmes had expressed his concern about potential programme impacts arising from design delays and that Mr Bell would provide greater detail on how the risk was passed to BBS [\[ibid\]](#), pages 0006–0007, items 5.4 and 8.3]. The minutes of the next meeting of the TPB, on 9 January 2008, recorded that further details had been provided by Mr Bell to Mr Holmes in relation to SDS design and risk transfer. These minutes also noted that: "The discussion on risk transfer was continuing with

²⁰ See paragraphs 10.80–10.110.

BBS and progress updates would be presented to the TPB." [CEC01015023, page 0005, item 1.5.]

- 13.151** Mr Holmes gave evidence that, at the meeting of the TPB on 19 December 2007, members were given a report of the Wiesbaden meeting by Mr Gallagher and members of his staff who had been involved in the discussion. It was reported that agreement had been reached on de-risking elements that had been of concern and that premiums had been applied to different elements in return for reduction of risk. Mr Holmes stated that the fact that design development risk had been transferred to BBS was "at the core" of his understanding of the outcome of the agreement. He remembered questioning the issues noted in the minutes in relation to design and programme delay because of their criticality [PHT00000042, pages 55–59].
- 13.152** From the meeting Mr McGougan had a similar understanding to that of Mr Holmes, which was that at Wiesbaden the consortium had agreed in principle to take on design development risk [PHT00000042, page 175; TRI00000060_C, page 0027, paragraph 75]. As was noted in paragraph 13.143 above, all decisions about risk transfer to BB required the approval of the relevant risk and Board committees. Discussions in Wiesbaden had recently concluded and the relevant committees had not considered BB's risk exposure. Thus the impression created by Mr Gallagher that risk transfer for design development had been agreed by the consortium was not accurate and might have been attributable to his optimism that the necessary approval would be forthcoming.

The evolution of the report to the Council on 20 December 2007

- 13.153** Mr McGougan and Mr Holmes provided councillors with a report dated 17 December for the Council meeting on 20 December 2007, at which they sought members' approval of the second version of the Final Business Case ("FBCv2") prepared by **tie** for the Edinburgh Tram Network [CEC02083448]. The preparation of the report to the Council on 20 December 2007 was an iterative process.
- 13.154** The normal procedure with most reports to CEC on any subject was for an official within the relevant department to prepare the initial draft for review, finalisation and signature by the Director. In this case Mr Fraser, perhaps with input from Ms Andrew, prepared the initial draft and a subsequent draft, as will be discussed below. However, in reports relating to the Tram project **tie** was also given the opportunity either to comment on the draft report or to supply specific paragraphs [PHT00000042, pages 39–43].
- 13.155** In the initial draft of the report Mr Fraser expressed the view that, as a result of the negotiations and the submission of designs for technical and planning approval, final designs might be changed from the preliminary designs, upon which the final price for the Infraco contract was based. He considered that this would have cost implications and suggested including the additional risk premium of £25 million mentioned in paragraph 13.123 [CEC01384000, pages 0002–0003, paragraphs 3.3 and 4.3]. The report included sections on capital costs and risks, as well as a proposed appendix on the agreed scope of the works to be carried out by BBS and an appendix on risks. The appendix on the agreed scope of the works was left blank for completion later, and the appendix on risks was the same one on risks included in the report to the Council in October 2007 [*ibid*, pages 0003–0005, 0009 and 0011].
- 13.156** By email dated 29 November 2007, Mr McGarrity, of **tie**, provided CEC with a revised draft containing his comments and those of his colleague, Miriam Thorne [CEC01383999; CEC01384000]. In relation to the proposed additional contingency of

£25 million, Mr McGarrity commented: "ALARM BELLS ALL OVER THE PLACE. WHAT ADDITIONAL £25M???" [*ibid.*, page 0003, paragraph 4.3.] Ms Thorne commented:

"a) this gives impression cost estimate has risen by £25m & b) we should not indicate to contractors what we think their changes could be worth" [*ibid.*].

- 13.157** Following Mr McGarrity's email, Mr Fraser met Mr McGarrity, Mr Bell and Ms Clark, of **tie**, to discuss the risks arising from incomplete design and approvals, but remained unclear about how that risk would be managed, transferred or quantified. There was considerable concern within **tie** at Mr Fraser's suggestion that there should be a further risk allowance or premium for incomplete design and the risk of design and scope change after the award of the Infraco contract. Thereafter Mr Fraser met Mr Holmes, as a result of which Mr Holmes told him to compress the report. Mr Fraser disagreed with that instruction, but recognised that it was a report by Mr Holmes and Mr McGougan and that it was for them to decide on its content. He was of the view that there required to be both transparency and a sufficiently detailed report to help members to understand the complexity of the situation and to be aware of what the risks were [**PHT00000004**, pages 78–79 and 83–86]. Mr McGougan also instructed Mr Coyle to make modifications to drafts of the report [**TR100000096_C**, page 0035].
- 13.158** Although Mr Holmes gave evidence that he could not recall asking Mr Fraser to compress the report, he observed that such a request would not have been unusual because reports required to be as clear and concise as possible to assist members to understand the recommendations being made to them. The purpose of such a request would not have been intended to suppress any vital information [**PHT00000042**, pages 44–46].
- 13.159** By email dated 30 November 2007, Mr Fraser circulated a fresh draft of the report, stating:
- "I have compressed the report as requested by Andrew [Holmes] to show what can be done, however I still have concerns about the completeness of information that informs the members [sic] decisions." [**CEC01384035**]
- 13.160** In the compressed report the reference to the additional risk contingency of £25 million for design changes after financial close had been deleted. The sections on capital costs and risk were also largely deleted, as was the proposed appendix on the agreed scope of the works to be carried out by BBS and the appendix on risk. The section on risk in the main body of the draft report simply stated: "Tie to provide text" [**CEC01384036**, page 0005].
- 13.161** In an email dated 14 December 2007, commenting on the draft "compressed" report, Ms Lindsay stated: "we will need to be more explicit that further risk matters require to close prior to financial close" [**CEC01397758**]. In a later email the same day she noted that the earlier version of the report that she had been working on was much more explicit in relation to risks, and she queried whether the text had been removed and, if so, why [*ibid.*]. By email dated 15 December 2007 (which was supported by Ms Lindsay), Mr C MacKenzie suggested that the outstanding matters should be drawn to the attention of members in the report and that there should be a position statement on the extent to which design was complete, that still being a Council risk [**CEC01397776**].
- 13.162** In the event, however, as will be discussed below, the report to the Council on 20 December 2007 followed the "compressed" version of the report produced by Mr Fraser on the instructions of Mr Holmes.

CEC meeting on 20 December 2007

13.163 The report was dated 17 December and was available to members in advance of the meeting for only three days at the most, contrary to the normal period of seven days. The meeting on 20 December considered almost 40 items of business, including the Tram project. The report recommended approval of FBCv2 and staged approval for the award by **tie** of the Infraco contract and the Tramco contract:

"subject to price and terms being consistent with the Final Business Case and subject to the Chief Executive being satisfied that all remaining due diligence is resolved to his satisfaction" [[CECo2083448](#), page 0001, paragraph 1.2].

13.164 The report explained that FBCv2 was materially unchanged from FBCv1, which had been approved by members in October 2007, in respect of the scope, programme and estimated capital cost. The estimated cost of phase 1a (Edinburgh Airport to Newhaven) of £498 million, including a risk allowance, remained valid [[ibid](#), page 0001, paragraph 2.1 and page 0005, paragraph 8.2]. It also noted that detailed negotiations between **tie**, BBS and Construcciones y Auxiliar de Ferrocarriles SA had progressed satisfactorily, with negotiations having focused on novation of the Tramco contract and the SDS contract to Infraco, design matters, price and risk allocation and the construction programme. The report stated that:

"The cost estimates for the project reflect provision for evolution as the detailed design will be completed in the coming months. The design is completed under the Infraco contract from the point of award of that contract through novation of the [SDS] contract with Parsons Brinckerhoff to Infraco." [[ibid](#), pages 0001–0002, paragraphs 3.1–3.2.]

13.165 In relation to risk generally, the report recorded that:

"The fundamental approach to the Tram contracts has been to transfer risk to the private sector. This has largely been achieved." [[ibid](#), page 0006, paragraph 8.10.]

13.166 In respect of public-sector risks, a number of ongoing matters were set out in the report and work would continue until financial close to ensure an acceptable outcome for CEC [[ibid](#), pages 0006–0007, paragraph 8.11].

13.167 Risks retained by the public sector included agreements with third parties, delays to utility diversions, finalisation of technical and prior approvals, and the fact that the market could not provide professional indemnity insurance to **tie** in respect of a claim by CEC against **tie** because **tie** was wholly owned by CEC. The report noted that: "[t]he risk contingency does not cover major changes to scope". The current construction programme had been compressed to reduce the length of disruption and provide best value. However, the report recognised that "[c]hanges to the programme could involve significant costs, not currently allowed for in the risk contingency". A "substantial" risk contingency had been included in the estimate of phase 1a and there was currently further headroom of £47 million between the cost of phase 1a and the total available funding of £545 million [[ibid](#), page 0007, paragraphs 8.13, 8.16–8.17].

13.168 The expected milestones were that the Infraco contract and the Tramco contract would be awarded by 28 January 2008, construction of phase 1a would commence in February 2008 and tram operations would commence in the first quarter of 2011 [[ibid](#), page 0008, paragraph 8.19].

13.169 The report concluded by stating:

"The preferred bidder negotiations, in terms of price, scope, design, and risk apportionment, give further assurance that Phase 1a can be completed within the available funding and are consistent with the Final Business Case ... **tie** is confident that risk contingencies and the final approved design can be accommodated within the funding available." libid, page 0008, paragraphs 9.2–9.3.]

13.170 On 20 December 2007, by a majority, CEC approved FBCv2 and authorised **tie** to award the Infraco contract and the Tramco contract, subject to price and terms being consistent with the FBC and subject to the Chief Executive being satisfied that all remaining due diligence was resolved to his satisfaction [CEC02083446, pages 0018–0021].

Discussion

13.171 The report to CEC together with FBCv2 was provided to councillors within three days of the meeting. Although the option of withdrawing the report from the agenda of the CEC meeting on 20 December was raised by members of the "B team", that did not find favour with the Chief Executive and other senior officials. Although the time afforded to councillors to consider the report, as well as many other issues on the agenda for that meeting, was unacceptably short, it is difficult for me to draw any conclusions from that fact, other than that it may suggest the existence of pressure by **tie** on CEC officials to obtain approval of the FBC at that meeting. Such an impression would be consistent with the impression gained by Mr C MacKenzie that Mr Gallagher was opposed to any delay in the date of the meeting to approve the FBC. Mr Holmes gave evidence that he could not recall what different factors were taken into account when officials decided to seek approval of the FBC at that meeting rather than waiting for resolution of the concerns of the "B team" expressed in the briefing note for the IPG meeting on 11 December. However, he was aware of issues relating to construction price inflation and to the risk of losing a tranche of the grant from the Scottish Ministers if CEC failed to reach particular milestones [Mr Holmes PHT00000042, page 54]. His evidence in that respect might support the existence of pressure on CEC officials to report to CEC on 20 December.

13.172 In addition, I consider that councillors should not have been asked to approve FBCv2 until senior CEC officials had satisfied themselves that the serious concerns about the project raised by members of the "B team" in the briefing paper had been resolved to senior officials' satisfaction. Mr McGougan's justification for seeking members' approval at that meeting was to avoid a delay of about six weeks until the next CEC meeting and the consequent expense of that delay. That concern should be seen in the light of an intention – which in reality was no more than a pious hope that did not come to fruition – of concluding the Infraco contract in January 2008. Even if that had been a realistic timetable, I am of the view that the resolution of these concerns was paramount and ought to have been addressed even if it meant delay.

13.173 Although Mr Holmes accepted that, with the benefit of hindsight, members should not have been asked to approve the FBC at that stage [libid, pages 53–55 and 67–70], I consider that, even without the benefit of hindsight, senior CEC officials ought to have been aware that it was not appropriate to seek councillors' approval on 20 December 2007 while so many important issues remained unresolved.

- 13.174** The resolution of these concerns could only reasonably have been achieved by CEC's obtaining adequate independent assurance on these matters, rather than relying on assurances provided by **tie** and its legal advisers. In coming to that conclusion I have had regard to CEC's duty to protect public funds (a duty that could not be delegated to others, including **tie**); as well as other factors mentioned earlier, such as the lack of the necessary internal skills within CEC to undertake this task, the withdrawal of the expertise previously provided to CEC by Transport Scotland and the guidance discussed elsewhere in this Report on the importance of obtaining assurance of a project independent of the project manager.
- 13.175** The content of the report and FBCv2 is also a matter that I have had cause to consider in two respects.
- 13.176** The first is concerned with the involvement of **tie** in the preparation of these documents. As with the previous drafts of the business case, **tie** prepared FBCv2. There had been no independent review of **tie**'s work, and CEC did not have the skills in house to do so. In the absence of independent scrutiny of the business case it appeared to me that CEC's officials relied upon assurances provided by **tie** that the negotiations that had already taken place had sufficiently removed or mitigated the public-sector risks in the project and that there were adequate sums in the risk allowance for those risks remaining with CEC. However, it is precisely because those responsible for delivering a major project may, whether consciously or subconsciously, present an overly optimistic view of matters that there is a need for independent assurance.
- 13.177** It is clear from the evidence that **tie** was also involved in the drafting of the report to CEC. As part of its review of the draft report it removed the reference to the additional risk premium of £25 million included in Mr Fraser's initial draft. Although Mr Fraser expressed concern at that deletion from his draft, I consider that the removal of the reference to the figure of £25 million was appropriate because its inclusion in the report to which the public had access would have given BBS a commercial advantage by disclosing the amount of money that CEC had allocated to a particular risk.
- 13.178** Although it was appropriate for **tie** to make representations about the inclusion of the amount allocated to the additional risk premium the involvement of **tie** in drafting the report, including the section on risk, causes me some concern. This practice highlights the reliance of CEC's senior officials on information provided to them by **tie** without satisfying themselves about that information. As I have already observed, CEC officials did not have the necessary skills to undertake that exercise and ought to have commissioned multi-disciplinary engineering, transport and project management consultants to advise them. Without such advice they could not fulfil their duties towards councillors in advising them upon the accuracy and implications for CEC of the FBC.
- 13.179** The second respect in which I have considered the report and FBCv2 is whether the information in these documents provided to councillors for the meeting on 20 December 2007 was misleading in any respect. In the first instance I shall consider the terms of the report.
- 13.180** By the date of the report there had been a history of design difficulties and delays, but that was omitted from the report; rather, paragraph 3.2 of the report referred to the completion of the design "in the coming months" [[CEC02083448](#), page 0001, paragraph 3.2]. The report also had a table (at paragraph 8.19) showing the expected timetable of events, including financial close on 28 January 2008. Paragraph 8.1

stated that "[s]ome cost allowance has been made for the risk associated with the detailed design work not being completed, at the time of financial close" [*ibid*, page 0005, paragraph 8.1]. When these paragraphs are considered together I am of the view that the statement that detailed design would be completed in the coming months created the impression that this would occur within a few months after financial close and that some financial provision had been made for that eventuality.

- 13.181** Mr Fraser gave evidence that he was surprised by the reference in the report to the detailed design being "completed in the coming months". At that stage, progress with the designs was still very slow, and he considered that the length of time required to complete detailed design was indeterminate because the design programme kept slipping. He considered that this reference in the report was slightly misleading [*PHT0000004*, pages 129–130]. Although **tie** was advising CEC that the transfer of risk to the private sector had largely been achieved, Mr Fraser was more sceptical, and he could not understand how that could be so, given that design was incomplete and few approvals and consents had been obtained [*ibid*, page 136.]
- 13.182** Mr Holmes, who had responsibility for the report along with Mr McGougan, also gave evidence to the Inquiry about this matter. He acknowledged that the report omitted reference to the fact that design was only about two-thirds complete and that there was a chronic history of design difficulties and delays. He had been aware of that at the time of the report, but he believed that what was emerging at that time was going to "de-risk" that element [*PHT00000042*, pages 72–73]. Mr Holmes accepted that, with hindsight, the report to the Council could have said more about the outstanding risks and how they were being addressed, including, for example, in relation to CEC's understanding of the transfer of design risk through SDS novation. He said that there was no intention to mislead members, and CEC officials tried to summarise matters as they understood them at the time, and relied on assurances from **tie** that issues had been dealt with [*ibid*, page 74].
- 13.183** I do not consider that it was appropriate to omit reference to significant design delays on the basis of such assurances without subjecting them to careful scrutiny. The report should have advised councillors of such delays and thereafter explained what steps were being taken to remove or mitigate risks associated with them. Such an approach would have provided councillors with a factually correct report on design progress and would have enabled them to consider whether the proposed measures to transfer or mitigate the associated risk were adequate. In particular, they could have questioned how long it was likely to take to complete the detailed designs in view of the chronic history of difficulties and delays with design and whether the cost allowance mentioned in paragraph 8.1 of the report was adequate.
- 13.184** I agree with Mr Fraser that the report was misleading in the above respect, but I disagree with his suggestion that it was "slightly" misleading. There was no reasonable basis for asserting that design would be completed in the coming months. To make such a statement, while not making members aware of the chronic design delays, was inaccurate and misleading. The stage of the design was significant because it would affect the willingness of Infracore to accept the transfer of all design risk from the public sector to it by novation. It could also affect the terms upon which Infracore might be willing to accept such risk.
- 13.185** Apart from the issue of design, I have considered the treatment in the report of issues relating to the MUDFA works. Mr Holmes was also aware that there had been delays and difficulties with the MUDFA works, but there was no mention of them in the report. He explained that failure by stating that he had been relying on

assurances that he had received about how that work was going to be resolved and integrated with the construction programme. He said that the intention had been

“to try and summarise the case as we assumed it at the time, that on the basis of the assurances in discussions that these issues had been dealt with” [ibid, pages 73–74].

- 13.186** In my opinion, this omission was significant and misleading. The purpose of the report was to inform councillors of the situation that existed – not of what officials assumed it to be, based on assurances from **tie**.
- 13.187** Mr Holmes' explanation for omitting the reference to delays and difficulties with the MUDFA confirms my suspicion, expressed in paragraph 13.178 that CEC officials placed undue reliance upon assurances given to them by **tie** without subjecting such assurances to careful scrutiny. Where, as appears to have been the case, the expertise to test the assumptions in the business case and assurances given about it did not exist within CEC, CEC senior officials ought to have sought an independent assessment of these issues from a suitably qualified and experienced firm of multi-disciplinary engineering, transport and project management consultants to advise them. As was said to **tie** when CEC proposed to instruct Turner & Townsend in September 2007, the instruction of an independent assessment was not intended to reflect adversely on **tie**. Rather, it was designed to inform CEC officials in their scrutiny of the risk exposure of CEC. The mere acceptance of **tie**'s assurances and estimates of CEC's risk exposure even where these emanated from a company that was wholly owned by CEC was, to my mind, reckless. It failed to protect CEC's interests, particularly when one has in mind that this was the largest capital project undertaken by CEC and one of the largest capital projects in Scotland where the financial consequences of failure to deliver the project on time could be, and ultimately were, severe. An added risk for CEC was the lack of any effective remedy against **tie**, irrespective of the nature and extent of any failures by it that resulted in loss to CEC.
- 13.188** As regards FBCv2, in Chapter 10 (Events between October and December 2007), I have concluded that it contained a number of inaccurate and misleading statements. In short, these related to issues of cost, implementation of the procurement strategy, work on design, MUDFA and a flawed approach to risk.
- 13.189** The statements in the FBC to the effect that the capital costs had been agreed and finalised at a level slightly below the draft FBC estimate were untrue. The forecast that the estimated cost for phase 1a of £498 million was misleading. The price for the Infraco works had not been fixed and the transfer of risk of design had not been achieved.
- 13.190** Unlike the report, FBCv2 did mention the utility diversions at paragraph 1.85. That paragraph identified utility diversions as one of the three most significant risks. The business case proposed that **tie** would manage the interface between MUDFA and Infraco works, and it recognised that delays in handing over worksites to Infraco could result in significant financial penalties. Accordingly, work had started on the MUDFA works in 2007 and their progress to date had been “excellent with no major issues encountered so far” [CECo1395434, Part 1, pages 0019–0020, paragraph 1.85].
- 13.191** As with version 1 of the FBC, this did not reflect the reality of the situation. Prior to November 2007, the monthly progress reports relating to utilities diversions were prepared by AMIS and submitted to **tie**. They regularly reported concerns about lack of IFC utility design drawings and necessary information from utility companies. In

November 2007, **tie** had started preparing the monthly progress reports in relation to MUDFA. The first report was dated 17 December 2007 and covered the period from 10 November to 7 December. It recorded a cumulative slippage in the programme of 804 metres and 7 chambers. In addition, in section 1B (from the foot of Leith Walk to McDonald Road) there were early indications that the programme was exhibiting signs of slippage. Moreover, there was significant delay in the issue of IFC utility drawings. A graph appended to the report showed the extent of that delay. Only 44 IFC design packages had been issued, compared with an anticipated 138, representing about 32 per cent of those originally planned to be issued by that date [CEC01452199, pages 0001–0002 and 0027]. Thus, it is clear that **tie** had knowledge of such issues. CEC officials were also aware of delays and difficulties with MUDFA works, but Mr Holmes explained that he was relying upon assurances from **tie** about how these would be resolved and integrated with the construction programme. Mr Holmes stated that, with the benefit of hindsight, CEC was “not necessarily getting the full position on the utilities diversion works” and in its reporting **tie** was “being overoptimistic as to the rate of progress and the completion of the works” [PHT00000042, page 79]. I have concluded that the statement about progress of the MUDFA works in the business case was inaccurate and liable to mislead the councillors.

13.192 I also consider that the report to the Council and the FBCv2 were inaccurate and misleading in respect of the extent to which the aims of the procurement strategy had been, and were likely to be, achieved. By December, the procurement strategy had not worked and was being departed from but was presented to CEC as still being implemented. In particular, it was an important part of the procurement strategy that design and utility diversions would be completed in advance of the infrastructure works. The problems and delays with design and the utility works (which I have found were not properly reported to members) inevitably meant that it would be difficult to achieve the aims of the procurement strategy of transferring risk to the private sector and achieving a fixed price for the infrastructure works. Against that background, it was unhelpful, and inaccurate, for the report to CEC to state that the fundamental approach to the tram contract had been to transfer risk to the private sector and that “[t]his has largely been achieved” [CEC02083448, page 0006, paragraph 8.10].

Conclusions

- 13.193** As was discussed more fully in Chapter 4 (Legal Advice), I do not consider that the unsigned letters of engagement between DLA and CEC were adequate to protect CEC's interests in respect of the emerging Infraco contract.
- 13.194** The management, culture and working relationships within the Council Solicitor's department disclosed inefficiency and a lack of mutual respect by the Council Solicitor, on one hand, and Mr C MacKenzie and Mr N Smith, on the other, which were not conducive to the efficient performance of their professional obligations to provide legal advice to, and act in the best interests of, CEC.
- 13.195** Having regard to the lack of the necessary specialist expertise and experience within the Council Solicitor's Department to undertake a detailed review of the contracts for the Tram project, particularly the Infraco contract, for the purpose of identifying the main risks for CEC arising from them and in view of the financial exposure of CEC as guarantor in these contracts without CEC having any effective remedy against **tie** for any of its acts and omissions resulting in loss to CEC, I consider that CEC ought to have insisted upon being the primary client of DLA if **tie** was also to be a client.

- 13.196** Alternatively, in the absence of any agreement recognising the primacy of CEC if **tie** was also a client of DLA, CEC ought to have instructed an independent firm of solicitors to undertake a review of the risks to it arising from the draft Infraco contract as it evolved from 2007 and, in any event before its signature in May 2008.
- 13.197** Having regard to the lack of the necessary specialist expertise and experience within CEC to review **tie**'s assessment of risks I consider that CEC ought to have instructed a suitably qualified firm of multi-disciplinary engineering, transport and project management consultants to undertake a detailed review of risk in accordance with the brief specified in the Invitation to Tender Notice mentioned in paragraph 13.70. In fulfilling that brief those conducting such a review would have examined the documents specified in the brief, notably the FBC, the proposed Infraco contract and the contract Heads of Terms and Risk Matrix prepared by **tie**'s legal advisers (DLA). They would also have the opportunity to interview relevant personnel in CEC and **tie** and would have reported on the state of the project, the risks to CEC, the quantification of these risks and whether the proposed risk allowance was adequate.
- 13.198** As project manager, **tie** had no role other than to comply with CEC's instructions to appoint Turner & Townsend and to co-operate in the review as required by CEC and the reviewers. It was inappropriate, and contrary to CEC's interests, that **tie**, whose assessment of risk was to be the subject of review, was permitted to determine the identity of the reviewer and the nature and scope of the review and to overrule CEC's desire to engage Turner & Townsend. **tie**'s actions illustrated a failure on its part to recognise its obligation to act in the best interests of CEC at all times and a failure of senior officials in CEC to ensure that **tie** was complying with that obligation.
- 13.199** Had Turner & Townsend undertaken a review in accordance with the brief detailed in [CEC01652669](#), as opposed to the different high-level OGC review instructed by **tie**, they would probably have gone into much more detail than the OGC review and might have acted as some sort of audit on the numbers in the QRA.
- 13.200** The Executive Summary of the FBCv1, which formed Appendix 2 to the report to the Council on 25 October 2007, contained a number of material errors and omissions and was misleading. These included false assurances that the work to award the main contracts had reached a stage at which all material terms, including the capital costs, had been agreed; that "fixed price" bids for the Infraco contract had been received; that progress on the diversion of utilities had been excellent and that no major issues had been encountered; and the omission to mention that, contrary to the procurement strategy, detailed design was incomplete, and few, if any, approvals and consents had been obtained.
- 13.201** The report to the Council on 20 December 2007, and the accompanying FBCv2, also contained errors and omissions similar to those mentioned in paragraph 13.200 above, and was misleading.
- 13.202** More generally, I consider that, in the autumn of 2007, CEC's senior officials (largely relying upon assurances by **tie**) and Mr Gallagher provided councillors with an overly optimistic view of the Tram project, thereby inhibiting councillors from reaching properly informed decisions in relation to the project.

Chapter 14

CEC: January–May 2008

Introduction

- 14.1** As was discussed in Chapter 13 (CEC: Events during 2006 and 2007), at the meeting of the City of Edinburgh Council ("CEC") on 20 December 2007, CEC approved the second version of the Final Business Case ("FBCv2") and authorised Transport Initiatives Edinburgh Limited ("**tie**") to award the infrastructure contract ("Infraco contract") and the tram vehicle supply and maintenance contract ("Tramco contract"), subject to price and terms being consistent with FBCv2 and subject to the Chief Executive (Mr Aitchison) being satisfied that all remaining due diligence had been resolved to his satisfaction. The intention remained to achieve financial close, and the award of the Infraco contract and Tramco contract, by the end of January 2008. As was discussed in Chapter 10 (Events between October and December 2007), the agreement following the meeting in Wiesbaden on 13 and 14 December was signed on 20 and 21 December and is entitled 'Agreement for Contract Price for Phase 1A' [[CECo2085660](#), Parts 1–2]. Thereafter negotiations continued, leading to the issue of the Notice of Intention to Award ("NIA") the Infraco contract and the Tramco contract on 18 March 2008 and the signature of these contracts on 14 May 2008. The inclusion of the Tramco contract simply recognised the need to co-ordinate the signature of the Infraco contract and the Tramco contract because they were both necessary for the Tram project, and the intention was to vary the Infraco contract immediately after its signature to incorporate the Tramco contract. Thereafter the consortium would include Construcciones y Auxiliar de Ferrocarriles SA ("CAF") and be known as BSC. In this chapter I have restricted my consideration to CEC's decision to authorise **tie** to publish the NIA relating to the Infraco contract and to negotiations with the Bilfinger Siemens Consortium ("BBS") leading to the conclusion of that contract.
- 14.2** By email dated 3 January 2008, Ms Lindsay advised Mr C MacKenzie that it was imperative that CEC's legal department fully support work and progress towards delivery of the Edinburgh Tram project ("the project"). She asked Mr C MacKenzie to ensure that all possible resources relating to the project were utilised on a full-time basis to support the legal work that required to be undertaken as a matter of urgency during January and leading to financial close, which was planned for the end of that month. As was to become apparent, that timescale for concluding contract negotiations was unrealistic.
- 14.3** Ms Lindsay requested that Mr C MacKenzie have "constant interface with Dr Fitzgerald" of DLA Piper Scotland LLP ("DLA") in respect of understanding, recognising and providing instructions as appropriate concerning progress towards financial close and risk assessment of the principal contracts [[CECo1400439](#)]. Mr C MacKenzie gave evidence that he did not recall that there was much contact at all with Dr Fitzgerald during this period and that, instead, there continued to be contact with Mr Fitchie of DLA [[PHT0000026](#), pages 59–60]. This is consistent with the evidence, noted below, that, from time to time, Mr Fitchie provided Ms Lindsay with letters from DLA advising on the contract suite, together with a contract risk matrix.

- 14.4** Before considering events between January and May 2008, it is convenient to address concerns expressed by members of the “B team” in relation to **tie**'s reporting and information sharing with them throughout the project. If well founded, the significance of such concerns is that any lack of transparency and co-operation with CEC officials would interfere with the role of these officials in ensuring that the price and terms of any draft agreements between **tie** and Infracore were consistent with FBCv2 and that the interests of CEC as **tie**'s guarantor and ultimate funder of the Tram project were protected.
- 14.5** In an email dated 19 February 2008, Mr C MacKenzie advised Ms Lindsay of his concerns about **tie**'s lack of transparency and co-operation with CEC officials [CECo1400919]. Mr C MacKenzie gave evidence that, from around the summer of 2007, the “B team” had been disappointed and frustrated with **tie**'s lack of transparency and its delivery of facts and information to CEC [PHT0000026, pages 66–67]. He considered that **tie** did not welcome the role of CEC legal, that higher up within **tie** there was more than a hint of resentment of the role that CEC legal was performing, and that CEC legal was perceived to be asking awkward questions while attempting to represent CEC's interests [TRl00000054_C, pages 0108 and 0113, paragraphs 222 and 235]. He also gave evidence that, in March 2008, he did not feel that CEC was being provided with a complete picture with regard to risk, and he was taking comments from **tie** with “a pinch of salt”. His doubts were increasing, and his trust in what **tie** was telling CEC was decreasing [PHT0000026, page 72; TRl00000054_C, pages 0065 and 0067, paragraphs 142 and 144].
- 14.6** Mr Coyle expressed “concerns that CEC were not party to all the information it needed to get comfortable with the risks that were being taken” [TRl00000144_C, page 0040]. Mr Fraser gave evidence that he agreed with the views expressed by Mr C MacKenzie about **tie**'s lack of transparency with CEC [TRl00000096_C, page 0040].
- 14.7** Ms Andrew gave evidence that she had concerns about **tie**'s lack of transparency with CEC officials throughout her dealings with the company and throughout the project. There was not a systematic or proactive way for sharing important information with CEC officials, who would pick up partial information from Tram Project Board (“TPB”) papers or conversations with **tie** staff. Difficult or awkward questions could result in a complaint to CEC senior management. Ms Andrew experienced that personally when, after attending a meeting of the TPB, her superior, Mr McGougan, was approached and she was requested not to attend any future meetings. Ms Andrew considered that it felt as though **tie** did not understand that CEC's officials had a duty to question them to ensure that CEC's interests were being protected [TRl00000023_C, page 0047].
- 14.8** I accepted that these were legitimate concerns, genuinely held by members of the “B team” at the time. Mr C MacKenzie articulated his concerns in his email to Ms Lindsay on 19 February 2008 [CECo1400919] mentioned in paragraph 14.5 above. Moreover, their suspicions about the extent of **tie**'s co-operation with CEC and the completeness of the information provided by **tie** were supported by the evidence of Mr Hamill concerning his email dated 27 May 2008 addressed to Mr Bell, Mr McGarrity, Ms Clark and Mr Murray, all of **tie**, about making a manual adjustment to the quantitative risk analysis (“QRA”) to reduce the risk allocation for delay and the overall risk allocation by £1.3 million. In that email he explained that he thought that the manual adjustment helped **tie** to “get the final result past CEC as I doubt that they will notice what I have done” [CECo1288043]. He also thought that the manual adjustment was the best way to avoid “unnecessary scrutiny from our ‘colleagues’

at CEC" [*ibid*]. When asked about his reason for putting the word "colleagues" in inverted commas he explained that it was "reflective of the atmosphere and mood at the time between tie and CEC personnel" [[PHT0000023](#), page 62]. There then followed this exchange:

"Q. How would you describe that mood?

A. Well, they certainly weren't aligned. So if you think – if you like, the tie employees obviously wanted to – it was in their interest for the project to go ahead, and there was a general feeling that some of the CEC employees were – let's just say they wouldn't have been unhappy if the project had been cancelled or it hadn't got across the line.

So there was – the relationship between some of the tie and CEC people at that point wasn't – wasn't very harmonious." [*ibid*, pages 62–63.]

- 14.9** Although this event occurred shortly after the Infraco contract was signed, it is indicative of the culture within **tie** and the attitude of its employees towards co-operating with CEC. It suggests that **tie** was unwilling to share information that might have a negative effect on the project or that would cause CEC to undertake independent investigations of the contract suite and the allowance for risk. In Chapter 13 (CEC: Events during 2006 and 2007), I referred to the attitude of **tie** to CEC's publication of a notice inviting tenders for the appointment of external consultants to review and quantify the risks to CEC arising from the proposed Infraco contract. Mr Bissett's internal email dated 19 September 2007 is a clear indication of **tie**'s failure to acknowledge CEC's legitimate interest in undertaking independent scrutiny of the contract and the public-sector's risk exposure and of **tie**'s resentment at CEC's officials' attempts to protect those interests. In that email Mr Bissett referred to the decision to instruct independent consultants as "[a] shambles that should have been strangled at birth" and stated that **tie** needed "to control this process from this point on" [[CEC01643076](#)].

Events between January and 18 March

- 14.10** Following CEC's approval of FBCv2, negotiations continued between BBS and **tie** to finalise the terms of the Infraco contract. As part of the process **tie** published the NIA on 18 March 2008. As Mr Fitchie explained in his evidence, the publication of the NIA was
- "a stage beyond conferring Preferred Bidder status, which indicates that the award of the contract is imminent and that the parties have concluded all permitted negotiation" [[TR100000102_C](#), page 0221, paragraph 7.473].
- 14.11** It is a precursor to the award of the contract and affords the parties a short period to reflect upon the terms of the negotiated deal before formally committing to it. As was discussed in Chapter 11 (Contract Negotiations), it also confers certain rights on the unsuccessful bidder.
- 14.12** A question arose in the evidence concerning the appropriateness of issuing the NIA on 18 March. In his evidence Mr Fitchie stated:
- "In my experience, it is entirely outwith normal procurement management practice for the procuring party to issue a Notification of Intention to Award when the parties are still in negotiation over central contractual documentation, as was still the case on 18 March 2008. For example there was: no agreed contract price; no milestone payment schedule; no bills of quantity; no agreed master construction programme with critical path to PSCD; and no agreed post novation design delivery programme." [*ibid*, page 0029, paragraph 2.147.]

- 14.13** Mr Fitchie's statement about lack of agreement concerning essential contract terms and central contract documentation is supported by the other evidence available to the Inquiry, and will be discussed below.
- 14.14** The consequences of issuing the NIA prior to agreement on contractual terms were that it "would strengthen BBS's resolve to squeeze all the pricing and/or risk transfer concessions that they could from TIE" [[ibid](#), page 0222, paragraph 7.479] and that there was an increased risk of a procurement challenge from the unsuccessful bidder if there was an extended delay between the publication of the NIA and contract close. Mr Fitchie had advised **tie** of his views on this matter on several occasions in January 2008 and had succeeded in stalling the publication of the NIA for several months [[ibid](#), page 0222, paragraphs 7.479 and 7.481]. He stated that:
- "TIE did not appear to agree with my view that issuing the Notice of Intent prematurely would simply strengthen BBS' negotiating hand – but it did. And it impacted TIE's ability to simply withdraw BBS's preferred bidder status." [[ibid](#), page 0222, paragraph 7.481.]
- 14.15** This evidence seems to me to indicate a clear divergence of interests between **tie** and CEC. In those circumstances Mr Fitchie ought to have advised CEC of the potential conflict of interest arising at that time.
- 14.16** In considering the appropriateness of publishing the NIA on 18 March, one should also remember that entering into the Infraco contract was a reserved matter for CEC and was excluded from the delegated responsibility of the Tram Project Board for delivery of an integrated Edinburgh Tram and Bus Network [[CEC02083455](#), page_0005]. Moreover, the contract could not be signed without the authority of the Chief Executive that had been delegated to him by CEC. In these circumstances **tie** also required the Chief Executive's authority to publish the NIA as an essential precursor to the signature of the contract. His authority was circumscribed by the need for the terms of the negotiated contract to be consistent with FBCv2 and by the necessity for him to be satisfied that all due diligence had been resolved. The effect of the above considerations was that it was necessary for the Chief Executive to be made aware of the relevant terms of the negotiated contract before he could be satisfied that they did not differ in any material respect from FBCv2. Obviously, he could not be so satisfied if material conditions were still the subject of continuing negotiations. In addition, he had to be satisfied that all remaining due diligence had been resolved. In the absence of these requirements he could not authorise **tie** either to publish the NIA or to sign the contract. The need for him to be satisfied about the consistency of the contract terms with FBCv2 and the resolution of due diligence did not mean that he had to consider the relevant documents himself. He could rely upon others doing so and providing him with advice. He did so, and entrusted these tasks to the two directors responsible for the project (the Director of City Development (Mr Holmes) and the Director of Finance (Mr McGougan)) and the Council Solicitor (Ms Lindsay). The involvement of these officials in supporting the Chief Executive in the exercise of his delegated authority reflected the report by the Director of City Development and the Director of Finance dated 17 December 2007 [[CEC02083448](#), page 0007, paragraph 8.12] and approved by CEC at its meeting on 20 December 2007 [[CEC02083446](#), page 0019, paragraphs 2 and 3].
- 14.17** In the foregoing circumstances it was necessary for CEC to advise **tie** what information would be necessary to enable the Chief Executive to exercise his delegated authority. Accordingly, in an email dated 10 January 2008, Mr C MacKenzie advised Ms Clark, of **tie**, of the "deliverables" that were required to enable the

Chief Executive of CEC to authorise **tie** to enter into the Infraco contract and the Tramco contract [[CEC01485884](#)]. As was discussed in Chapter 13 (CEC: Events during 2006 and 2007), these deliverables had arisen from the concerns expressed in the directors' briefing note prepared by members of CEC's "B team" for the meeting of the Internal Planning Group ("IPG") on 11 December 2007 [[CEC01400191](#)].

- 14.18** In relation to the contracts, the deliverables included that all contract terms required to be finalised and ready to be signed, supported by a letter from DLA to the Council Solicitor, together with updated risk allocation matrices. An explanation of the risk profile was required "so as to give comfort to the Chief Executive before the Council executes the Guarantee in respect of **tie**'s financial obligations" [[CEC01485884](#), page 0001]. **tie** was also to provide a list of the items specifically excluded from the Infraco contract, with a financial value against each item, and to advise on the current status of the Multi-Utilities Diversion Framework Agreement ("MUDFA") and whether it had the potential to hold up the Infraco contract and result in an increase in costs. In relation to risk, there was a need for the QRA to be fully transparent. **tie** required to produce a summary statement on the QRA, with details of black-flag risks and the strategy for avoiding them materialising, together with an assessment of the cost of exiting them. CEC also needed details of the risk management strategy for the key risks and a detailed analysis of programme risks, together with the risk allowance for programme delay. **tie** was to produce a written statement comparing each risk as at 25 October 2007 and January 2008, explaining any changes in cash value. In relation to pricing, CEC required a detailed analysis of prices, costs and risk allowances. A statement was required of the percentage of fixed costs and the percentage outstanding as provisional sums (with a programme for moving these to fixed costs).
- 14.19** The report to the IPG on 24 January 2008 (and subsequent reports) included an appendix showing the status of the various deliverables (also called "critical contractual decisions") necessary to enable the Chief Executive of CEC to use his delegated powers to authorise **tie** to award the Infraco contract and the Tramco contract [[CEC01390618](#)]. By 17 March 2008, a number of necessary critical contractual decisions were still outstanding in respect of the Infraco contract, including the Employer's Requirements, value engineering, pricing and funding and System Design Services ("SDS") assurances [[CEC01399109](#); [CEC01399110](#)].
- 14.20** The reference to critical contractual decisions relating to pricing concerned negotiations to finalise the pricing schedule of the Infraco contract, Schedule Part 4 ("SP4"), which will be considered later in this chapter and was also considered in Chapter 11 (Contract Negotiations). However, prior to 18 March, price increases of £8 million, £3.8 million and £8.6 million had been agreed and were reflected in the Wiesbaden Agreement on 20 and 21 December 2007, the Rutland Square Agreement on 7 February 2008 and the Citypoint Agreement on 7 March 2008 respectively, all of which were discussed more fully in Chapter 11 (Contract Negotiations). Some of these sums represented the conversion of provisional sums to fixed prices, but there was an overall increase of £10 million in the price of £498 million reported to CEC on 20 December 2007.
- 14.21** Another issue that was outstanding at 18 March related to design risk and novation of the SDS contract. As was explained in Chapter 5 (Procurement Strategy), **tie** expected that, by the time that the Infraco contract was signed, the design of utility diversions would be complete; planning permissions for the most critical sections (that is, between Haymarket and St Andrew Square) would have been granted; and the design would be "60-70% complete" [[CEC01875336](#), Part 3, page 0054, paragraph 5.7.1]. Mr Kendall explained that this meant that the scope of the project

would be designed and that, insofar as design was incomplete, it would be in matters of “detailed engineering”. Had the original procurement strategy been followed, of completing design sufficiently to enable CEC to grant most, if not all, of the necessary approvals in advance of the finalisation and signature of the Infraco contract, the System Design Services contract (“SDS contract”) would have been novated to the Infraco contractors, who would retain design development risk. From January until the issue of the NIA in March, and thereafter between the issue of the NIA and the award of the Infraco contract, CEC officials sought clarification about the risks retained by the public sector associated with design delays.

- 14.22** On 7 January 2008, an update on the current status of design was given to a meeting of the CEC/**tie** legal affairs group. The meeting was advised that SDS had completed 70 per cent of detailed design and that BBS was “prepared to accept SDS under novation agreement [in respect of] (the quality of design, programme and commercial position)” [CEC01475121, page 0004]. BBS was not prepared to sign up to the risk of delays associated with consents and approvals because there was no time limit on SDS to obtain all necessary approvals, whereas the Infraco contract had a liquidated damages mechanism in place for delay. The **tie** commercial team was working through these issues with BBS, but the expectation remained that financial close would take place on 28 January 2008, with the NIA being published on 18 January to allow for the 10-day cooling-off period.
- 14.23** In the information listed in Mr C MacKenzie’s email to Ms Clark, dated 10 January, under the heading “SDS Assurances” [CEC01485884, page 0002], which is mentioned in paragraph 14.17, **tie** was required to provide CEC with a full written explanation of SDS novation, including the risks of failing to deliver design and whether that would lead to an extension of time claim and additional costs being payable to BBS. Full details were also required from **tie** of the status and degree of completion of SDS design work as at 14 January 2008, including prior and technical approvals. If approvals risk was not being transferred to BBS, CEC required to know the impact and likelihood of the risks and the strategy for managing them. **tie** was required to confirm that the public sector would not incur the cost of any delays by the planning authority or roads authority in processing prior and technical approvals.
- 14.24** The minutes of a meeting of the CEC/**tie** legal affairs group on 21 January 2008 note that Mr N Smith queried who would be liable if the SDS provider did not work to the programme, and that he was advised by Mr Crosse, of **tie**, that the SDS novation agreement would take care of that. At Mr N Smith’s request, Mr Crosse was to confirm that the agreement contained details of who would take the risk of knock-on effects of delays [CEC01476409, page 0003]. In his evidence to the Inquiry, Mr N Smith stated that it was obvious to him, from a common-sense perspective, that delays to design could impact on the infrastructure works and programme, which could, in turn, create risks for CEC, and so he asked the “daft laddie” question of who would be liable if the designer did not work to programme. **tie**’s response was to the effect that “this is all taken care of, don’t worry about it” [PHT00000005, pages 181.
- 14.25** In an email dated 22 January 2008 [CEC00481318], addressed to members of the “B team” and copied to Ms Lindsay, Mr N Smith advised of “a significant issue” in relation to which party bore the risks arising from incomplete design, approvals and consents, against the background that the design process was now more than 12 months late in delivery and SDS contractors were under no definitive timetable for the production of design (there being no penalties for non-timeous delivery in the SDS contract). He noted that although these issues were highlighted in the briefing note provided to directors for the meeting of the IPG on 11 December 2007, “the full extent of the risk

is becoming clearer as contract close gets closer with no appreciable advance is [sc. in] approvals being obtained" [libid](#), page 0006]. In an email dated 23 January 2003 (in the same chain), Mr Fraser stated that:

"Based on our confidence and experience to date we do not expect any of the submission[s] to [be] right first time and also expect a number of iteration[s] until they are acceptable. This means that each time the submission is re-submitted the clock starts again." [libid](#), page 0002.]

- 14.26** The implications of the above statement should be considered in light of Mr Fraser's statement in an earlier email on that date (in the same chain) that planners might not like the shape or form of an object even although its design complied with the minimum standards contained in the Tram Design Manual [[CEC00069887](#)] and other CEC policies and guidelines. If approval was withheld in that situation he envisaged that the additional cost from any consequent delay would be borne by CEC. In my opinion, there was a reasonable likelihood of CEC's exposure to risk arising from delay attributable to the need to change the shape or form of an object in view of the status as a World Heritage Site of those parts of the city between Haymarket and Leith Walk in the vicinity of London Road, through which the tram would travel, and the probable need for several iterations of submissions before obtaining the necessary approvals. That risk would not have existed if **tie** had followed the original procurement strategy of obtaining most, if not all, of the necessary approvals in advance of the award of the Infraco contract or if, having recognised the existence of significant delay in the completion of designs and obtaining the necessary consents, **tie** had postponed the award of the contracts until the designs had been completed and the necessary consents and approvals obtained.
- 14.27** The scale of the problem with consents and approvals is illustrated in the report to the IPG on 24 January 2008, which noted, under planning prior approvals, that, of 63 batched submissions, 1 planning permission had been granted, 8 prior approvals had been granted, a further 8 prior approvals were currently under consideration, 2 submissions had been cancelled and 44 batches remained to be submitted for prior approval (of which 26 batches were under informal consultation) [[CEC01390618](#), page 0007]. Of the batches received, a number had been put on hold, awaiting revised details from the designers. There was noted to be concern that prior approvals might have to be revisited if there were substantial changes as a result of inter-disciplinary co-ordination, technical approvals or value engineering. In addition, no technical roads approvals had been obtained and there was significant slippage in that respect. The report contained a table showing the extent of the delay to the programme for obtaining roads technical approvals based on a proposed programme (version 24) which would become the contractual programme with BBS. Comparing version 24 of the programme with the base programme (version 17), the slippage in obtaining these approvals for different sections of the route varied from about 6 weeks (41 days) to about 11 months (336 days).
- 14.28** Little progress was made in the following month, as was shown in the report to CEC's IPG on 29 February 2008. In respect of planning prior approvals it recorded that, of 63 batched submissions, 1 planning permission had been granted, 11 prior approvals had been granted, 1 application was pending consideration at planning committee, 8 prior approvals were under consideration, 2 submissions had been cancelled and 40 batches remained to be submitted for prior approval (of which 25 were under informal consultation) [[CEC01246993](#), page 0006]. It was, again, noted that a number of batches received had been put on hold, awaiting revised details from

the designers, and concern was, again, expressed that prior approvals might require to be revisited if there were substantial changes in design. In relation to technical approvals, it was noted that CEC had received 2 out of 14 roads technical approvals and that the programme for the remaining approvals was still being revised to align with the Infraco construction programme.

- 14.29** The concern at that time about CEC's exposure to risk attributable to delays in obtaining consents and approvals is illustrated by the email dated 29 January 2008 from Mr N Smith to Ms Lindsay, which included a proposed text for Ms Lindsay to send to Mr Holmes and Mr McGougan [[CEC01395151](#)]. Mr N Smith noted that only approximately 20 per cent of approvals and consents had been granted, and that
- "as CEC has no real visibility on what is being delivered in relation to the currently unapproved drawings, this opens up the possibility of significant risk of increased cost to the project" [[ibid](#), page 0001].
- 14.30** The proposed text stated that the only way to exclude that risk entirely would be to require all drawings to be approved before financial close, which would be impossible on current timescales. The proposed text queried whether these directors were of the view that CEC should accept the unquantified risk of claims for compensation from BBS as a result of that situation. It is not clear whether Ms Lindsay sent an email or a note to that effect to Mr Holmes and Mr McGougan on these matters or, if so, what their response was.
- 14.31** Ms Lindsay gave evidence that this was the first time that she had been made aware that not all of the design risk would be passed to BBS following SDS novation and that some of that risk would be retained by **tie**. She understood that if there was a delay in obtaining consents, which resulted in additional costs, BBS would require to claim liquidated and ascertained damages from the SDS contractors in terms of the novated contract, but only up to a particular cap, beyond which the exposure would lie with **tie**, and ultimately CEC as the guarantor and funder of the project. **tie** had advised that the position that it had negotiated in that regard was the best that could be achieved and that there would be additional and separate risk within the QRA to deal with that. Ms Lindsay's own instinctive view was that the proposed cap appeared small and that the allowance for that particular risk in the QRA seemed relatively modest [[PHT00000027](#), pages 84–86 and 96]. Her view did not alter prior to the award of the Infraco contract in May 2008, although she acknowledged that it was just an instinctive view. She had no specialist knowledge of, or role in, financial and technical matters and deferred to the two responsible directors on such matters, namely the Director of Finance and the Director of City Development [[ibid](#), pages 97–98, 119–121 and 125].
- 14.32** By email dated 19 February 2008, Mr C MacKenzie provided Ms Lindsay with an update following the meeting of the legal affairs group the previous evening [[CEC01400919](#)]. He noted that the position regarding novation of the SDS contract had been given next to no clarification at the meeting, with a contradictory explanation having been given by **tie**.
- 14.33** By email dated 22 February 2008, Mr Bissett, of **tie**, circulated a draft paper on "SDS – DELIVERY AND CONSENT RISK MANAGEMENT", setting out how it was proposed to address the risks arising from the overlapping design and construction periods and the outstanding approvals and consents [[CEC01474243](#); [CEC01474244](#)]. The draft paper noted that **tie**/CEC were exposed to risks relating to timeliness of submission of design and/or quality, which could be heightened by deliberate or inadvertent

actions by BBS/SDS. In summary, it was proposed that these risks would be controlled by management processes (led and directed by **tie**/CEC) and by focusing on the key elements of design, which had been subject to prioritisation to mitigate their risk profile. The combination of controlling the management process and focusing on the key elements of the residual risk were considered to constitute "an effective risk mitigation framework". In addition, there was a risk contingency of £3 million in the QRA, which related to the approvals and consents risks described in the paper.

- 14.34** Mr Fraser gave evidence that although he welcomed the fact that steps were being taken to minimise the design risk, he remained of the view that the allowance for that risk required to be substantial (provisionally, £25 million), and that it was difficult to understand the justification for having an allowance for that risk of only approximately £3 million [[TR100000096_C](#), pages 0042–0043].
- 14.35** In an email dated 28 February 2008 [[CEC01400987](#)], Mr C MacKenzie advised Ms Lindsay of his concerns that there had been a number of changes since the report to the Council in December 2007 and that there was a need for the Chief Executive to seek the fresh authority of members at the CEC meeting on 13 March to allow him to authorise **tie** to enter into the Infraco contract and the Tramco contract. That did not occur. There is no reference to the project in the agenda for, or minutes of, that meeting [[CEC02083387](#); [CEC02083388](#) Parts 1–4]. In that email Mr C MacKenzie also identified SDS novation and the costs of dealing with it as the "number one risk for the Council". He explained that it was unclear what the financial and legal implications were for CEC "because the Council is not kept fully advised of ongoing discussions between **tie**, SDS and BBS" [[CEC01400987](#), page 0003].
- 14.36** In a reply dated 29 February 2008, in the same chain, Ms Lindsay advised Mr C MacKenzie that, essentially, matters were unresolved in relation to SDS and novation. She stated:
- "My concerns are around the robustness of risk and contingency as although I accept there are movements from risk to price and closing of ... some risks, I believe that the residual risk re SDS may be very significant and I understand we still have no figures to assess this ... The previous level of around £3m is appearing to me grossly undervalued depending on final position. I agree fully with Donald that we need the best contract and if more money is required for the contract sum that is more easily dealt with as it is a defined figure. I am also concerned re timetable to close and whether we can close to an award of notice stage by 10 March in current circumstances." [[ibid.](#), page 0002.]
- 14.37** While Ms Lindsay stated that she had no knowledge of, or responsibility for, financial matters and deferred to the two responsible directors, Mr McGougan and Mr Holmes, her instinctive reaction supports the evidence of Mr Fraser that £3 million was a gross underestimate of the allowance for design risk.
- 14.38** On 10 March 2008, Mr Bissett circulated the "approval supporting documents", comprising an updated draft Close Report and a DLA report, letter and risk matrix [[CEC01393819](#); [CEC01393820](#); [CEC01393821](#); [CEC01393822](#)]. Mr Bissett stated that the main outstanding areas in the draft Close Report included the section on the pricing schedule (which was being finalised) and the appendix on design and consents (which would require to be updated to the final position on submission and consent status).

- 14.39** In an email dated 11 March 2008 [CEC01393838], addressed to Mr Bissett, Mr Holmes, Mr McGougan and Ms Lindsay as well as members of the “B team”, Mr C MacKenzie advised that members of the “B team” had met to consider the documents supplied by Mr Bissett, as a result of which they were not yet in a position to advise their directors and heads of service that they could recommend to the Chief Executive that he should exercise his delegated authority to authorise **tie** to award the contracts. Mr C MacKenzie listed a number of crucial points that remained outstanding, including the need for more details on price and value engineering and the settled position on SDS novation. As was explained in paragraph 10.25 relating to events in December 2007, value engineering was a means by which it was hoped that savings could be made on the contract price without compromising the functioning of the works.
- 14.40** By email dated 11 March 2008 [CEC01490289], Mr Coyle advised **tie** that before CEC could approve the issue of the NIA for the Infraco contract and the Tramco contract, CEC required a letter from Mr Gallagher stating that **tie** considered that the deal with BBS/CAF represented value for money on price, scope and programme and that it was the appropriate time to issue the NIA. He also stated:
- “Assurance is also required on the outstanding risks and that the level of risk allowance, as determined by the QRA is appropriate ... and that the price is now fixed (excluding know(n) estimated costs).” [ibid]
- 14.41** By letter dated 12 March 2008 [CEC01399076], Mr Gallagher advised Mr Aitchison that a thorough review of the key contracts and issues had been given to the TPB. The TPB had concluded that the final terms negotiated were consistent with the terms set out in the FBCv2 approved in December 2007 and had confirmed the value-for-money proposition demonstrated by the FBC. **tie** was, accordingly, of the view that it was appropriate to issue NIAs for the Infraco contract and the Tramco contract.
- 14.42** By email dated 13 March 2008, Mr C MacKenzie advised Ms Lindsay that he had concerns about giving **tie** authority to issue the NIAs [CEC01399075]. He found it hard to agree with the statement in Mr Gallagher’s letter that the final terms negotiated with BBS were consistent with the FBC approved by the Council in December 2007, given that the price had risen by £10 million since then, the project timetable was now three months later than predicted, and the risk on consents had not been assumed by the private sector. Mr C MacKenzie stated that he would be uncomfortable if these facts were not made known to councillors, or at very least to group leaders, before the Chief Executive authorised **tie** to issue the NIAs.
- 14.43** By email dated 13 March 2008 [CEC01474537], Mr Bissett provided Ms Lindsay with an update on various matters, with a view to issuing the NIA the next day at the latest, assuming that a robust position on the outstanding Infraco issues could be achieved. Mr Bissett noted that delay in issuing the notice would diminish **tie**’s negotiating credibility and, even more fundamentally, would jeopardise the chances of completing the contract in time to crystallise the 2006/07 funding from Transport Scotland, which would create a range of possible difficulties for achieving close on the agreed financial terms and put substantial borrowing pressure on CEC. The reference to 2006/07 appears to me to be an error and must relate to 2007/08, which was the then current financial year. Mr Bissett attached a short note on the QRA and risk allowance [CEC01474538]. The note explained that the total risk allowance provided in the QRA in respect of the continuing consents and approvals risk was £3.3 million, which equated to the cost of some three months of BBS standing time and was considered adequate by **tie**’s management in the context

of the number and criticality of the consents still to be delivered, the liquidated damages available to BBS from SDS in the event that the delay was caused by SDS, the responsibility of BBS to mitigate the costs of any delay and **tie**'s close management of the process beyond financial close.

- 14.44** By email dated 17 March 2008 [[CECo1399109](#)], Mr Coyle circulated an updated version of the spreadsheet [[CECo1399110](#)] setting out the deliverables required for Mr Aitchison to authorise **tie** to award the Infraco contract and the Tramco contract. The recipients included Ms Lindsay and Mr C MacKenzie. The spreadsheet indicated that a number of deliverables remained outstanding, including, in relation to the contracts, the Employer's Requirements, value engineering, pricing and funding and SDS assurances.
- 14.45** On 18 March 2008, DLA sent a further letter to the Council Solicitor, advising on the draft contract suite as at 13 March 2008 [[CECo1347796](#)]. The letter contains five numbered paragraphs. In the first, dealing with the core Infraco and Tramco terms, it stated:
- "There has been measured progress in closing out the core provisions, despite extreme time pressure and interruption for detailed commercial discussion. **tie** has achieved a level of closure and agreement which will support the notification of intent to award letters being dispatched today." [[ibid](#), page 0001.]
- 14.46** It explained that: **tie** had advised that both SDS and BBS were content that the Employer's Requirements were now in an acceptable form and detail to be used as a contractual scope; final Infraco proposals had been received; a project master programme had been agreed; and execution of the Network Rail Asset Protection Agreement was confirmed.
- 14.47** In the third numbered paragraph, under the heading "FURTHER TASKS", the letter stated:
- "We understand that **tie** will confirm settled pricing for all major fixed price elements of the Infraco Contract. If **tie** has achieved these objections [sic] and BBS has been able to confirm its commitment to abide by these positions, **tie** should have every confidence in closing the contract suite efficiently, commencing with the issue of notification of intention to award today. We would stress that full cooperation of the BBS Consortium on this objective is essential." [[ibid](#), page 0002.]
- 14.48** Although this suggests that DLA understood that there had been agreement on price for all major fixed-price elements of the Infraco contract that remained to be confirmed by **tie**, that was dependent on BBS's commitment to abide by such agreement. These qualifications, particularly the latter, introduced an element of uncertainty. Moreover, Mr Fitchie confirmed in his evidence that at that date there was an absence of an agreed contract price, as well as other outstanding issues. Whatever **tie**'s understanding or expectation may have been at 18 March, subsequent events, including the demand for additional sums prior to contract signature and the terms of SP4, established that Mr Fitchie was correct in his evidence that there was an absence of agreement about the contract price. In view of his evidence, mentioned in paragraph 14.12 above, it is surprising that he considered that the level of agreement reached supported the NIA being issued on 18 March. This letter omits any reference to his concerns that it was premature to do so.

- 14.49** On 18 March 2008, Mr Holmes, Mr McGougan and Ms Lindsay provided a short note to Mr Aitchison, confirming that it was appropriate to accept **tie**'s recommendation to authorise **tie** to issue NIAs in relation to the Infraco contract and the Tramco contract [[CEC02086755](#)]. The note stated that the final contract price was now £508 million and that the risk contingency had been reduced from £49 million to £33 million as part of the closure process. There had been a three-month extension to the programme and a range of adjustments to the risk allocations. Many of the adjustments to risk allocation were positive, but others had transferred risk to the public sector including risks relating to SDS. Referring to the need for the immediate issue of the NIA, the note stated:
- “We are also advised by **tie** ... of the requirement to immediately lodge the Notice of Intention to Award and the financial and commercial risks which will accrue to the Project if this is not done immediately, with particular reference to the period of 10 days from lodging of Notice of Intention to Award to contract signing and the financial advantage of signing and booking expenditure prior to 31 March.” [[ibid.](#), page 0002.]
- 14.50** The above passage tends to suggest that the ability to requisition funds from Scottish Ministers during the financial year ending 31 March 2008 depended upon the signature of the Infraco contract and the Tramco contract before that date and not merely the NIA. The Tramco contract and Infraco contract were not signed until 13 and 14 May 2008 respectively. There was no evidence before the Inquiry that suggested that Scottish Ministers did not make payment of the total grant of £500 million, despite the delayed signature of the contract.
- 14.51** Despite the fact that the price had increased by £10 million and risks, including those relating to SDS, had been transferred to the public sector, Mr Aitchison duly authorised **tie** to issue NIAs for the Infraco contract and the Tramco contract. His delegated power to do so was circumscribed by conditions that the price and contract terms had to be consistent with the FBCv2 approved by CEC on 20 December 2007 and that all remaining due diligence had been resolved to his satisfaction. Apart from the inconsistency between the price and contract terms negotiated by that date and the FBC, it was not possible to resolve all due diligence at that stage because the contract terms, notably the price, had not been finalised. Accordingly I have concluded that his authorisation to issue the NIAs exceeded Mr Aitchison's delegated powers. He ought to have reported the changes in price and risk allocation to councillors to ascertain whether they were willing to amend his delegated powers. The notices to award the Infraco contract and the Tramco contract were issued by **tie** on 18 March 2008 [[CEC01314422](#); [CEC01314423](#)].
- 14.52** Apart from Mr Fitchie's evidence about the inappropriateness of issuing an NIA where crucial contract terms were still the subject of negotiation, as noted in paragraph 14.51 above, the obligations imposed upon the Chief Executive on 20 December 2007 required him to be satisfied that the price and terms of any contract were consistent with FBCv2 and that all due diligence had been resolved. Only then could he authorise **tie** to issue the NIA and enter into the contract with Infraco. In the exercise of his obligations in this regard the Chief Executive relied upon advice from the two responsible directors and the Council Solicitor. To fulfil their role in supporting the Chief Executive in this respect, these officials required relevant information from **tie**. However, it was not sufficient for them to accept information and assurances from **tie** without undertaking independent scrutiny of the contract terms. Moreover, it was essential that **tie** was frank in its dealings with CEC and provided CEC officials with full disclosure of relevant facts to enable them to assess whether to advise the Chief

Executive to authorise **tie** to issue the NIA and ultimately sign the Infraco contract. As noted in paragraphs 14.4–14.8 above, it is apparent that **tie** did not display such candour in its dealings with CEC.

- 14.53** Even if there were no issue about the accuracy or completeness of the information provided by **tie** to CEC, it was still necessary for CEC officials to scrutinise the information to satisfy themselves that the proposed agreement met the requirements of the resolution of 20 December 2007 before the Chief Executive could authorise **tie** to issue the NIA and ultimately sign the Infraco contract. Mr C MacKenzie, Ms Andrew and Mr Coyle were each of the opinion that it was not appropriate to issue the NIAs, but they recognised that the ultimate decision rested with the Chief Executive, as advised by the responsible directors and the Council Solicitor. It is, therefore, important to understand what steps were taken by the Chief Executive, Director of City Development, Director of Finance and the Council Solicitor before authorisation was given to **tie** to issue the NIAs.
- 14.54** During his evidence Mr Aitchison stated that he had relied upon discussions at the IPG and briefings that he had had from his colleagues, as well as the professional advice from his colleagues to whom he had delegated the task of being satisfied professionally that what was being proposed was in the best interests of CEC. In addition, **tie** had provided a letter confirming that it was appropriate for the NIAs to be issued. Nevertheless, he confirmed that, when the NIAs were issued, he was aware that contract terms had not been finalised and that agreement on the pricing schedule had still to be reached. He knew that CEC was accepting the additional risk of design delay which was not within CEC's control, but that was judged to be financially relatively small and time-limited based upon the assertion (which proved to be wrong) that design would be completed within a few months. He also accepted that the retention by the public sector of significant risks arising from SDS delay was a departure from the procurement strategy and the FBC. Councillors were not formally told, before the NIAs were issued, that CEC had accepted risks arising from SDS delay, nor were they ever told that the retention of that risk by CEC either was, or might be, inconsistent with the FBC [PHT00000041, pages 103–109]. Accordingly, it is clear that, on the basis of his knowledge at the time, Mr Aitchison should not have authorised **tie** to issue the NIAs, irrespective of the advice tendered by Messrs McGougan and Holmes and Ms Lindsay.
- 14.55** Nevertheless, the signatories of the note to Mr Aitchison confirming that it was appropriate to accept **tie**'s recommendation to authorise the NIA's must also bear some responsibility for Mr Aitchison's actions, as he relied upon their professional expertise, and I consider it highly unlikely that he would have granted the authorisation to **tie** without such a note. It is thus relevant to consider what investigations they undertook before signing the note to him.
- 14.56** Mr Holmes gave evidence that there would have been extensive discussions, including with his support staff, before he signed the note to Mr Aitchison, and that he could not imagine having signed the note if unresolved concerns remained. The discussions would also have included Ms Lindsay as to the appropriateness of the agreement that was being concluded. In relation to whether any independent checks were carried out by Mr Holmes, Mr McGougan or Ms Lindsay, Mr Holmes stated that the checks were just CEC's own questioning of **tie**, CEC's own understanding of the contract and the information that CEC had received. It was internal due diligence rather than engaging an independent third party to review these matters. He stated that while he would have tried to satisfy himself that what he was being told was

correct, a point would have been reached where he would have had to believe what he was being told [PHT00000042, pages 93–95 and 115–117]. It is apparent that the internal due diligence did not provide CEC with the same protection and reassurance as a review by an independent firm of professionals with experience of similar large-scale infrastructure projects in the transportation sector. CEC officials did not have the same experience or expertise to scrutinise the documentation or to challenge **tie**'s assumptions or optimistic assertions as independent experts would have had. For example, CEC officials did not see a draft of the SDS novation agreement before the issue of the NIAs, and Mr Holmes must have relied upon assurances given by **tie** as to its effectiveness in transferring design risk to BBS. This was despite an email dated 18 March 2008, which was copied to Mr Holmes, stating that the NIAs should not be issued until four issues had been addressed, including that a copy of the SDS novation agreement required to be provided by **tie** [CEC01401041; TR100000096_C, page 0048]. It is inconceivable that an independent firm would have recommended proceeding without having seen and considered such a document to assess the risk exposure of CEC.

- 14.57** Mr Holmes accepted that the retention by the public sector of risks arising from SDS delay was a departure from the procurement strategy and the FBC. He considered that CEC officials must have **"assumed"** (emphasis added) that the retention of that risk was covered by the risk contingency. The possibility of delaying the procurement process to enable designs to be completed and approvals and consents obtained was not really discussed because of concerns about the continuing availability of the grant from Scottish Ministers if there was such delay. He remembered being told that if grant was not taken up in that financial year it would be lost. There were also concerns in relation to construction price inflation. In short, there was always a worry that a long delay would be counterproductive in that money would no longer be available to complete the project [PHT00000042, pages 95–109]. These concerns, whether realistic or not, were not relevant considerations for officials charged with the responsibility of ensuring that the price and terms of the contract documents were consistent with FBCv2 and that all due diligence had been completed to their satisfaction. The political and financial implications of delay to secure that objective, including the potential loss of grant allocated to the then current financial year, and any relevant strategic decisions were matters for the consideration and determination of councillors, not officials.
- 14.58** Mr Holmes retired from CEC on 1 April 2008. When he left, his understanding was that the Infraco price was largely fixed, apart from any issues that might arise from the consents process, which he assumed was manageable by CEC. With the exception of residual risks relating to consents and approvals, he understood that the vast majority of the design risks would be novated to the Infraco contractor and that that was reflected in the Infraco contract and the contract sums [*ibid*]. When he retired the contract terms, including the price, had not been finalised, and his understanding can only have been based upon assurances that he had received from **tie**. This is a clear illustration that senior officials in CEC, including Mr Holmes, failed to undertake the necessary independent scrutiny of the proposed contract terms to satisfy themselves that they were consistent with FBCv2 and the report to CEC on 20 December 2007. He should not have confirmed that the Chief Executive could authorise **tie** to issue the NIAs.

- 14.59** Mr McGougan gave evidence that there was frustration with the consortium at that time for not closing out negotiations, and that one of the reasons for issuing the NIA was to try to “encourage them towards the finish line” [PHT00000043, page 5]. That consideration seems to me to be inconsistent with the obligation to ensure that the price and contract terms were consistent with the FBC. Mr McGougan could not remember whether, before signing the report to Mr Aitchison, he had checked that all the outstanding matters identified in the director’s briefing note to the IPG on 11 December 2007 had been resolved. He was aware that Ms Andrew and Mr Coyle still did not feel that they had 100 per cent understanding of all the risks that might attach to the contract and to the project. Mr McGougan himself did not have 100 per cent understanding of all the risks that arose from the contract (not having read the contract and not having been in a position to understand it even if he had read it). He was relying on the processes that had been gone through, the reviews that had been undertaken, the professional advice from industry expert firms and the commercial experience and abilities of **tie**. CEC was relying on **tie** and DLA to a very significant extent [*libid*, pages 5–11]. As Director of Finance he had responsibility for considering and advising upon risk allowance. His evidence that he was aware that officials within his department, and he himself, did not have a complete understanding of the risks arising from the contract, for which CEC would bear ultimate financial responsibility, demonstrates the extent to which he was relying upon assurances from **tie**. The fact that CEC was relying upon **tie** and DLA to a significant extent in this regard illustrates that the internal exercise undertaken by senior CEC officials was woefully inadequate as independent scrutiny of the contract suite.
- 14.60** Mr McGougan accepted that the retention by the public sector of potentially significant risks arising from SDS delay was a departure from the procurement strategy and from the FBC. He agreed that members ought to have been advised of these matters. There was £3.3 million for retained design risk in the risk allowance, and mitigation measures were in place. The option of delaying the award of the contract was not put to councillors. He considered that if the project had been delayed to allow design to be completed, and approvals and consents obtained, there was the potential for re-procurement, and the project was likely to have been cancelled given the political environment at that time [*libid*, pages 12–13, 18–20 and 29–33]. Although **tie** wished to proceed with expedition to avoid cancellation of the project and potential loss of grant payments from Transport Scotland, it put BBS into a strong negotiating position by issuing the NIA prematurely and exposed CEC to increases in the contract price. Insofar as Mr McGougan, as Director of Finance of CEC, shared **tie**’s concerns about loss of grant payments and was apparently persuaded to support the publication of the NIA for that reason he was in error. As will be discussed in paragraph 14.61 below, **tie**’s concerns in that regard appear to have their foundation in speculation by Mr McGarrity of **tie**. Before basing his decision on such concerns Mr McGougan ought to have clarified the position with officials in Transport Scotland. This is an example of his reliance upon assertions by **tie** without making any independent check about their accuracy. Moreover, the consequences for the future of the project of the possible loss of grant funding, in whole or in part, and the available options were strategic issues for determination by councillors, not officials.
- 14.61** **tie**’s concerns in March 2008 about possible loss of grant funding from Scottish Ministers appear to have their derivation in an email exchange dated 4 and 10 March between Ms Andrew, of CEC, and Messrs McGarrity and Hamill, of **tie** [CEC01506128]. In her email dated 4 March Ms Andrew sought **tie**’s response to a number of issues, the second of which was a comparison of the risks of delaying contract signature with the risks of signing the contract when items in the matrix were unresolved. In his

email dated 10 March Mr McGarrity explained that his responses had been added to Ms Andrew's email. The response to her second issue envisaged a delay in contract signature until September to enable design completion and estimated the cost of inflation to be between £15 million and £20 million. However, he added:

"More likely is that either BBS or the TS funding or both would walk away and we'd have no project." [libid](#), page 0002.]

- 14.62** Ms Andrew gave evidence that she did not think that additional delay would have meant Transport Scotland cancelling financial support for the project, as she thought that it would have been supportive of measures to reduce risk and increase cost certainty. She also pointed to the fact that slippages earlier in the project had been tolerated [[TR100000023_C](#), page 0049]. Her reasoning appeared to me to be more persuasive than Mr McGarrity's speculation about the possibility that Transport Scotland would withdraw all grant support, particularly when one has regard to the decision of the Scottish Parliament in June 2007.
- 14.63** Ms Lindsay gave evidence that she required to satisfy herself, in respect of legal matters, that it was appropriate for Mr Aitchison to authorise **tie** to issue the NIAs. She was not involved in commercial, pricing or financial matters. These were matters upon which Mr McGougan had to be satisfied, including whether, by that stage, the price had been fixed. While Ms Lindsay was not involved in the composition of the contract price, she would have wanted to know the overall project cost, including the overall figure for risk, to ensure that CEC officials acted within the authority delegated by CEC. There was a drive by CEC directors and **tie** to issue the NIA quickly, because of a desire to meet the funding deadline of 31 March 2008. Her clear understanding was that legal matters had been closed; there was sufficient certainty in respect of other matters; the Chief Executive, the leader of CEC and the two directors clearly wished the matter to proceed; and she did not have any information about inconsistency between what had been agreed and the FBC. She accepted that, with hindsight, it would appear that the NIAs were issued prematurely, albeit that she did not have enough experience to know, in a contract of this sort, whether one would still expect some variation in prices prior to contract close, and to what extent [[PHT00000027](#), pages 103–120 and 145].
- 14.64** Ms Lindsay was asked whether she considered that the risk retained by the public sector in relation to design delay was consistent with the FBC, and replied that she had only a "very, very general" understanding of the FBC and that, insofar as the FBC required a price and a QRA to fall within a certain price then, as long as the risk of design delay was contained within the QRA, she would have considered that the retention of that risk by the public sector was consistent with the FBC. She stated that she was not sufficiently familiar with the FBC to know whether it required that risk to be with a particular party. She accepted, however, that the retention by the public sector of risk in relation to approvals and consents delay was a significant change in the risk profile since December 2007 [[libid](#), pages 113–122].
- 14.65** Having regard to their acceptance that there had been significant changes to the risks accepted by the public sector since FBCv2, I have concluded that Messrs McGougan and Holmes and Ms Lindsay ought not to have advised Mr Aitchison to authorise **tie** to issue the NIAs. If that advice had been withheld I am of the view that the NIAs would not have been issued unless councillors instructed the Chief Executive to do so, after they had been fully informed of the stage of negotiations, changes to price and to public-sector risk since December 2007, the additional risks to **tie** and/or CEC resulting from premature issue of the NIA and the effect, if any, of

the availability of grant funding. If there was to be delay in concluding the contract, the issue of grant funding should have been clarified with Transport Scotland before informing councillors of the position.

Events after 18 March

- 14.66** Almost immediately after the issue of the NIA relating to the Infraco contract, serious concerns arose in relation to design, approvals and consents and the adequacy of the risk allowance. By letter dated 28 March 2008, Mr Leslie, Development Management Manager, Planning, of CEC, wrote to Mr Gallagher [[CEC01493318](#)], expressing certain concerns in relation to the programme of submissions of prior approvals and the quality of the submissions that had been received. On 3 April 2008, Mr Fraser wrote to Mr Gallagher [[CEC01493639](#)], setting out similar concerns in relation to technical approvals and quality control issues. Mr Gallagher responded to Mr Leslie's letter on 10 April 2008, noting that
- "[g]iven where we are with design & approvals, all parties (tie, SDS, CEC, BBS) need to get it right first time to meet the construction programme" [[CEC01494162](#), page 0002].
- 14.67** Mr Gallagher's acknowledgement that it was necessary to "get it right first time to meet the construction programme" was unrealistic and displays a lack of awareness of the planning and technical approvals processes. In the first place applications had to be submitted on time and in accordance with the agreed programme. Secondly, the submissions had to be to an appropriate standard. Mr Leslie's letter disclosed failures in both respects. Thirdly, even if the submissions had been timeous and met the minimum standards contained in the Tram Design Manual [[CEC00069887](#)] and other CEC policies and guidelines, it was necessary to allow for the possibility that some applications would be rejected and require to be resubmitted for aesthetic reasons associated with Edinburgh's status as a World Heritage Site, as was mentioned in paragraph 14.26 above, or for other legitimate planning and technical reasons.
- 14.68** By email dated 4 April 2008, Mr C MacKenzie advised Ms Lindsay of the continuing concern about SDS and the submission of prior and technical approvals, which showed no signs of improving. He referred to the formal letters of concern issued by CEC to Mr Gallagher, which led Mr C MacKenzie to question what implications there might be for CEC, as client and funder, in the longer term should the tie/SDS collaboration not "get its act together" [[CEC01395476](#)].
- 14.69** An email chain on 10 and 11 April 2008 [[CEC01401109](#)] between members of the "B team" noted that an issue had arisen in relation to the prior approval for the Russell Road bridge and its impact on the construction programme. In an email dated 10 April, Mr C MacKenzie noted:
- "This appears to be one of the dreaded scenarios which we have regularly discussed ... I would be most reluctant to see a situation whereby the Council ends up paying the cost of delays brought about by the fault of another party in failing to secure a timeous Prior Approval. I cannot confidently say that I understand what the settled position is among tie/SDS/BBS and communicated to the Council about Prior and Technical Approvals, and specifically the liability for delays." [[ibid.](#), page 0005.]
- 14.70** In an email dated 10 April (in the same chain), Mr Coyle asked: "how many of these things are going to come out of the woodwork?" [[ibid.](#), page 0004].

14.71 In an email dated 11 April 2008 addressed to Mr David Anderson, the Director of City Development who succeeded Mr Holmes, and copied to the Director of Finance and the Council Solicitor as well as others, Mr Conway reported on a discussion that he had had with Mr Sharp of **tie** about the likely delay to the Infraco contract as a result of the prior approval for the Russell Road bridge not being complete. Mr Sharp had inquired about piling commencing before the necessary approval, and Mr Conway had advised that a formal application for that would be necessary to avoid any legal challenge. According to Mr Conway, Mr Sharp refused to do that and suggested that “they could charge on regardless” [*ibid*, page 0002]. Mr Sharp’s proposal that **tie** might be party to construction and engineering work on a structure which, as noted in paragraph 6.98, still needed detailed planning consent was inappropriate and exposed **tie** and CEC to a risk of public criticism for failing to comply with planning legislation and to the possibility of a legal challenge to their actions. His proposal also exposed **tie** and CEC to a risk of incurring unnecessary expenditure in the event that there were changes to the design of the structure as a result of the planning process requiring changes to the piling.

14.72 Prior to his discussion with Mr Sharp, Mr Conway had been unaware of the likely delay to the Infraco contract as a result of the prior approval for the Russell Road bridge not being complete and expressed his concern as follows:

“The main issue is that this was news to us, and wasn’t an issue that we [were] aware about. It’s not been mentioned in the Tram Project Board papers from Wednesday’s meeting. It is not in the QRA or in the close-our [sic] report ... a total of £3M is identified in the QRA for delays to prior and technical approvals. That said; it wouldn’t be very palatable if we use that up in the first week of the contract award and [it] doesn’t quite align with the positive wording in the current draft of the Council report.” [*ibid*]

The reference to the “Council report” was a draft report in preparation for the CEC meeting on 1 May 2008.

14.73 In an email dated 11 April 2008, in the same chain, Mr Coyle explained to Mr McGougan that the issue could give rise to a claim by BBS for delay or disruption in two situations. The first was that BBS was likely to claim for a compensation event as a result of delay if permission was not granted to undertake piling works in advance of the approvals process for the structure. The second was that if BBS went ahead with the piling but needed to amend the work as a result of the approvals process the cost would ultimately be the liability of CEC. He repeated concerns that had been expressed earlier about the adequacy of the design risk allocation when he said:

“We have been led to believe that the structures have been given priority in terms of design approval. The point is we as the Council are being backed into a corner. I think this needs bottomed out with **tie**. SDS continue not to deliver and these type of issues could eat into the QRA (£3m for SDS delay, £6m for General Delay) pretty quickly.” [*ibid*, page 0001.]

14.74 Although this issue arose in the context of the structure of the Russell Road bridge, the manner in which it arose and the reactions of Mr Sharp and Mr Gallagher ought to have alerted CEC officials to the real possibility of increased risk exposure to **tie**, and consequently CEC.

Schedule Part 4 to the Infraco contract

- 14.75** As was mentioned in paragraphs 14.19 and 14.20 above, negotiations to settle the terms of the pricing schedule of the Infraco contract, SP4, were continuing on 18 March 2008. The progress of these negotiations and the meaning and effect of the agreed terms were discussed more fully in Chapter 11 (Contract Negotiations).
- 14.76** At a meeting of the CEC/**tie** legal affairs group on 14 April 2008, it was noted that Mr McGarrity, of **tie**, would send CEC a copy of the draft SP4, which set out the pricing provisions, and which was "now mostly agreed" [[CEC01227009](#)].
- 14.77** By email dated 15 April 2008, Mr McGarrity sent Mr Coyle and Ms Andrew the draft SP4 and a cost analysis spreadsheet, which included the QRA [[CEC01245223](#); [CEC01245224](#); [CEC01245225](#)]. Mr Coyle forwarded the email and attachments "for information" to Ms Lindsay, Mr C MacKenzie and Mr N Smith on the same day.
- 14.78** Clause 3.3 of SP4 contained a list of specified exclusions from the construction works price. Unlike its failure (mentioned in paragraph 14.117 below) to discuss the risks inherent in Pricing Assumption 1 ("PA1"), **tie** made specific reference to these exclusions in correspondence with CEC [[CEC01297117](#); [CEC01297118](#)].
- 14.79** At that stage SP4 contained the following clauses that became part of the signed Infraco contract:
- "3.2 It is accepted by **tie** that certain Pricing Assumptions have been necessary and these are listed and defined in Section 3.4 below. The Parties acknowledge that certain of these Pricing Assumptions may result in the notification of a Notified Departure immediately following execution of this Agreement. This arises as a consequence of the need to fix the Contract Price against a developing factual background. In order to fix the Contract Price at the date of this Agreement certain Pricing Assumptions represent factual statements that the Parties acknowledge to represent facts and circumstances that are not consistent with the actual facts and circumstances that apply. For the avoidance of doubt, the commercial intention of the Parties is that in such circumstances the Notified Departure mechanism will apply." [[CEC01245224](#), page 0005.]
- "3.4 Pricing Assumptions are:
- "1. The design prepared by the SDS Provider will not (other than amendments arising from the normal development and completion of designs):
- "1.1 in terms of design principle, shape, form and/or specification be amended from the drawings forming the Base Date Design Information (except in respect of Value Engineering identified in Appendices C or D);
- "1.2 be amended from the scope shown on the Base Date Design Information and Infraco Proposals as a consequence of any Third Party Agreement (except in connection with changes in respect of Provisional Sums identified in Appendix B); and
- "1.3 be amended from the drawings forming the Base Date Design Information and Infraco Proposals as a consequence of the requirements of any Approval Body.
- "For the avoidance of doubt normal development and completion of designs means the evolution of design through the stages of preliminary to construction stage and excludes changes of design principle, shape and form and outline specification." **ibid**, pages 0005–0006.]

"3.5 The Contract Price has been fixed on the basis of inter alia the Base Case Assumptions noted herein. If now or at any time the facts or circumstances differ in any way from the Base Case Assumptions (or any part of them) such Notified Departure will be deemed to be a Mandatory **tie** Change requiring a change to the Employers Requirements [sic] and/or the Infraco Proposals or otherwise requiring the Infraco to take account of the Notified Departure in the Contract Price and/or Programme in respect of which **tie** will be deemed to have issued a **tie** Change on the date that such Notified Departure is notified by either Party to the other ..." [*ibid.*, page 0010.]

- 14.80** The meaning of the above clauses was considered in Chapter 11 (Contract Negotiations). Although I have concluded at paragraph 11.131 of that chapter that there is no letter or report from DLA or Mr Fitchie that draws the attention of CEC to the risks inherent in SP4 as it had been drafted, it is also necessary to consider the state of CEC's knowledge and understanding of the terms of SP4.
- 14.81** It is clear from the evidence of Ms Lindsay, Mr C MacKenzie and Mr N Smith, discussed below, that each of them realised the significance of SP4 upon reading it for the first time. Ms Lindsay and Mr N Smith stated that they did not read SP4 prior to the signature of the Infraco contract, although Mr C MacKenzie did.
- 14.82** Ms Lindsay explained to the Inquiry that she did not read SP4 when it was forwarded to her "for information", because she had a strategic role as Council Solicitor and had to deal with many other legal issues on behalf of CEC apart from the Tram project. She had delegated legal issues relating to the Tram project to Mr C MacKenzie and Mr N Smith, and neither of them had drawn her attention to SP4. She stated that it was unfortunate that SP4 was not sent to CEC by DLA and that the risk matrix provided by DLA to CEC made no mention of the schedule [PHT00000027, pages 189 and 191–192]. Mr C MacKenzie was very risk-aware, and she could not understand why he failed to make her aware of the risks in SP4 [*ibid.*, page 195]. I agree with Ms Lindsay that she required to delegate to solicitors within her department particular tasks, including those relating to the Tram project, and that it was reasonable for her to expect those delegates to report any particular concerns to her for her consideration. Prior to any issue being brought to her attention in relation to SP4 or any specific request being made for her advice about SP4 it was unreasonable to expect her to read the contract suite, including SP4, having regard to the scope of her duties as Council Solicitor.
- 14.83** When Ms Lindsay read SP4 for the first time, in the context of the disputes that had arisen after the award of the Infraco contract, she realised how significant a part of the contract it was and how imprecise it was. Counsel to the Inquiry referred her to paragraph 3.2 of SP4, and she agreed that it was clear that there would be Notified Departures and price changes after contract close. She stated that if she had read the schedule before contract close she would have considered that the contents of paragraph 3.2 of the schedule were not appropriate in a public-sector contract and that she would have raised her concerns in relation to SP4 at the highest level within CEC. Serious consideration would have been required to ascertain where allowance was made in the QRA for the risks arising from SP4 and what the value of these risks ought to have been [*ibid.*, pages 137–142].
- 14.84** Mr C MacKenzie gave evidence that the draft SP4, when finally produced, was the most definitive document from **tie** that he had seen, setting out the price negotiated, what was to be included and, just as significantly, what was not to be included, in the price. He stated that it was evident to him that clauses 2 and 3 of SP4 excluded a fair

amount from the certainty of the lump sum, fixed and firm price of the construction works price. His reference to paragraphs 2 and 3 must refer to paragraphs 3.2 and 3.3, because paragraph 2 relates to definitions of terms used in the schedule.

14.85 The issue that arose relating to the prior approval for the Russell Road bridge, discussed in paragraph 14.69 above onwards, had increased Mr C MacKenzie's concerns about the adequacy of the £3.3 million provision in the risk allowance for design, including prior and technical approvals. In his evidence Mr C MacKenzie accepted that these concerns were heightened when he read the draft SP4. He could not remember whether he raised these heightened concerns with anyone at the time and accepted that perhaps he should have. His evidence on this matter was as follows:

"Q. Were those concerns [about the adequacy of the £3m risk allowance after the issue relating to the Russell Road bridge prior approvals] not heightened when you saw the draft Schedule 4?

A. Yes, I think they probably were.

Q. Did you raise these concerns with anyone at the time?

A. I can't remember.

Q. Do you consider you ought to have?

A. Yes, maybe I should have. But it was – I felt I'd done quite a bit in the run-up to this to draw attention to the fact that the risk pot was on the low side, and that how could we be sure that that was sufficient to cover all foreseeable risks.

I think after – before I went off on holiday on 2 May, I seem to recall asking or suggesting in a note to Gill Lindsay, there were a number of issues I covered there. And I think I recall asking or raising a question whether 3.3 million was still enough to cover all of these risks.

Q. ... when you have been sent and read draft Schedule 4, which contains the obvious risks you have described, surely that was an obvious time at which to email Ms Lindsay or in some way raise these risks and concerns with her?

A. Yes, it probably was.

Q. Do you recall whether you did at this time raise these risks with her?

A. I can't recall if I did or not. It may be covered in emails, but no, I can't point to one at the moment." [\[PHT0000026, pages 93–94.\]](#)

14.86 The Inquiry has found no evidence to indicate that he mentioned to Ms Lindsay increased concerns about the adequacy of the risk allocation because of the terms of SP4 or expressing any views or seeking advice about the meaning and effect of the specific provisions of SP4 mentioned above. His reference above to drawing attention to the fact that the risk pot was on the low side, and seeking reassurance for CEC that it was sufficient to cover all foreseeable risks, was not obviously linked to SP4 and appeared to be a separate issue that had pre-dated the delivery to CEC of SP4. Before he had gone off on holiday on 2 May 2008, he had set out the concerns of the "B team" in a note to Ms Lindsay, including asking whether £3.3 million was still enough to cover design delay risk. His note did not mention SP4. Mr C MacKenzie accepted that he probably did not raise his concerns in relation to SP4 with Ms Lindsay and that, with the benefit of hindsight, he ought to have done so. He also accepted that, with hindsight,

he ought to have clarified with **tie** the likely number and value of Notified Departures that were expected [*ibid*, pages 89–97; [CEC01222467](#)].

- 14.87** Although Mr C MacKenzie did not raise his concerns about SP4, he wanted to know whether the figures mentioned in the QRA accompanying SP4 would be enough to meet all the foreseeable risks for **tie**/CEC [[PHT00000026](#), page 92; [TR100000054_C](#), page 0096, paragraph 195], and he emailed Mr Coyle on 16 April, asking if **tie** could

"safely say that there is still enough in the QRA to meet all foreseeable risks: in other words can the Council be comfortable with the reduced figure?"
[[CEC01247693](#)]

Mr C MacKenzie received a short reply from Mr Coyle, explaining his understanding of the reduction in the risk allowance and stating: "I guess it still holds and I guess we have to accept their [ie **tie**'s] word" [*ibid*]. Mr Coyle also referred to the Office of Government Commerce ("OGC") review, which stated that the previous level of risk allowance had been in line with the industry norm. Mr C MacKenzie gave evidence that he was satisfied with Mr Coyle's response against the background of **tie**'s delay or reluctance to provide CEC with detailed information over a period of time. He stated that there was an element of resignation on his part that he simply had to accept that **tie** was being transparent and accurate with CEC [[TR100000054_C](#), page 0096, paragraph 195].

- 14.88** Mr C MacKenzie suggested that his inquiry of Mr Coyle was related to the conditions in SP4, and he wanted to know "what implications these conditions had for the ballpark figure of risk allowance previously advised by TIE" [*ibid*]. The context of the email correspondence between Mr C MacKenzie and Mr Coyle was Mr Coyle's email correspondence with Mr McGarrity of **tie** [[CEC01247693](#)] about an increase of £1 million for Tramco, but no corresponding increase in the overall price of £508 million for the Tram project. **tie**'s explanation was that the additional sum for Tramco had been achieved by reducing the QRA by £1 million. Mr C MacKenzie's email made no reference to the content of SP4 or to any concerns that he may have had about that document. Mr Coyle's response to Mr C MacKenzie referred to the restricted issue mentioned above and to the reduction of risk attributable to the completion of the procurement process from the figure that OGC had said was consistent with the industry norm. If Mr C MacKenzie had wanted to know the implications of the conditions in SP4 for the amount of risk allocation, I would have expected him to have been more explicit in seeking clarification that adequate provision had been made for risk after taking account of the terms of SP4.
- 14.89** In the same context Ms Lindsay emailed Mr Coyle on 16 April [[CEC01247679](#)], asking whether it would be appropriate to obtain a revised statement from **tie** confirming that the risk allowance was still sufficient. Mr Coyle responded that the previous statement provided on the QRA by **tie** was approximately £32 million, which still stood. The email correspondence involving Mr Coyle, Mr C MacKenzie and Ms Lindsay gives the clear impression that the concerns of the Solicitor's department at that time were related to the reduction of £1 million in the risk allowance to accommodate the increase in the Tramco price. No specific concerns were raised relating to the effect of SP4 on the adequacy of the risk allowance. In these circumstances the responses of Mr Coyle seemed reasonable.
- 14.90** Mr N Smith gave evidence that he did not read SP4 at that time, partly because it was part of the contractual terms on which he had refused to advise and partly because he had just returned to work after a period of medical absence and was not fully up to speed with developments during his absence. He also gave evidence

that he did not read SP4 at any time before the award of the Infraco contract, that he was unaware of any discussion within CEC's legal department of SP4 at any time before the award of the Infraco contract, and that he probably first read the schedule sometime in 2009 or 2010, as part of the dispute phase. He stated that, prior to the award of the Infraco contract, he was not aware that there would be Notified Departures. If he had read SP4 at the time it would have rung a number of "alarm bells", which he would have raised with Mr C MacKenzie and Ms Lindsay and, possibly, with DLA. He agreed with the suggestions put to him that anyone reading the 15 pages of the draft SP4 at that time would have been left uncertain as to which pricing assumptions were acknowledged not to be correct; that one would be uncertain as to how the price might change; and that, on one view, the fixed contract price was based on a fiction, given that the day after the contract was signed there would be an automatic increase in price (as a result of a Notified Departure or Departures). He gave evidence that, in relation to PA1 (definition of "normal design development"), he did not immediately understand it and that, even now, its meaning was not clear to him [PHT00000006, pages 3–4, 9–19 and 150–162].

- 14.91** Mr N Smith's evidence about being unaware of any discussion about SP4 within CEC legal conflicted with the impression that Mr C MacKenzie had. Apart from reading SP4 when he received it, Mr C MacKenzie thought that there had been a read over of the document within legal services and discussion about it within the "B team", although Mr C MacKenzie could not be more specific about such discussions in view of the passage of time. He presumed that Mr N Smith had read SP4 at that time, but could not categorically say that he did. If Mr N Smith did not read SP4 at that time, that would be consistent with his earlier refusal to review contract terms [PHT00000026 pages 156–158]. Prior to preparing his statement for the Inquiry Mr C MacKenzie had asked the Inquiry to recover from CEC his notebooks containing records of meetings, discussions and actions taken by him when he was involved in the Tram project. He stated that he had left these notebooks for his successor when he took voluntary redundancy from CEC in April 2011. The Inquiry was unable to recover these notebooks because CEC could not locate them. Accordingly, Mr C MacKenzie had no notes to assist him in resolving the question whether Mr N Smith read SP4 or was aware of its terms at the end of April 2008.
- 14.92** I have been unable to resolve this apparent discrepancy, but of the two witnesses Mr C MacKenzie was the more impressive. He was obviously doing his best to assist the Inquiry and was prepared to admit that he might have made mistakes, particularly in failing to advise the Council Solicitor of his concerns about SP4. In contrast, Mr N Smith gave the impression of seeking to distance himself from any possible criticism of his actions or of his failure to act to protect the interests of CEC. In his evidence to the Inquiry when he was asked by counsel to the Inquiry what he might have done if he had read clause 3.2 of SP4 in April, he replied:

"I guess I would have queried this. Yes, I guess I would have queried that. I need to be slightly careful, because I need to consider that there are ongoing litigations in relation to this." [PHT00000006, page 10.]

- 14.93** When I sought clarification of that comment, he replied:

"The contract and advice given in relation to the contract is subject to ongoing legal matters in the Court of Session. So I just wanted to make sure that I don't stray into areas which may impinge on that." [ibid]

- 14.94** The nature and extent of any internal advice given, or omitted to be given, to CEC prior to contract signature was pertinent to the remit of the Inquiry. If Mr N Smith was being truthful about his knowledge of SP4 in April 2008, or about the actions that he would have taken had he been aware of its terms at that time, it is difficult to understand how his evidence to the Inquiry would, or should, differ from any evidence that he may ultimately give about these matters in the Court of Session actions. Mr N Smith's explanation that he thought that he could adjust his evidence to the Inquiry because of litigation in the Court of Session caused me to question whether he was being entirely frank as a witness. In reaching that view I have taken into account that CEC was represented by the now deceased Mr Martin QC, a former Dean of Faculty, who would have undoubtedly intervened if he had thought that Mr N Smith's evidence to the Inquiry should be limited in any way in light of the litigation in the Court of Session.
- 14.95** My concerns about Mr N Smith's integrity as a witness increased when he disavowed knowledge of the contents of other documents that had been sent to him. Mr Dunlop QC tested Mr N Smith's evidence about his knowledge of the contents of documents that Mr Bissett of **tie** had sent to him and others on 28 April 2008 [CEC01312358]. These included **tie**'s report on the Infraco Contract Suite [CEC01312363] and the DLA letter reporting on the Edinburgh Tram Network contract suite as at that date [CEC01312368]. The DLA letter referred to pricing assumptions surrounding programme and pricing and to **tie** being prepared for an immediate contractual variation to accommodate a new construction programme and for the management of contractual Notified Departures "when (and if) any of the programme related pricing assumptions fall" [ibid, page 0003]. Following receipt of these documents from Mr Bissett, Mr C MacKenzie and Mr N Smith sent a joint email from Mr C MacKenzie's email address to Mr Conway and Mr Coyle [CEC01246045], commenting on the DLA letters dated 12 and 18 March and 28 April.
- 14.96** The unsatisfactory nature of Mr N Smith as a witness is illustrated in the following exchange about whether he reviewed the attachments to Mr Bissett's email mentioned in paragraph 14.95, including the DLA letter dated 28 April.
- "Q. You will have considered the attachments to it [Mr Bissett's email]?"
- A. I can't recall whether I did or not. Certainly I wasn't reviewing the DLA letters.
- Q. This is why I am confused, Mr Smith. Are you saying that you did not review it, or are you saying that you cannot recall whether you reviewed it?"
- A. Sorry, I did not review those documents. I – yes.
- Q. Are you sure about that, Mr Smith?"
- A. I don't – so, can you please confirm exactly which documents you are referring to?"
- Q. Well, the attachments and in particular the DLA letter which is mentioned in point 2 in the body of the text, the DLA letter effective today which updates DLA views.
- A. I cannot recall – sorry, I cannot recall reviewing those letters.
- Q. Again, can we have some clarity. You say in your statement you didn't review. You say now you can't recall. Which is it?"

A. I don't recall reviewing. So my position was I was not involved in reviewing the DLA letters generally, because I didn't believe they gave the Council sufficient comfort. I don't recall reviewing them in any detail.

Q. If you didn't review them, how could you be of the view that they did not give sufficient comfort?

A. Because they were not independent enough.

Q. So you were able to say that there was insufficient comfort in letters that you had not reviewed?

A. There was insufficient comfort for me. No matter what those DLA letters said, there was insufficient comfort for me. Because the view that I took was that independence was required.

Q. So when you say there was insufficient comfort in these letters, you are not talking about the content at all? Merely about the fact that DLA had been involved in negotiating the contract?

A. Largely, yes. There was insufficient, um, comfort for me that these provided the Council with sufficient comfort

Q. I'm not clear as to what you mean by "largely", Mr Smith. Are you saying that you didn't review these letters at all, or are you not?

A. I can't recall whether I reviewed them. I may have opened them and read one line, I can't honestly remember. But my position is I wasn't reviewing those letters as a principle." [\[PHT00000006, pages 152–154.\]](#)

- 14.97** At the end of the day I was unclear whether he definitely did not review the documents, or whether he did but could not recall doing so, or whether he merely opened them and "read one line".
- 14.98** Although I have concluded that Mr C MacKenzie was a truthful witness, and a more reliable one than Mr N Smith, it is unnecessary for me to determine whether Mr N Smith was a truthful witness, despite my concerns expressed above. Mr C MacKenzie's evidence alone is sufficient for me to conclude that within the CEC legal department there was an awareness of the significance of the terms of SP4 in April 2008. It is unnecessary for me to determine whether that awareness was confined to Mr C MacKenzie or was shared by Mr N Smith as the other solicitor tasked with reporting upon legal issues relating to the Tram project. However, assuming that Mr N Smith did not read SP4 when he received it, his failure to do so is inexplicable, particularly as he ought to have been aware that the Solicitor relied upon him and Mr C MacKenzie to draw her attention to any particular issues relating to the contract. Unlike the earlier draft document extending to almost 1,000 pages that he had been asked to review and produce a report within two days, to which reference is made in paragraph 13.39, the main text of the final version of SP4 only extended to 14 pages. Had he read it at that time he could have alerted the Solicitor to his concerns before she signed the letter of advice to the Chief Executive.
- 14.99** Mr C MacKenzie ought to have taken steps to report his concerns about SP4 to the Council Solicitor to enable her, along with the two responsible directors, to ascertain their effect on the contract price and any resultant increased risk exposure to the public purse. Such steps would have involved considering the remainder of the contract suite, including clause 80. That exercise ought to have been undertaken by an independent firm of solicitors experienced in construction law, as it is apparent

that the necessary expertise did not exist within the department of the Council Solicitor. Had that been done, CEC would have been aware of the true nature of the proposed Infraco contract and could have taken an informed decision about the available options to it, including constructing phase 1a in its entirety even if the price was likely to exceed £545 million or constructing part of phase 1a, as ultimately occurred, but within the available funding of £545 million, or suspending the decision to enter into the Infraco contract and the Tramco contract until the necessary stages of design had been reached and the necessary consents and approvals had been obtained in accordance with the procurement strategy. I appreciate that each of these options would have had financial and political implications for CEC. The decision about how to proceed was a strategic one for councillors, informed by detailed advice from officials about the implications of each of the above options and any other options that might have been available to CEC. In the event, councillors were not afforded the opportunity to take an informed decision on these options as they were not provided with the relevant information.

Events leading to financial close on 14 May

14.100 Members of the “B team” continued to have concerns about councillors’ awareness of changes since December 2007 as well as **tie**’s assessment of, and provision for, the risks associated with change and delay. They also took issue with the extent to which the DLA letters about the contract suite and the risk matrix sent to CEC provided adequate reassurance for CEC.

14.101 By email dated 14 April 2008, addressed to members of the “B team” and copied to Ms Lindsay [[CEC01256710](#)], Mr C MacKenzie noted that councillors had received no formal update on the project since 20 December 2007. He considered that it would be prudent and proper to report to councillors at the Council meeting on 1 May before financial close on the various changes that had occurred since then and that the Chief Executive should not exercise his delegated authority to permit **tie** to sign the Infraco contract and the Tramco contract before that meeting. He had no difficulty with the Chief Executive exercising his authority immediately after the meeting if councillors were aware of the changes since December, and they accepted a recommendation that he should do so.

14.102 On 15 April 2008, Ms Clark sent Mr Conway a short document, entitled “Analysis of Inclusions/Exclusions from BBS Fixed Price” [[CEC01297117](#); [CEC01297118](#)]. Mr Conway responded on 16 April with the following query:

“The scope of the works related issues refer to the status of the design as of 25th November [2007]. Our concern is that if the design has changed, or at least developed, since then (and say a prior approval has been granted) then a change will need to be issued. Have *tie* undertaken an exercise to determine the extent and cost of changes that will be required since the design freeze in November?” [[CEC01245274](#), page 0002.]

14.103 Ms Clark replied:

“BBS are contractually obliged to construct to the designs that SDS produce and get consented. We have been identifying significant changes as design has progressed to ensure we have made financial provision – eg Burnside Road. Normal design development is a BBS risk as described in Schedule 4 of the Infraco contract.” [libid](#), page 0001.]

- 14.104** The above statement is not strictly accurate. If the design produced by SDS obtained the necessary consent from CEC, it might also give rise to a Notified Departure if that design failed to comply with the provisions of PA1 in clause 3.4, quoted in paragraph 14.79 above. Ms Clark gave evidence that she would have written her email on the basis of advice received from the people negotiating the relevant clauses of the contract, whom she understood to be Mr Gilbert and Mr Bell, with the involvement of DLA [[PHT00000025](#), pages 151–152].
- 14.105** Mr Fraser gave evidence that although, on one level, Ms Clark's reply gave him some reassurance that CEC's concerns had been addressed, he considered that there was still no clarification as to how that was possible under this form of contract. He thought that changes to design would be necessary in order to obtain approvals, and that CEC still did not have comfort that that was encompassed within the contract. It was not transparent to Mr Fraser how the contract allowed for such changes [[PHT00000004](#), page 162].
- 14.106** A report to the meeting of the IPG on 16 April 2008 noted, under planning prior approvals [[CEC01246992](#), page 0004], that, of 63 batched submissions, 1 planning permission had been granted, 18 prior approvals had been granted, 4 prior approvals were currently under consideration, 2 submissions had been cancelled and 40 batches remained to be submitted for prior approval (of which 26 batches were under informal consultation). There was, again, noted to be concern that prior approvals might have to be revisited if there were substantial changes in design (reference was made to the planning department having written to **tie** on 28 March 2008, expressing its concerns). Under technical approvals, it was, again, noted that, to date, no roads technical approvals had been obtained and there had been significant slippage. It was noted that:
- "Similar to the concerns raised by Planning, Transport have also written to tie on 3 April 2008 reiterating their concerns about the quality of the submissions being received ... **There is potential for the approvals to cause a delay to the construction programme.**" [emphasis in original; [ibid](#)]
- 14.107** The report recorded that delay in submissions for prior and technical approvals might leave CEC in a difficult position. It was likely that the appropriate planning prior approvals would not be obtained prior to the commencement of construction work at three locations (Russell Road bridge, Haymarket tram stop and the Gogar depot), which were on the critical path for delivery. If construction was delayed, CEC would be responsible for these compensation events and resultant claims from BBS, which could easily be in excess of £2 million. The only possible mitigation measure would be for the planning department to allow the construction works to commence before planning approval had been granted, which would leave CEC open to the potential for legal challenge as well as negative press from people objecting to the prior approvals during the consultation stage.
- 14.108** The evidence in paragraphs 10.105–10.107 simply confirms the need for CEC to have obtained an independent review of its risk exposure, including the nature and extent of such exposure arising from fixing the design as at November 2007 and from the terms of SP4. The mere acceptance of **tie**'s assurances by Messrs McGougan and Mr David Anderson, as the responsible directors, meant that the Chief Executive did not exercise the scrutiny necessary for CEC's protection and expected of him before authorising **tie** to enter into the Infraco contract and the Tramco contract. Even although Mr David Anderson had recently been appointed as Director of City Development following the retirement of Mr Holmes, that did not absolve him of his

responsibilities towards CEC in respect of the Tram project. He could, and should, have sought information about the project from officials within his department, including members of the "B team", who had been involved in the project for a considerable period of time. Moreover, in light of his own awareness of the delays with planning and technical prior approvals and of the possible consequences for CEC, the Chief Executive ought to have considered the need for an independent risk assessment.

14.109 On 28 April 2008, DLA sent a letter to Ms Lindsay and Mr Gallagher in respect of the draft contract suite as at 28 April 2008 [[CEC01312368](#); an updated risk allocation matrix was also provided, [CEC01312367](#)]. The letter noted that, since DLA's last letter of 18 March, **tie** had been engaged largely on negotiations to close the SDS novation and to complete programme and final pricing and commercial discussions with Parsons Brinckerhoff and BBS respectively.

14.110 In relation to the core Infraco terms, the letter noted:

"The Core Infraco terms are closed as to all matters of contractual, technical and commercial principle ... No issues have arisen since we last reported which have resulted in an alteration (of consequence) to risk balance. As they stand, the terms and conditions represent a clear reflection of the positions which have been negotiated by **tie** and are competent to protect and enforce those positions." [[CEC01312368](#), page 0002.]

14.111 In relation to risk, it noted:

"Following on from our letter of 12 March, we would observe that delay caused by SDS design production and CEC consenting process has resulted in BBS requiring contractual protection and a set of assumptions surrounding programme and pricing.

"**tie** are prepared for the BBS request for an immediate contractual variation to accommodate a new construction programme needed as a consequence of the SDS Consents Programme which will eventuate, as well as for the management of contractual Notified Departures when (and if) any of the programme related pricing assumptions fall." [*ibid.*, page 0003.]

14.112 The letter noted further:

"The Pricing Schedule (Infraco Contract Schedule Part 4) has been extensively discussed over the past six weeks and is now settled as to its key assumptions, value engineering items, provisional sums and fixed prices. **tie** has assessed the likely financial assumptions not holding true and triggering changes." [*ibid.*, page 0005.]

14.113 On 30 April 2008, Mr C MacKenzie sent a joint email from himself and Mr N Smith to Mr Conway and Mr Coyle, copied to Mr Fraser [[CEC01246045](#)], which stated:

"Further to the meeting this morning Nick and I have considered the DLA letters dated 12th March, 18th March and 28th April. You sought our views on this correspondence.

"As you are aware we have from the outset expressed reservations about the ability of DLA to effectively review their own work. In this regard, it is difficult to see how any letter from DLA could give full comfort to the Council. Our preferred route was always that the Council seek independent legal advice. In particular, all the DLA letters are heavily caveated, and refer to instructions from **tie**, or positions achieved by **tie**. The reality of the contract structure is that the Council

is to give a guarantee in respect of all financial obligations being undertaken by **tie**. Instructions have been given throughout by **tie** to DLA, with little input from Council officers and accordingly no certainty that Council instructions flowed through to DLA. The most recent letter dated 28th April does little to remove doubts and uncertainties. Specifically, that letter appears to give no comfort on the risk profile and acceptability in relation to the market norm. The lengthy letter also narrates matters which appear to us to be risky for the Council and are not covered by the QRA.

“No doubt the Directors of Finance and City Development, respectively, will be seeking confirmation from the Council Solicitor as to the acceptability to her of the DLA letter.”

- 14.114** Mr Bell gave evidence that around this time (ie in late April or early May 2008) he and Mr Fitchie had a telephone conference call with Ms Lindsay to discuss DLA's letter and updated risk allocation matrix [[CEC01347797](#)]. Mr Bell believed that there was discussion of the mechanism in the contract whereby a departure from the pricing assumptions would lead to Notified Departures and a requirement to change the price. He did not think that there was any discussion of the number or value of any Notified Departures that might arise. He thought it likely that he would have confirmed that **tie** had incorporated items within the risk register and risk allowance for elements that it thought were likely to generate a change. Although there was discussion of the general risk items, areas and values, and whether they were included in the risk allowance, there was none on specific Notified Departures or groupings of such departures [[PHT00000024](#), pages 114–119].
- 14.115** Ms Lindsay gave evidence that she had no recollection of such a phone call with Mr Bell and Mr Fitchie taking place, and she considered that it was unlikely to have taken place. She had checked her notes, and the only record of a conference call that she had was of one on 8 May 2008, which had involved the Directors of City Development and Finance, Ms Andrew and the Tram Monitoring Officer, the purpose of which was for **tie** to update CEC on the developing situation in relation to the increase in price, mentioned in paragraph 14.116 below. She did not recall any discussion with Mr Bell outside the legal affairs group, and she stated that he was not one of her usual contacts in relation to the project [[PHT00000027](#), pages 149–152].
- 14.116** The Inquiry has seen no record of the telephone call mentioned by Mr Bell, and it is difficult to come to a view on whether such a call took place. Regardless of whether it took place, however, I do not consider that a discussion along the lines described by Mr Bell in his evidence was sufficient to alert Ms Lindsay to the dangers inherent in SP4 to the Infraco contract, including that it was expressly recognised that the price was based on pricing assumptions, some of which were known not to be correct and were likely to result in Notified Departures, and price increases, immediately after the contract was signed.
- 14.117** Furthermore, even on Mr Bell's evidence, there was no discussion of the risks in PA1, whereby the language used to describe “normal design development” contained an exception that, on a literal reading, appeared to deprive the expression “normal design development” of much of its content. In addition, in his evidence to the Inquiry, Mr Bell stated that he would have expected between 60 and 100 Notified Departures to have arisen after the award of the Infraco contract [[TRI00000109_C](#), page 0072]. As was indicated in paragraph 14.114 above, Mr Bell did not think that in the alleged conference call involving Ms Lindsay there was any discussion of the number or value of any Notified Departures that might arise. Nor, indeed, is there any

contemporaneous documentary evidence whatsoever from Mr Bell, or others in **tie**, to anyone in CEC advising of the number and/or value of Notified Departures that were expected, or likely, to arise after the award of the Infraco contract.

14.118 Although Mr Bell had expected between 60 and 100 Notified Departures, there were in fact more than 800 [**ibid**]. There was other evidence suggesting that the total number was not as high as that but certainly exceeded 700 (see Chapter 15, Contractual Disputes: May–December 2008). Whatever the accurate figure, it is clear that there were a substantial number of Notified Departures. That is an indication of the over-optimistic approach adopted by **tie** in assessing and evaluating the risk exposure of the public sector and is a further adminicle of evidence supporting the need for CEC to have commissioned the type of independent review advocated by the “B team” in September 2007 and discussed in Chapter 13 (CEC: Events during 2006 and 2007). Had such a review been commissioned at that time, CEC would have appreciated the need for further reviews as the contract negotiations progressed and, on any view, once the terms had been finalised but before contract signature. By failing to do so, and instead relying upon the untested assumptions made by **tie** as to the number, nature and value of risks to which the public sector was exposed, CEC failed to protect the public purse. The Chief Executive together with the responsible directors jointly bear responsibility for that failure.

Councillors’ consideration of the project in May 2008

- 14.119** Mr C MacKenzie’s concerns, mentioned in paragraph 14.101 above, were addressed at a Council meeting on 1 May 2008 [**CEC00906940**], although Mr C MacKenzie had further concerns when he became aware that BBS had made a demand for a further price increase shortly before that meeting and after the report of the Chief Executive to councillors had been signed and submitted to them in advance of the meeting. He suggested that either the report should be withdrawn from consideration at that meeting, the true picture assembled and then a report made to councillors or, alternatively, officials should be open with councillors at that meeting about the changed situation. Mr C MacKenzie posed the questions: “Are members being properly served by officers? Are there implications for us as professional legal advisors?” [**CEC01241689**]
- 14.120** The preparation of the Chief Executive’s report for the meeting on 1 May followed the same pattern as other reports to CEC in respect of the Tram project. It was drafted by officials within the responsible departments and circulated for comment to senior officials and **tie**. As was discussed in paragraph 12.61, the report itself was misleading to the extent that it reported that 95 per cent of the combined Infraco and Tramco costs were “fixed”, with the remainder being provisional sums. Moreover the report included a statement that the utility diversion works along the tram route were “progressing to programme and budget” [**CEC00906940**, page 0002, paragraph 3.6]. This statement had been proposed by Mr Bissett of **tie**, and the report makes it clear that the statement was based upon a report by **tie**. As will be apparent from Mr Fraser’s evidence noted in paragraph 14.122 below, the statement about the utility diversion works did not reflect reality.
- 14.121** Ms Andrew gave evidence, which I accepted, that she considered noteworthy the number of times that the report referred to **tie** (rather than CEC’s officials) carrying out activities or providing information or assurance. She considered that that reflected nervousness on the part of CEC’s officials over **tie**’s management of the process. However, given that CEC had ultimate responsibility for the project, it was her view that such a level of reliance on **tie** was inappropriate. She also considered

that the statement in the report describing the movement in risk as a "risk transfer to the private sector" was slightly misleading, as there was less risk transfer to the private sector than had been envisaged at the stage of the FBC [TR100000023, page 0057].

- 14.122** Mr Fraser was asked for his views on the statement in the report that the utility diversion works were progressing to programme and budget, and he replied that that was not his recollection. He explained that the programme kept slipping, additional utility apparatus was discovered and the budget required to be increased. He considered that every time there was a new programme for the MUDFA works it was very optimistic and was based on levels of production that had never been achieved previously. If apparatus was uncovered that was not expected, there was no scope for slippage in the programme and there was likely to be delay [PHT00000004, pages 164–165 and 180].
- 14.123** On 30 April 2008, during a telephone conversation between Mr Walker of Bilfinger Berger ("BB") and Mr Gallagher of **tie**, Mr Walker made a demand for an increase in the Infraco contract price of £12 million [CEC01338847, page 0003]. CEC officials, including the Chief Executive, were aware of this demand prior to the meeting on 1 May but took no steps to advise councillors as a whole of this significant event, despite Mr C MacKenzie's suggestions, noted in paragraph 14.101 above. In his evidence Mr C MacKenzie expressed concern about the failure to advise councillors of the price increase that had been sought. In his view, officials had a duty to be transparent with councillors and to give them as much information as possible [PHT00000026, page 119].
- 14.124** Mr N Smith also considered that councillors ought to have been told that the price increase had been sought by BB. He gave evidence that the obligation of Council officials was to present the correct facts to members to allow them to take decisions, otherwise the basis for those decisions was flawed [PHT00000006, page 29].
- 14.125** Mr Aitchison gave evidence that he advised the leader of the Council, Councillor Dawe, about the demand for a price increase before the meeting of the Council started, but that other councillors were not advised of it either before or during the meeting. He accepted that it was both inaccurate and potentially misleading to have represented to councillors that £508 million was the final price, when he knew that a substantial price increase had been sought and remained unresolved. Moreover, with the benefit of hindsight, Mr Aitchison did not consider that his report gave members sufficient information to enable them to come to an informed view before accepting the recommendations in his report. He considered that there ought to have been a more detailed report, drawing out issues associated with design and the reconciliation of design to the construction programme. The reference in the report to the utility works progressing on time and budget was consistent with his broad understanding at that time, albeit that he was not in a position to query whether the utility works were exactly on track [PHT00000041, pages 117–133].
- 14.126** In his evidence, Mr McGougan accepted that although the reference to the "final price" of £508 million was correct when the report was drafted, that reference was no longer correct when the report was considered by councillors at the meeting on 1 May. He agreed that councillors should have been advised that it was an estimated or anticipated final price [PHT00000043, page 36].

- 14.127** Apart from the misleading nature of the report, mentioned in paragraph 14.120 above, I consider that the councillors were misled at the meeting on 1 May by the Chief Executive's failure to advise them of the demand for a price increase of £12 million. Even if he did notify the Leader of the Administration alone of that demand, I do not consider that that was sufficient when he was aware that councillors would be asked to take a decision based upon inaccurate and incomplete facts. In that situation it was incumbent on him to withdraw his report or to explain to councillors at the meeting that there had been a demand for a price increase and that negotiations would ensue. In ignorance of that material fact, councillors accepted the Chief Executive's recommendations in his report, noted "the imminent award of the two contracts with a final price for the Edinburgh Tram Network of £508m" [[CEC02083356](#), Part 1, page 12, item 12] and refreshed the delegated powers previously given to him to authorise **tie** to award the Infraco contract and the Tramco contract.
- 14.128** Following the meeting on 1 May, negotiations between **tie** and BBS continued, resulting in the "Kingdom Agreement" between them, dated 9 May 2008, whereby the contract price increased by £4.8 million with an additional £3.2 million if phase 1b did not proceed [[WED0000023](#)]. The details of the negotiations and terms of the Kingdom Agreement, as well as my assessment of it, were discussed more fully in paragraphs 11.125–11.142.
- 14.129** In short, an "incentivisation payment" of £1.2 million was payable for each of four sections of the route (A, B, C and D). As I note above, while described as "incentivisation" in the Kingdom Agreement and also in the clause in the Infraco Contract which gave effect to it [[CEC00036952](#), Part 2, page 0143, clause 61.8] the contract had effect so that the payment was not dependent on works being completed on time. In that situation justification for additional payment based upon minimising the risk to businesses and residents of Edinburgh of delays to the agreed programme of works was illusory.
- 14.130** Mr Aitchison considered that councillors, rather than CEC officials, should approve the change since 1 May, and he decided to report the matter to a meeting of the Policy and Strategy Committee of CEC on 13 May. A report signed by him was tabled at that meeting. The composition of that committee as well as the reasons for reporting the matter to it were explained in paragraph 12.62.
- 14.131** Mr Fraser and Ms Andrew drafted the report to the Policy and Strategy Committee, based on the draft Financial Close Process and Record of Recent Events emailed by Mr Bissett of **tie** to CEC on 8 May [[CEC01294645](#); [CEC01294646](#)]. The draft Financial Close Process and Record of Recent Events was superseded by an updated version on 12 May 2008 [[CEC01338847](#)] which was considered in more detail in Chapter 12 (Contract Close). Mr Fraser and Ms Andrew were in the position of having to prepare their report despite not having had first-hand knowledge of the events described in the draft document emailed to them by Mr Bissett. The draft committee report was edited a number of times, following comments by the responsible directors, before being passed to the Chief Executive for signature and tabling at the committee meeting [[TR10000096_C](#), pages 0057–0058].
- 14.132** As was explained in paragraph 12.65 the report to the Policy and Strategy Committee erroneously referred to an increase of £4 million instead of £4.8 million, indicating a lack of scrutiny of the report by the Chief Executive, the Director of Finance, the Director of City Development and the Council Solicitor, all of whom were aware of the correct figure and were present at the committee meeting when councillors asked questions about the report. There is no record of the questions asked or answers

given. More importantly, the report was misleading. As was discussed in paragraphs 12.64 and 12.66 the explanation for the price increase after 1 May included the following statement:

“To help reduce the risk of programme delays, the price increase agreed will be paid as a series of incentivisation bonuses over the life of the contract, on achievement of specified milestones. This approach should minimise the risk to businesses and residents of Edinburgh of delays to the agreed programme of works. These changes increase costs by £4m [sic] to £512m [sic], but have corresponding advantages by further transferring risks to the private sector.”
[[USB00000357](#), paragraph 2.9.]

- 14.133** In paragraph 12.66 I have concluded that the above statement was untrue in two material respects. First, if, as was probable, the programmed completion date of a section was delayed because of a Notified Departure or other event specified in clause 61.8, the four payments of £1.2 million were each payable on the completion of a section of the route irrespective of the date of completion. Thus it was untrue to assert that they “should minimise the risk to businesses and residents of Edinburgh of delays to the agreed programme of works”. Secondly, it was also untrue to state that there were corresponding advantages to the increase in price by securing a further transfer of risk to the private sector.
- 14.134** On 13 May, the Policy and Strategy Committee approved the final estimate cost of £512 million [sic] for phase 1a and the contingent payment of £3.2 million if phase 1b was not built, authorised the Chief Executive to enter into contracts with the Infraco and Tramco bidders, refreshed the Chief Executive’s delegated powers to make any final minor amendments to the contracts and modified FBCv2 to reflect the new circumstances.
- 14.135** By letter dated 13 May 2008 [[CEC01284042](#)], Mr Gallagher advised Mr Aitchison that **tie** was of the view that the final terms negotiated were materially consistent with the terms of the FBC, that the final terms confirmed the value-for-money proposition demonstrated by the FBC and that it was now appropriate to conclude the contracts.
- 14.136** On 13 May 2008, Mr McGougan, Mr David Anderson and Ms Lindsay provided a short note to Mr Aitchison confirming that it was appropriate to support **tie**’s recommendation that there was an imminent financial close to the project [[CEC01244245](#)]. Mr Aitchison authorised **tie** to enter into the contracts, and on 14 May 2008 the Infraco contract and the Tramco contract were signed.
- 14.137** I have considered whether Mr McGougan, Mr David Anderson and Ms Lindsay ought to have given the above advice to Mr Aitchison. Mr McGougan was aware that Ms Andrew still felt uncomfortable that she did not have 100 per cent understanding of the risks relating to the contract. Although Mr McGougan had concerns about risk, he took comfort from the positive Audit Scotland and OGC reviews. It should be borne in mind that the later of these two reviews took place in October 2007 and that since then there had been significant material changes to the contract terms, including three price increases, the retention by the public sector of potentially significant risks arising from SDS delay, and the negotiation and subsequent agreement about the pricing schedule. Although Mr McGougan considered that it was not unusual for changes to be made up to the last minute in major public-sector projects contracts, it would have been a matter of concern for him if these changes were material in nature [[PHT00000042](#), pages 149–150]. As noted above, the changes after the OGC review were material. At the time of the OGC review, the price, terms and conditions of contract and risk allocation had yet to be agreed. When asked whether CEC

should have instructed a further independent review of the risks when price, terms and conditions and risk allocation had been agreed, Mr McGougan replied: "I think with hindsight that is something that may well have proven of value" [[ibid](#), page 149]. Having regard to the fact that a review had been undertaken in October 2007, and that since then there had been several material changes, it should not have required hindsight to appreciate that a further review was required before contract signature. Failure to instruct such a review was an error of judgement on his part and failed to protect CEC's interests.

- 14.138** Mr McGougan explained that CEC was entitled to rely on due diligence by **tie** and the written information from DLA, together with the discussions that CEC legal was having with DLA, to take the view that the changes in risk that had happened in the run-up to contract close had been understood in terms of the overlapping elements of design construction and that a provision had been made for them in the risk register. DLA had a duty of care to the Council and was expected to undertake that duty of care properly and to alert CEC to any areas in which the final contract negotiation had changed the transfer of risk balance [[ibid](#), page 150].
- 14.139** Mr McGougan gave evidence that if a decision had been taken to delay the award of the Infraco contract until design was complete, and all approvals and consents had been obtained, that would probably have required re-procurement of the contract, which would have led to further delay and increased costs and there would have been a likelihood of cancellation of the project. The Scottish Ministers and Transport Scotland were already very concerned by the project delay. Grant expenditure that had been planned for that financial year would require to be deferred to a future year, leading to an under-spend in the present year's budget. Mr McGougan considered that there was little doubt that the project would have been cancelled if that had happened [[TR100000060_C](#), page 0069, paragraph 184]. This evidence seemed to suggest that, as an official, Mr McGougan was taking a strategic decision to proceed with the project in the knowledge of known difficulties that ought to have been reported to councillors, who alone were responsible for strategic decisions.
- 14.140** In paragraph 14.19 above, reference is made to reports to the IPG from January 2008 onwards, which showed the status of the various deliverables, also called "critical contractual decisions", necessary to enable the Chief Executive of CEC to use his delegated powers to authorise **tie** to award the Infraco contract and the Tramco contract and to the fact that a number of necessary critical contractual decisions were still outstanding at the date of the NIA. When the Chief Executive authorised **tie** to enter into the contracts it appears that deliverables were still outstanding, indicating a lack of diligence on his part and on the part of those advising him in protecting CEC's interests.
- 14.141** By email dated 21 May 2008, after contract signature, Mr Coyle circulated the latest version of the spreadsheet detailing the deliverables for contract award, which showed that a number of items remained outstanding [[CEC01249269](#); [CEC01249270](#)]. These will be listed in Chapter 15 (Contractual Disputes: May–December 2008), but they included obtaining a copy of the SDS novation agreement, obtaining an update of the QRA (including to take account of the changed risk profile at financial close), obtaining a detailed analysis of programme risk and obtaining full details on the status and degree of completion of the SDS design work. Mr Coyle also gave evidence that the status of the deliverables was reported to senior officials in CEC on a daily basis (as well as at meetings of the IPG) and that senior officials were aware that some of the deliverables were outstanding but nevertheless decided to authorise signature of the Infraco contract by **tie** [[PHT00000010](#), pages 4–12 and 18–19].

Conclusions

- 14.142** In fulfilling their advisory role to the Chief Executive, the Director of Finance, the sequential Directors of City Development and the Council Solicitor relied upon assurances given by **tie** about matters having potential financial consequences for CEC and upon risk matrices prepared by DLA without subjecting any of them to informed independent scrutiny.
- 14.143** The material changes in the terms of the draft Infraco contract as a result of negotiations after the reports of the Audit Scotland and OGC reviews, and the Director of Finance's acknowledgement that neither he nor his staff had a complete understanding of all the risks that might attach to the contract, as well as the qualifications in the DLA letters to CEC from which it was clear that CEC's interests were not considered independently of those of **tie**, indicated the need for CEC as the funder of the project to obtain independent advice.
- 14.144** Accordingly, I consider that before signature of the Infraco contract, but when the final price and risk allocation and up-to-date factual position was known, CEC officials ought to have obtained independent legal advice on the terms of the draft contract and ought to have obtained an assessment of the state of the project, the risks, the quantification of the risks and the adequacy of the risk allowance from an independent firm of suitably qualified engineering, transport and project management consultants. These experts ought to have been retained during contract negotiations to advise CEC, independently of **tie**, of the implications for it of proposed contractual terms.
- 14.145** Had suitable independent reviews been instructed by CEC, it is likely that the risks affecting the project would have been identified and evaluated, including risks arising from the difficulties and delays with the design and the utility diversion works, as well as the risks arising from the pricing provisions in SP4 to the contract, enabling CEC officials to determine the adequacy of the risk allocation and to provide councillors with accurate information.
- 14.146** Before the Council meeting on 13 March 2008 there had been significant changes to the FBC that had been approved by CEC on 20 December 2007, in respect that BBS and **tie** had agreed three separate price increases resulting in a net increase of £10 million above the price of £498 million reported to councillors on 20 December 2007, and there were continuing discussions indicating that BBS was unwilling to accept some of the risks allocated to it in the FBC. In these circumstances, before authorising **tie** to issue the Notice of Intention to Award the Infraco contract to BBS, the Chief Executive of CEC had a duty to report the changes to CEC, as well as his inability to complete due diligence because the contract terms had not been finalised, but he failed to do so.
- 14.147** Having regard to the fact that, on 18 March 2008, **tie** and BBS were still in negotiation over critical contractual documentation (deliverables), including the final pricing and risk provisions, and that at that date the Chief Executive and other senior CEC officials were aware that certain deliverables were still outstanding that were necessary to enable the Chief Executive to exercise his delegated powers to authorise **tie** to issue the NIAs for the Infraco contract and the Tramco contract, the responsible directors and the Council Solicitor should not have advised the Chief Executive to authorise **tie** to issue the notices, and in any event the Chief Executive should not have authorised **tie** to do so, in light of his own knowledge mentioned above.

- 14.148** The premature issue of the NIAs on 18 March 2008 strengthened BBS's negotiating position and resulted in its securing the transfer of risks to the public sector that, in terms of the procurement strategy, were meant to be retained by Infraco as well as a last-minute price increase of £4.8 million plus a contingent payment of £3.2 million if phase 1b did not proceed.
- 14.149** DLA was aware that prematurely issuing the NIAs would strengthen BBS's negotiating position, and it advised **tie** accordingly but failed to notify CEC of the potential conflict of interest between CEC and **tie** arising from the divergence of their interests if **tie** issued the NIAs prematurely. Had DLA done so, CEC officials would have had the opportunity to reconsider their decision in 2007 not to instruct an independent firm of solicitors with expertise in construction contracts, and in any event could have considered whether it was appropriate to issue the NIAs before the conclusion of negotiations about critical contractual documentation.
- 14.150** The terms of SP4 of the draft Infraco contract were such that they alerted an informed reader that pricing assumptions had been based upon a factual situation that was known by **tie** and BBS to be inaccurate, leading to price increases as a result of a Notified Departure or Notified Departures immediately after contract signature based upon the true factual position, and that design risk had not been transferred to Infraco as had been intended in the procurement strategy.
- 14.151** When Mr C MacKenzie read SP4 in April 2008, it was evident to him that it excluded a fair amount from the certainty of the lump sum, fixed and firm price elements of the construction works price, but he did not advise the Council Solicitor of his concerns in relation to that schedule, including the risk of changes resulting in price increases after the award of the contract. His failure to do so was a serious error of judgement on his part.
- 14.152** Mr N Smith alleged that he did not read SP4 until 2009 or 2010, and therefore could not have advised the Council Solicitor before contract close of the obvious concerns apparent to him when he read the schedule. If that is correct, it calls into question the culture within the legal department and indicates a lack of the scrutiny of documents sent to him required of Mr N Smith for the protection of CEC's interests.
- 14.153** Had the Council Solicitor been alerted to the terms of SP4, she would have read the schedule and raised her concerns at the highest level within CEC, as a result of which it is probable that CEC officials would have reconsidered the need for legal advice about the draft contract as a whole from a firm of solicitors experienced in construction contracts and who had not been involved in negotiating the terms of SP4, and for advice from qualified professionals with experience of similar large-scale infrastructure projects in the transportation sector about CEC's risk exposure as guarantor of **tie**.
- 14.154** At the Council meeting on 1 May 2008, CEC officials did not provide councillors with accurate or complete information. The Chief Executive's report to them was misleading to the extent that it reported that 95 per cent of the combined Infraco and Tramco costs were "fixed", with the remainder being provisional sums, and it was inaccurate in stating that the utility diversion works along the tram route were "progressing to programme and budget" [[CEC00906940](#), page 0002, paragraph 3.6]. These statements were made in reliance on information from **tie**, but the ultimate responsibility for the accuracy of the report rested with the Chief Executive as its signatory. Moreover, although the reference in the report to the final price of £508 million was accurate at the date of signing the report to councillors, it was no longer accurate or complete at the date of the Council meeting, in view of the demand

for a further price increase of £12 million, but the Chief Executive failed to advise councillors of that fact and allowed them to make a determination on the basis of the incomplete information about price. In the foregoing respects the Chief Executive failed in his duty to councillors to provide them with complete and accurate information to enable them to take informed decisions.

- 14.155** The report to the Policy and Strategy Committee on 13 May 2008 was also inaccurate and misleading. It claimed that the additional sum of £4.8 million (wrongly stated to be £4 million) represented incentive payments for the completion of sections of the tram route that should minimise the risk to businesses and residents of Edinburgh of delays to the agreed programme of works. This did not accurately reflect the agreement reached and which was due to be signed the following day, subject to the Policy and Strategy Committee's giving the Chief Executive the necessary authority. The report failed to advise the committee that incentives already existed to induce Infraco to achieve sectional completions by the scheduled programme date because of the provisions for liquidated and ascertained damages for failure to do so. It also failed to advise the committee that if completion was delayed due to Notified Departures (which were anticipated immediately after contract signature) or another event specified in clause 61.8 the incentive payments were payable within seven days of the issue of a certificate of sectional completion and were not related to the programmed dates for sectional completion. In that event there could be no minimisation of risk to businesses or residents.
- 14.156** I consider that the inaccuracies and deficiencies in the reports to councillors on 1 and 13 May arose for reasons similar to those discussed in paragraphs 13.171 - 13.178 inclusive in respect of the report to the Council in December 2007. In short, senior officials placed too much reliance on information and assurances provided by **tie** and its legal advisers, DLA, without subjecting them to proper scrutiny and placed insufficient reliance on the concerns expressed by more junior Council officials.

Chapter 15

Contractual Disputes: May–December 2008

Introduction

- 15.1** As noted in Chapter 12 (Contract Close), **tie** Limited ("**tie**") and Bilfinger Berger Siemens ("BBS") concluded the infrastructure contract ("Infraco contract") on 14 May 2008. On the same date the contract for the manufacture and supply of the trams was concluded between **tie** and Construcciones y Auxiliar de Ferrocarriles SA ("CAF"). The immediate novation of that contract to the Infraco contract resulted in the consortium becoming Bilfinger Berger, Siemens and CAF ("BSC"). Although Bilfinger Berger ("BB") was responsible for the construction work, apart from the laying of the track, and most of the disputes related to BB's entitlement to payment arising from changes to the contract, I have referred to these disputes as being between **tie** and BSC as the contracting party following novation.
- 15.2** At a fairly early stage after signature of the Infraco contract, a dispute emerged between **tie** and BSC in relation to BSC's entitlement to additional sums for notified changes. In particular, there was a difference of opinion between the parties concerning whether, under the contract change mechanism, BSC was required – or even entitled – to commence work that was subject to a disputed change.
- 15.3** Many of the disputed changes related to the issue of which party bore the risk under the contract for design development (design having been incomplete when the contract was awarded, with many approvals and consents outstanding). The parties disagreed over the correct meaning and application of Pricing Assumption 1 in Schedule Part 4 ("SP4"), which related to design.
- 15.4** An ominous, early indication of that dispute arose during a peer review of the Tram project in July 2008, undertaken by the team that had carried out the Office of Government Commerce reviews of the Edinburgh Tram project (the "project") before financial close. The report of that review outlines the procedure adopted by the review team that followed a similar procedure to that of the earlier reviews, which included conducting interviews with key personnel except that, on this occasion, the interviews were not confined to employees of **tie**. They included Mr McFadzen and Mr Brady, both of BBS [CECo1327777, page 0003 and page 0012 Appendix B]. In the section of the report dealing with contract issues the review team noted that design was not complete when the design contract was novated to BSC at financial close, and that, at interview, **tie** and BBS each considered that design risk lay with the other party [ibid, page 0006].
- 15.5** That can be contrasted with **tie**'s undisputed liability in terms of the Infraco contract for delays to the diversion of utilities that impacted upon the Infraco works. The extent of such delays in July 2008 is reflected in the report of the review, which recorded that the Multi-Utilities Diversion Framework Agreement ("MUDFA") works were approximately 60 per cent complete [ibid, page 0003]. The necessary implication of that statement, based upon information provided to the review team, is that where the MUDFA works were complete there were no remaining utilities in those locations that could interfere with the progress of the Infraco works. The peer review recommended:
- "prioritising the remaining MUDFA works packages in order to minimise the impact on the Infraco programme should be undertaken as soon as possible" [ibid, page 0006].

- 15.6** This was a recognition of the obvious risk that outstanding MUDFA works could result in delays to the Infraco programme, resulting in increased costs to **tie**.
- 15.7** Ultimately, various disputes between **tie** and BBS were referred to adjudication. The nature and outcome of these disputes will be discussed more fully in Chapter 17 (Adjudications and Beyond). Despite these formal disputes there was evidence before the Inquiry that BBS made an early attempt to carry out, on an informal basis, work that was subject to a disputed change. However, that did not prove effective or workable and, around October 2008, BBS decided that it would not open up any new work areas that were subject to an unresolved change notice.
- 15.8** That resulted in a “stand-off” between the parties that continued until the resolution of the dispute at the Mar Hall mediation in March 2011.

Early change notices

- 15.9** By letter dated 21 May 2008, within a week of concluding the Infraco contract, BBS sent **tie** six Infraco Notices of **tie** Change (“INTC”) (INTCs 1–6) [CECo1288310]. The first notice related to the impact on the construction programme of the slippage in the design programme from version 26 to version 31 [*ibid*, page 0002]. As was mentioned in paragraph 11.66, on 26 March 2008 Mr Laing had drawn attention to the fact that the pricing assumption in SP4 assumed that the design programme would not change from version 26. By that date the design programme had changed to version 28, giving rise to the possibility of a Notified Departure immediately after contract signature. The other notices related to works at the Hilton Hotel car park, roads surveys, works at Russell Road bridge, works at Haymarket viaduct and works at Gogarburn viaduct [*ibid*, pages 0003–0007]. Although the change mechanism required BBS to provide an estimate of the cost of the change for **tie**’s approval, no estimates were provided with any of the INTCs. The stated reason for omitting estimates in each case was “due to the complexity” of each change. **tie** responded by letter dated 29 May 2008, commenting on the change notices, including the requirement for BBS to provide estimates to enable **tie** to consider the change notices further [CECo1311410].

The “gentlemen’s agreement”

- 15.10** Mr Walker, the managing director of BB at the relevant time, gave evidence that the price in the Infraco contract was based on significant assumptions that were accepted by BSC and **tie** as not reflecting the true position. Both parties knew that the price would increase as soon as the contract was signed, as a result of the assumptions not holding true and triggering contract changes. He stated that, in the days following signature of the contract, in relation to discussions about the construction programme having been based on a superseded version of the design programme, Mr Gallagher acknowledged that the price would increase, but said that **tie** could not go back to City of Edinburgh Council (“CEC”) and ask for more money without any works having been started. Mr Walker said that he responded that BSC would work in good faith over the summer period, without agreeing in advance the cost of contract changes, and would seek payment for these works in September, when **tie** would have some “works on the ground” to show that there had been progress. He stated that, in essence, he and Mr Gallagher entered into a “gentlemen’s agreement” to the effect that BSC would progress with the works in that manner and would be paid for them, assuming that its invoices were fair and reasonable. While BSC was of the view that the change mechanism in the contract did not require – or even entitle – BSC to commence work that was subject to a disputed notified change

in advance of the cost of the change being agreed, Mr Walker gave evidence that it was prepared to put the strict terms of the contract to one side to allow work to be carried out [PHT00000035, pages 111–114 and 123–126; TRI00000072_C, pages 0043–0044 and 0055–0057, paragraphs 87 and 101–103; see also email dated 21 November 2008 from Mr Walker to Mr Bell, CEC01125238].

- 15.11** For his part, Mr Gallagher gave evidence that although he recalled a discussion with BSC in which he had emphasised the need to start work on building the tram line, he had not been involved in the detailed management of the works. He denied the suggestion put to him by Inquiry Counsel that his response to BSC's first Notified Departure claim was that he could not be seen to be paying for, or agreeing to, additional sums before the works had started, and that he had, therefore, said to BSC to start the works, without agreed estimates for changes, and that things would be sorted out later [PHT00000037, pages 144–146].
- 15.12** Mr Flynn, of Siemens, gave evidence that although he was not aware of any "gentlemen's agreement", he recalled that there were some discussions about the contract processes being slow and that, in an effort to show goodwill, BBS proceeded with some of these works on the basis that the contract processes would catch up. In the event, the contract processes did not catch up; consequently, BBS's position hardened. In other words, BBS proceeded with some work but when payment was not forthcoming it reverted to the terms of the contract and insisted upon following the contract process [PHT00000045, page 99]. Similarly, Mr Eickhorn, of Siemens, gave evidence that although, in the beginning, there was more willingness to be a little bit more relaxed about the precise terms of the contract, as the number of changes grew and could not be agreed, "the consortium felt more and more exposed that it might not be ... recompensed in a fair manner for [the] changes that had occurred" *ibid.*, page 146].
- 15.13** The evidence in relation to what, exactly, was discussed between Mr Walker and Mr Gallagher, in the days and weeks following the award of the Infraco contract, was not clear. In his oral evidence Mr Walker originally stated that the conversation with Mr Gallagher took place on the day of contract signature, but when I sought clarification of the timing he thought that the discussion occurred after BSC sent its letter to **tie** on 21 May, enclosing Notified Departures [CEC01288310], and that the letter probably prompted that discussion. The latter position is consistent with his written evidence [TRI00000072_C, pages 0043–0044, paragraph 87]. Mr Gallagher denied that such a conversation took place, but confirmed that he was pressing for progress. I am not able to come to any firm conclusions as to whether a "gentlemen's agreement" was entered into, along the lines set out by Mr Walker. Even if there had been such an agreement as described by Mr Walker, there was scope for dispute about the price payable for work done on that basis. It lacked the certainty of an accepted estimate for the work to be undertaken, even if that estimate permitted re-measurement of the work actually undertaken. Moreover, any agreement to depart from the strict terms of the contract ought to have been recorded in writing. Although a formal minute of variation of the contract would have settled the matter of what had been agreed, the Inquiry has not even seen any less formal record of the agreement that was reached, such as an exchange of letters or emails. The absence of any documentary evidence is surprising in view of the expenditure that BSC was incurring on the basis of the alleged "gentlemen's agreement", but I am not prepared to conclude on that basis alone that Mr Walker's evidence on this matter was untrue.
- 15.14** What is clear, however, is that BSC did attempt initially to carry out works on Leith Walk and that the difficulties in carrying them out due to the presence of undiverted

utilities and underground obstructions, the growing number of unresolved changes, and the dispute in relation to which party bore the risk of design development, led to a hardening of BSC's position, as will be discussed in paragraphs 15.26 – 15.35.

Work carried out

- 15.15** Between June and August 2008, BSC carried out site clearance and demolition works. In its report to **tie** for the period to 11 October 2008, BSC recorded that it had received Issued for Construction ("IFC") design on 15 September 2008 and thereafter had commenced works on Leith Walk between McDonald Road and the Foot of the Walk [CEC00430660, page 0008]. When BSC started work on Leith Walk it encountered difficulties that prevented it from working in an efficient manner. These included lack of design, late design, failure to have unrestricted access to designated work areas due to continuing MUDFA works in those locations, and the existence of utilities in a work site that ought to have been diverted even after the MUDFA contractor had ostensibly completed the MUDFA works in that location.
- 15.16** The continued presence of the MUDFA contractor in designated work areas that ought to have been available exclusively to BSC resulted in inefficient and unproductive work. Its continued presence in those work areas meant that BSC was given access to only small work areas (of approximately 20–25 metres in length at a time), rather than the large work areas (of approximately 300–350 metres in length) that it had anticipated when it entered into the contract. Moreover, the small work areas were not adjacent to each other and, upon completion of a short section of 20–25 metres, the workforce would relocate to another short section that was possibly 200 metres up the road, or even on the other side of the road. Different traffic management arrangements were required. Consequently, the work flow was interrupted, and there was no consistency. This was not conducive to efficient working.
- 15.17** The existence in BSC's work areas of utilities that had not been diverted by the MUDFA contractor meant that BSC had to divert them [Mr Walker PHT00000035, pages 127–128]. Mr Donaldson, BSC's Construction Manager from July 2008, summarised matters by stating that it was impossible to carry out any meaningful work on Leith Walk because of the amount of utilities still there. He considered that the contract was unworkable, because every time that BSC discovered an undiverted utility following its excavation of the work site, that amounted to a change, which then required BSC to follow the contract process for dealing with changes. At the same time, BSC was trying to undertake construction work in parallel with the change process [PHT00000036, pages 106–108].
- 15.18** In his evidence to the Inquiry, Mr Foerder, BSC's Project Director, illustrated the impracticality of the change mechanism in the contract if contractors experienced numerous unexpected obstructions within their work areas. He explained that, upon its discovering an unexpected obstruction such as undiverted utilities, the contract mechanism required BSC to notify **tie** of the change to the contract and to submit an estimate of the cost of the additional work. Before work could commence, **tie** had to issue a Change Order, following which BSC could proceed with the work. That process was time consuming and had to be repeated every time that BSC encountered an unexpected obstruction. In the context of the work on Princes Street, on which Mr Foerder was giving evidence, the contractual mechanism would not have worked because of the number of obstructions present there [PHT00000044, pages 23–24]. Although this evidence related to the conditions on Princes Street at a later date, it supports Mr Donaldson's evidence about the contract being unworkable

because of the need to follow the contract process for dealing with changes when BSC discovered an obstruction such as an undiverted utility. **tie** recognised that the contract change mechanism was not effective in allowing BSC to progress urgent work pending evaluation and agreement of a change notice. It was willing to consider solutions such as agreeing that work might progress up to a limited sum without prior agreement, but considered that much of the difficulty lay with BSC's failing to adhere to the timetable of the change procedure and submitting inflated estimates for work to be done, to which **tie** could not possibly agree [CEC00605558]. However, even if these alleged difficulties that **tie** attributed to BSC did not exist, it seems to me that the contract mechanism for change was impractical where there were numerous unexpected obstructions.

- 15.19** Mr Walker gave evidence to the effect that BB was approximately £2.5 million out of pocket because of the delay and disruption to its works on Leith Walk. In September and October 2008, he had two meetings with Mr Gallagher, at which payment was sought for the work that had been undertaken. At the second meeting, he presented photographs and diagrams showing the extent to which BSC was unable to progress its works on Leith Walk as a result of ongoing utility diversion works, undiverted utilities and underground obstructions [WED00000025]. He understood that Mr Gallagher intended to speak to the appropriate people at **tie** to resolve this matter. As will be seen from paragraph 15.20 below, there was correspondence between Mr Walker and Mr Gallagher, and discussions between representatives of **tie** and BSC, about issues in dispute. Payment was not, however, made before Mr Gallagher's departure from **tie**, which will be mentioned in the same paragraph.
- 15.20** By letter dated 13 October 2008, Mr Walker suggested to Mr Gallagher a structured approach to evaluating and agreeing the impact of delays and changes to date and the development of a revised baseline for the programme going forward [DLA00001671]. In his reply on 14 October 2008, Mr Gallagher stated that **tie** did not accept that "a significant number of changes" had been "instigated or caused by **tie**" or that **tie** had caused "a notified 6 month delay". **tie** was also of the view that it was important to recognise that normal design development from the Base Date Design Information ("BDDI") in SP4 was included in the price agreed at contract close [DLA00001672]. The proposed work streams set out in the letters were discussed in a telephone conference call in the evening of 14 October 2008 [DLA00002768]. It also appears that meetings were arranged between **tie** and BSC in the week beginning 20 October 2008, to discuss and, it was hoped, to resolve the various issues that had arisen [email dated 17 October 2008 by Mr McGarrity with note – CEC00605557; CEC00605558]. In the event, Mr Gallagher left **tie** in late October or early November 2008, and the various issues that had arisen between **tie** and BSC remained unresolved.

Mobilisation of BSC

- 15.21** The issue of mobilisation in this section relates to the actions of BB and Siemens as the members of the consortium respectively responsible for the construction of the project and the necessary systems, including the track. **tie** had concerns that, following the award of the Infraco contract in May 2008, BSC had been slow to mobilise, enter into contracts with sub-contractors and commence the Infraco works. These concerns were raised with BSC as early as June 2008 [DLA00001673] and were noted in various documents thereafter [see, eg, report for meeting of the Tram Project Board on 2 July 2008 USB00000005, page 0012; **tie** programme report relating to progress up to 3 August 2008 CEC01355364; email dated 27 August 2008 from Mr Bell to Mr Walker CEC01165082; and letter dated 14 October 2008 from **tie**

to BSC [DLA00001672](#)]. A number of **tie** witnesses also gave evidence that, in their opinion, BSC had been slow to mobilise. Mr Bell acknowledged that delayed design was not BSC's fault, but considered that its use of civil engineering sub-contractors to do packages of work caused an element of delay in mobilising and managing the supply chain [[TRl00000109_C](#), page 0084; see also Mr McGarrity [TRl00000059_C](#), pages 0189 and 0191].

- 15.22** Mr McFadzen, of BB, acknowledged that its mobilisation was open to criticism, but that was not a critical delay and did not affect overall progress [[TRl00000058_C](#), page 0053, paragraph 185] In his oral testimony he explained that it was a more complicated contract to sub-contract than a standard contract, because it was bespoke. There was no standard form of sub-contract that could be used. The absence of an agreed programme in the first few months of the project made the appointment of sub-contractors more difficult. A further difficulty was that BB was "new on the block as far as the Scottish construction industry was concerned, and we had to get people in". Nevertheless sub-contractors had been identified and pre-selected for particular sections of work, and there were memoranda of understanding with them [[PHT00000034](#), pages 169–170]. Mr Donaldson, of BB, considered that the project mobilised in accordance with what work sites were available to BSC following completion of the MUDFA works [[PHT00000036](#), page 104]. Although BSC reported, in late June 2008, that its recruitment of staff for the project had been adversely affected by the protracted negotiations in relation to the Infraco contract and the consequent uncertainty over the project commencement date, by August 2008 it reported that mobilisation was well advanced and that key personnel were in place to progress the available work [[BFB00036446](#), page 0003; [BFB00056434](#), Part 1, page 0003]. Dr Enenkel, Chief Executive Officer and member of the Executive Management of Bilfinger's Construction Subgroup between 2006 and 2010, gave evidence that no work package was available that justified significant mobilisation and that, in areas where BSC were able to work, mobilisation took place and work was started [[TRl00000161_C](#), page 0041].
- 15.23** Mr McFadzen's evidence on this matter reflected BB's contemporaneous internal report [[BFB00112167](#)], which will be mentioned in paragraph 15.27 below, and was balanced. He accepted that BB could be criticised for slow mobilisation, but it is clear from his evidence – and the evidence generally – that there was delay in completing the design. That, together with the lack of an agreed and up-to-date construction programme, made it difficult for BB to plan its works and enter into contracts with sub-contractors. In the absence of sub-contracts, they issued letters of intent to their sub-contractors to enable work to commence at sites where IFC design was available and utility diversions had allegedly been completed. Sub-contractors were able to commence work on the basis of a memorandum of understanding pending the execution of a sub-contract. I am satisfied that although there may have been a degree of slow mobilisation by BB immediately after the Infraco contract was awarded, any initial delay by BB in that regard was of less importance than the delay caused to the Infraco works by incomplete utility diversions and incomplete design.
- 15.24** Mr Eickhorn gave evidence that Siemens mobilised its main sub-contractor, BAM, at a very early stage. That early mobilisation caused Siemens problems later, when the works could not be progressed as planned. In addition, despite the project delays, Siemens continued to order and manufacture the necessary parts and equipment. The reasons for doing so were twofold: because many of the items were bespoke and had long lead-in times, and to enable Siemens to start work immediately when work sites became available [[PHT00000045](#), page 150]. On 22 May 2008, Siemens

issued its instruction to BAM, its sub-contractor responsible for laying the track, to ensure that it could deliver its works as originally planned. When the project was delayed, BAM made claims against Siemens, which Siemens sought to recover from **tie**. These sums were ultimately only recovered to a large extent as part of the Mar Hall settlement agreement [*ibid*, pages 156–158; [TRl00000171](#), page 0010, paragraph 22.1.1].

15.25 I accepted Mr Eickhorn's evidence. In fairness, **tie**'s criticism of slow mobilisation was directed at BB, and no criticism was made of Siemens in that regard. Having regard to Mr Eickhorn's evidence, there could be no basis for any such criticism. Indeed, Siemens mobilised its main sub-contractor within days of signing the Infraco contract and suffered loss as a result of **tie**'s failures. It did not recover that loss until after the settlement following mediation.

Progress of works and hardening of BSC's position

15.26 BB sent monthly reports to its group head office in Germany about the progress of the project. These were obviously of value as internal documents, but they provide a useful summary of the state of the project at the date of each report as well as an insight into BB's concerns and its reaction to **tie**'s proposals for resolving them.

15.27 BB's monthly report for September 2008 noted that actual performance achieved in the month and overall performance to date were at approximately 40 per cent of planned levels. The causes of that underperformance were stated to be delays to design approval, issues of access to work sites and changes to work scope, all of which had reduced the amount of work available. BB attributed responsibility for each of these causes to **tie** [[BFB00112167](#), page 0004]. The programme issued in April 2008 had been superseded for the reasons outlined in paragraph 15.10 above, which BB maintained were the responsibility of **tie**. Works were five months behind the existing programme, but were being managed on site with a four-month interim programme, although continuing problems with design and access were affecting progress [*ibid*].

15.28 Although there continued to be delay in design approval, some of the final drawings that had been approved were significantly different from the "freeze" drawings on which the Infraco contract was based, requiring changes to be agreed with **tie**. In the on-street section, initial works had commenced on Leith Walk, following partial completion of utility diversions by **tie**, but ongoing utility diversions continued to have an adverse impact upon construction. In the off-street section, works were in progress at various sites. Firstly, work had commenced at Haymarket viaduct, but design changes were causing delay there. Secondly, foundation works were in progress at Edinburgh Park bridge, but were delayed by design change. Thirdly, after delay caused by undiverted utilities, piling works had now commenced at the A8 underpass. Preparatory works were also in progress for embankment fill at Carrick Knowe [*ibid*, page 0005].

15.29 The report also dealt with the status of major unapproved claims, variations and changes. As at the date of the report, more than 120 changes had been notified to **tie**, but nothing of any substance had been agreed. The process of preparing a programme and cost estimate for each change was very demanding, and BB was allocating extra resources to that task. BB had submitted an extension of time claim in respect of initial design delay at the date of contract award, but was preparing to substantiate the delay. One of the issues in dispute was the delayed commencement of work, which BB acknowledged had been caused by a combination of **tie**'s delay and BB's slow mobilisation, whereas **tie** maintained that all delays had been caused

by BB's late mobilisation. It is also clear from this report that BB was unwilling to accept **tie**'s proposed compromise of negotiating a revised programme incorporating all delays to date, as it considered that that would not result in a fair evaluation of the delay and associated costs already incurred by BB [**libid**].

- 15.30** BB's monthly report for October 2008 noted that performance in the period was approximately 90 per cent of the revised target, which had been reduced in the previous month in view of the continuing disruption being experienced due to changes, external delays and lack of instructions. Efficiency had been significantly reduced by these circumstances, and BB would not open up new work areas unless these issues were resolved [**BFB00112170**, page 0004]. The decision not to start work in areas affected by change, external delays and lack of instructions was clearly critical for the progress of the project. In effect, it meant that BB would refuse to commence work in those areas unless and until the underlying dispute over the correct interpretation of the contract was resolved or **tie** authorised BBS to proceed with the work in terms of the agreed change procedure. Despite the significance of that decision, BB did not intimate it to **tie** until December 2008, as will be discussed in paragraph 15.35 below.
- 15.31** The above report noted that the on-street works at Leith Walk were seriously impacted by undiverted utilities. It was hoped that a system of authorisation of, and payment for, diversion of utilities could be devised, ensuring that BB received payment when costs were incurred. In the off-street section, works had continued, on a small scale, at Haymarket viaduct, Carrick Knowe, Edinburgh Park and the A8 underpass. All these locations had been affected by external delay or change, making work inefficient and uneconomical. Prior to the date of the report, BB had notified 187 changes to **tie**, but had submitted only 41 cost and programme estimates. BB was recruiting a planner and an estimator to improve performance on submission of estimates. The report also stated that there were recent indications that **tie** was intending to dispute certain basic pricing principles, such as all departures from the November 2007 BDDI being mandatory changes for which BB would be paid. That was "absolutely unacceptable" to BB and would be "strongly contested" [**libid**, pages 0004–0005].
- 15.32** Dr Keysberg, a member of the Executive Board of Bilfinger Berger AG in Wiesbaden between 2008 and 2010, with responsibilities for the project, gave evidence that BB had undertaken the work on Leith Walk on a "good faith basis" but had not been paid for that work. The work had not gone well because of the presence of many utilities that should have been moved before BB started work. He commented: "it was such a mess that we were subsequently instructed to close it up again" [**TRl00000050_C**, page 0010]. This experience made BB very nervous and reluctant to continue working on a good-faith basis. Furthermore, BB's decision not to start work in areas that were subject to disputed notified changes was consistent with that company's philosophy of not accepting risk that was unusual for the industry or could not be quantified [see paragraph 11.104]. In addition, where sums were due to BB, the company policy was that these sums could not be forgone except with the consent of the executive management in Germany. That meant that, without such consent, disputes required to be pursued at all levels, including, if need be, through the courts [Dr Enenkel **PHT00000034**, pages 135–137; **TRl00000161_C**, page 0040].
- 15.33** BSC's report to **tie** for the period to 8 November 2008 recorded that construction works were in progress in sections 1B, 2A, 5A, 5B, 5C and 7, but were all impacted by external issues that required resolution through the change process. On Leith Walk, undiverted utilities in the first work site were severely hampering progress.

At Edinburgh Park viaduct, significant changes to foundation works were required due to unsuitable ground conditions. The overall volume of changes and, in some cases, the requirement for design work to produce change estimates, were overloading available change management resources and introducing severe delay. Disagreement over liability for change, for example, between BDDI and IFC drawings when produced, was exacerbating the delays in agreeing changes [CEC01169379, Part 1, page 0003]. The report did not contain any reference to BB's decision not to start work in any areas that were subject to a disputed change.

- 15.34** BB's internal monthly report for November 2008 noted that performance in the period was in line with the target, albeit that the limited works in progress were affected by changes or obstructed by undiverted utilities in many areas, reducing efficiency and increasing costs. Progress in finalising approvals and consents for track and highway drawings by System Design Services ("SDS") had been poor and was threatening to delay commencement of works on Princes Street. Some progress had been made in securing **tie**'s agreement for civil works enhancements to suit Siemens' proposals, notably for a ground improvement layer under the track, but duct and overhead line equipment foundation designs remained delayed by Siemens' late design finalisation. Additional resources had been mobilised. On-street works had continued in one area of Leith Walk, in an attempt to establish a method for dealing with undiverted utilities and other obstructions. Traffic management was being installed to enable work to commence on Princes Street in February 2009. Off-street works had continued at Haymarket viaduct, Edinburgh Park bridge, Carrick Knowe bridge and the A8 underpass to the extent possible without taking any risk for changes that had not been agreed with **tie**. Following indications from **tie** that it intended to dispute changes from BDDI to IFC drawings, meetings had been held to explain the scope of, and reasons for, the changes, particularly changes to structures adjacent to the railway line [BFB00112174, pages 0004–0005].
- 15.35** BSC's report to **tie** for the period to 6 December 2008 noted similar problems as before in relation to construction works being impacted by changes, which required resolution through the change process. Discussions were in progress to seek to agree an interim change mechanism to permit works to proceed while the full change process was followed. Importantly, the report stated that: "[u]ntil this is in place, BSC will not progress any further changed works prior to agreement on costs" [CEC01121557, Part 1, page 0003]. This appears to have been the first time that BSC made **tie** aware that it would not commence works that were subject to a disputed notified change without the cost of these works being agreed in advance or without there being an amendment to the change mechanism in the contract. This was an ominous indication that the simmering dispute over changes and the change process was about to come to a head. However, in BSC's next report to **tie**, for the period to 31 January 2009, there was no repetition of its intention to refuse to start work in new areas in the above circumstances. As will be discussed in Chapter 16 (The Princes Street Dispute), BSC's position in that regard would crystallise shortly before the planned commencement of the works on Princes Street in early 2009.

Change notices

- 15.36** The minutes of a meeting between members of the consortium on 5 June 2008 noted that the lump sum in the Infraco contract was "soft" because the price was based on design information as at 25 November 2007 and later changes in the IFC design were regulated by SP4. Everyone in the BSC team was to read SP4 in order to understand BSC's strategy towards design changes. In addition, delays due to approvals, consents and third-party imposed changes would become **tie** changes.

A dedicated change team was being established. Weekly change meetings were to be held within BBS, and Pinsent Masons (BB's solicitors) were to hold a session about the contractual change mechanism to be followed [[SIE00000228](#), page 0004].

- 15.37** As was stated in paragraph 15.9 above, BSC notified the first 6 changes to **tie** on 21 May 2008 [[CEC01288310](#)]. By 10 July 2008, the number of notified changes intimated by BSC to **tie** had risen to 50 [[CEC00793598](#)]. By November 2008, the total number of notified changes had increased to 240, 26 of which had been notified by **tie** and the remaining 214 by BSC. Of these notified changes, **tie** had acknowledged that 87 were valid, it had rejected 54 and had yet to state a position on 99. BSC had submitted 51 cost estimates [[BFB00112174](#), page 0005].
- 15.38** The Inquiry understands that there was no internal monthly report for December 2008 because of the festive season, although such reports were prepared and submitted to the group headquarters in Germany each December between 2009 and 2013 inclusive. However, BB's internal report for November 2008 included a table listing the claims, variations and changes to the contract [*ibid*, pages 0014–0018]. The table gives a flavour of the more significant claims for changes in respect of which estimates had been provided:
- changes to the programme as a result of slippage in the IFC design for the on-street section (£3 million)
 - amendments to Ocean Terminal layout (£2.6 million);
 - Ocean Terminal revised finishes (£1.7 million);
 - Gogarburn tram stop feasibility cost (£1.2 million);
 - Gogar depot public tram stop proposals (£2.6 million);
 - public realm works at St Andrew Square (£9.9 million); and
 - public realm works at Bernard Street (£1.2 million) [*ibid*].
- 15.39** The sheer volume of changes presented problems for both BSC and **tie**. BSC experienced difficulties in producing estimates for the changes within the period specified in the contract. In addition, it was difficult to value the prolongation effect of a change until the underlying change had been agreed. In order to cope with the volume of work associated with the number of changes the BSC change team, particularly BB, required to be increased significantly [Mr Eickhorn [PHT00000045](#), page 147].
- 15.40** Processing the larger than expected number of notified changes also presented difficulties for **tie**. That difficulty was exacerbated by a number of factors. It was of the view that many of the changes lacked sufficient detail to enable it to form a view as to whether a change had occurred. In addition, the majority of the estimates were not provided within the timescale stipulated in the contract and, where estimates were provided, **tie** considered that the estimates were either lacking in specification and/or were excessive [Mr Murray [TRl00000063_C](#), pages 0024 and 0026; Mr Murray [TRl00000155](#), page 0003; Mr McGarrity [TRl00000059_C](#), pages 0210–0211]. More fundamentally, however, **tie** did not accept that the contract gave rise to a right to additional payment in respect of the changes in question.
- 15.41** Witnesses from both **tie** and BSC gave evidence that there were an abnormally high number of changes, and disputed changes, over the course of the contract. In the event, by the time of the Mar Hall mediation in March 2011, there were more than 700 notified changes. Mr Bell gave evidence that, when the Infracore contract was awarded,

he anticipated that there might be in the region of 60–100 notified changes over the course of the contract [TR100000109_C, page 0072]. Dr Keysberg gave evidence that no one anticipated the number of changes that arose, which was extremely high compared with those for other projects, and that the number of changes that were disputed, and which remained unresolved over a long period of time, was also unprecedented [TR100000050_C, pages 0010–0011].

- 15.42** The abnormal number of changes can be seen as a consequence of **tie**'s decision to conclude the Infracore contract when the design was incomplete, and when pricing of the contract was based upon an out-of-date design and upon pricing assumptions that were known not to reflect the actual situation that prevailed at the time of the contract. Moreover, in the contract the parties had acknowledged that certain of the pricing assumptions might result in a Notified Departure immediately after contract signature. It is hardly surprising that BB sent six INTCs to **tie** within a week of concluding the contract, or that notices of change arose because of **tie**'s failure to give BB unfettered access to work sites, or because sites that were provided to BB contained obstructions that should have been removed. Nor is it surprising that, unless the contractual change mechanism were to be changed, **tie** would not issue Change Orders in the absence of estimates of the cost of any change. That was simply an indication that **tie** was adhering to the terms of the contract relating to the change mechanism as BSC intended to do, by refusing to start work in any areas that were subject to a disputed change. These opposing positions illustrate that strict adherence to the terms of the contract would continue to affect the progress of the project unless the contract was amended.

Proposals to amend the change mechanism

- 15.43** In view of the difficulties that BSC experienced when it commenced work on Leith Walk, and the implications for future progress of the contract of adhering to the contractual change mechanism every time that an unexpected obstruction was encountered, it is not surprising that BSC and **tie** realised that it was necessary to attempt to resolve this issue at the earliest opportunity. From September 2008 onwards, discussions took place between **tie** and BSC in relation to amending the change mechanism in the contract (clause 80) to deal with urgent changes, ie where time was critical to prevent delay to construction operations in progress [email dated 17 September 2008 from BSC to **tie** with a draft agreement (CECo1130811; CEC01130812); **tie**'s proposed protocol in October 2008 (DLA00001328); and BSC's letter dated 4 November 2008 (CECo1123824)]. Although parties appear to have been close to reaching agreement in late 2008 [email dated 20 November 2008 from Mr Bell (CECo1125114) and Mr Walker's reply the following day (CECo1125238)], they were unable to agree an amendment to the change mechanism. They disagreed on the fundamental issue of whether BSC was obliged or even entitled, under clause 80, to carry out the works that were subject to a disputed notified change before the cost of these works had been agreed. That issue was not finally determined until August 2010, with Lord Dervaird's decision, mentioned in Chapter 17 (Adjudications and Beyond).

Updated construction programme

- 15.44** Although **tie** and BSC failed to agree on an amendment to the change mechanism, they did agree in principle to a revision to the construction programme in around November 2008. That revision took account of the change from version 26 of the design programme, being the version of the design programme upon which BBS had based its tender to version 31 (which was the version in force when the

Infraco contract was awarded). The agreed revision included an extension of time of seven weeks and three days [BB's internal monthly report for November 2008, [BFB00112174](#), page 0004]. The revision to the construction programme formed the basis of the first change notice intimated by BSC to **tie** (INTC 1), the cost of which was subsequently agreed on 19 November 2009 at £3,524,000 [[CEC00121677](#)].

- 15.45** By the time that the revision to the construction programme was agreed, however, the revised construction programme was already out of date as a result of further design delay and further versions of the design programme having been issued. In the event, no further revision of the construction programme was agreed until the resolution of the underlying dispute between the parties at Mar Hall in 2011.

Conclusions

- 15.46** By the end of 2008, the dispute between **tie** and BSC in relation to the correct interpretation of the Infraco contract – concerning which party bore the risks arising from incomplete design and the correct operation of the provisions relating to the change mechanism – had come into focus.
- 15.47** With a view to keeping its exposure to risk to a minimum, BB decided not to start work in areas that were subject to a disputed notified change, resulting in delay to the progress of the project.
- 15.48** Given the number of disputed changes throughout the route of the tram line, and the failure to reach an agreement about an amendment to the provisions for contract change in clause 80, it ought to have been apparent to parties that progress would be severely impeded and would ultimately be brought to a halt.
- 15.49** The dispute came to a head shortly before the planned start of the works on Princes Street in early 2009, and this contributed to the ultimate decision of the parties to enter into the Princes Street Supplemental Agreement, which will be discussed in Chapter 16 (The Princes Street Dispute).
- 15.50** The difficulties with the project in 2008 and the abnormal number of Notified Departures were a consequence of **tie**'s decision to conclude the Infraco contract when the design was incomplete and pricing of the contract was based upon an out-of-date design and upon pricing assumptions that were known not to reflect the actual situation that prevailed at the time of the contract.

Chapter 16

The Princes Street Dispute

16.1 Disputes between **tie** Limited ("**tie**") and Bilfinger Berger, Siemens and CAF ("BSC") had started to manifest themselves shortly after the infrastructure contract ("Infraco contact") was signed. Perhaps most significantly, irrespective of whether there had been a "gentlemen's agreement", BSC had not been paid additional sums in respect of what it saw as disruption to the works that it had carried out on Leith Walk. This had led to the hardening of attitude on the part of BSC and to its decision not to open up new work areas unless the issues were resolved. These problems flared up in relation to the works on Princes Street that were planned to commence on 21 February 2009. The dispute that emerged exposed the difficulties that had been built in to the contract and it set the scene for what was to follow until the Mar Hall mediation in 2011. Before examining the issues that arose and their consequences, it is useful to set out a chronology of the principal elements of the dispute and its resolution.

2008

- 1 October As part of the preparation for the works on Princes Street, temporary traffic management plans were put in place there, at its junction with the Mound. The result had been "an absolute snarl up of the greatest order" [Councillor Dawe, [TRl00000019_C](#), page 0108, paragraph 415] and councillors were determined that there would be no repetition when work started in February 2009. The outcome of investigations following this was a decision that one lane of Princes Street should be kept open for buses. For completeness, I note that Mr Mackay, chairman of **tie** at that time, claimed that the decision to keep the bus lane open was unconnected with the congestion that arose in October 2008 [[TRl000000113_C](#), page 0078, paragraph 288], but his evidence is at odds with the other material available to the Inquiry and I consider that he is mistaken in his recollection.
- 22 October A meeting of the Tram Project Board ("TPB") took place, which was attended by a representative of BSC, Mr Brady. While the original plan had been to close Princes Street to all traffic, including buses, the meeting discussed the possibility of changing that plan so that a bus lane would be kept open [[CECo1053731](#), page 0007]. This discussion was described as "amicable", and a note in the minutes records that agreement was later reached. A PowerPoint presentation of the same meeting, however, noted that the revised approach would need to be carefully handled, as it was likely to require a notice of change under the contract, which would result in increased charges [[CECo1167539](#), page 0022]. There was therefore clearly an awareness at **tie** that some claim could be expected.
- 6 December By this date, BSC had decided that, in the absence of agreement as to costs, it would not carry out works that it considered to be the subject of change [[CECo1121557](#), Part 1, page 0003].

2009

- 12 January Following meetings with BSC to discuss the proposal to keep a lane on Princes Street open, **tie** issued a notice of change in relation to the provision of a bus lane on Princes Street during the works
- 9–10 February A meeting took place between representatives of **tie** and BSC to consider the position in relation to Princes Street. **tie**'s record of the meeting [[TIE00089656](#)] noted that BSC had said that the following were the options:
- “They will only work on a cost+ basis for any work progressed prior to completion of design and utilities ..., or ...
- “They could go away for 6–12 months until your utilities and your design are completed then come back to work as per the original contract sequence.”
- 12 February BSC intimated a draft assessment of the additional cost relative to the change notice [referred to in Infracore Position Paper for Dispute Resolution Procedure that followed: [CEC01032611](#)]. The sum identified was £8,001.96.
- 12 February Mr Mackay wrote to Dr Keysberg of BSC, expressing concern that BSC was not adhering to the contract in relation to variations [[CEC00900093](#)]. The particular concern was that BSC had said that the change was too complex to be able to permit an estimate in terms of the contract.
- 13 February **tie** issued Change Order 21. Mr Foerder's evidence was that he understood that there had been no Change Order [[PHT00000044](#), pages 24–25, but this is clearly incorrect. This Change Order agreed with the BSC estimate *except* in relation to head office overheads and profit; consortium preliminaries; and other preliminaries. The sum that **tie** identified in the Change Order was £6,546.55, which differed from the BSC figure by £1,455.41.
- 17 February A meeting took place between **tie** and BSC. At this meeting, **tie** representatives asked whether it was BSC's position that it had no obligation to accept **tie**'s instruction to start work on Princes Street.
- 18 February BSC responded by email to the question posed at the meeting on the previous day [[CEC00867153](#)]. It said that it was not obliged to start work in Princes Street in the absence of agreement as to the additional cost. The email also stated:
- “However we understand the importance of this area to you. Therefore as a gesture of goodwill and without prejudice to any entitlements with respect to events and circumstances given rise to this action we are prepared to evaluate diligently any proper instruction to commence the works in Princes Street. Such proper and detailed instruction is still outstanding. It is our strict understanding that we shall receive a proper instruction prior to our commencement of the works in Princess [sic] Street containing clear details on reimbursement of our actual costs and overheads, prelims and profit – further that tie accept of [sic] the risks associated with

proceeding with the works under these circumstances. In addition that any extensions of time to the relevant milestones will be granted where such works are delayed."

In his evidence Mr Foerder accepted that this was a demand to be paid on the basis of "demonstrable cost" [PHT00000044, page 22]. In my view, it is significant that this answer was given in an email a day later than the meeting rather than at it. It suggests that BSC took time to consider what its position was and that it was developing. I return to this issue below.

- 19 February **tie** purported to instruct BSC in terms of clause 80.15 of the contract to implement the change.
- 19 February BSC responded that it was not obliged to accept the instruction of 19 February.
- 19 February **tie** notified BSC that it was referring the matter for dispute resolution in terms of the contract.
- 21 February Intended commencement date of Princes Street works [CEC01032608, page 0002, paragraph 2.1]. Full traffic diversion measures were in place by this date [CEC00988034, page 00013].
- 23 February Dr Keysberg of BSC wrote to Mr Mackay to say that the consortium was not demanding an additional £80 million from **tie** but was indicating that it considered that it would cost an additional £50 million to £80 million to complete the contract. The letter stated that starting work on Princes Street was not conditional on payment of these sums. The letter referred to the belief within **tie** that the Edinburgh Tram project (the "project") was fixed price, and it said: "Nothing could be further from the truth." [CEC01009884.]
- 5 March Mr Flynn of Siemens sent a document entitled 'March 2009 framework concept mf' to Dr Keysberg and Mr Mackay [DLA00002513; DLA00001455]. This suggested that the parties should identify five critical examples in the "country area" of the issue, concerning the move from base date design to Issued for Construction ("IFC") design,
- "and agree an equitable solution to enable work to commence on those items. E.g. agree direct works costs (assuming they are changes) until a solution is agreed on the preliminaries discussion.
- "... Agree a pragmatic working solution within the contract to the ... 'I need an estimate before I can agree it is a change' ... vs ... 'you must agree it is a change before I give you an estimate.'"
- 17 March Mr Swinney and Mr Stevenson, both of whom were Ministers in the Scottish Government, had a meeting with Mr Mackay (recorded in email of that date: TRS00016931]. Mr Swinney expressed the view that the contract was in a bad place and that public confidence needed to be restored. Mr Mackay confirmed that he was working towards that.
- 20 March The first supplementary agreement was signed, stipulating that works should commence on 23 March [CEC00334456].
- 29 May The second version of the supplementary agreement was signed [CEC00302099].

Scope of the dispute

16.2 Perhaps the most immediately striking fact from the above chronology is the apparently small sum of money that was in dispute. Taken in isolation, it would not have been expected to bring matters to a halt. In reality, however, the issues went beyond the agreement of the particular change. It is necessary to take into account the difficulties and disagreements that had occurred when BSC attempted to carry out works on Leith Walk.²¹ The essence of the dispute lay in the issue of whether it would be practicable to implement the contract terms at all in relation to works to be carried out on existing roads. As would be expected, the picture presented by the evidence of witnesses from **tie** was very different to that presented by the BSC witnesses.

tie witnesses

16.3 Mr Mackay led the **tie** team in relation to the discussions on the dispute. He was of the view that the refusal to work on Princes Street was a deliberate tactic on the part of BSC to bring **tie** and City of Edinburgh Council ("CEC") to their knees [**PHT00000038**, page 104] and that the reference to the bus lane was a "red herring" [**ibid.**, pages 158–159]. In his view, BSC wanted to change "the fabric of the contract" [**ibid.**, page 95]. In particular, his view was that for on-street works BSC wanted to move from the payment terms specified in the contract to payment based on its costs. Mr Mackay said that BSC was indicating an intention to claim in respect of unforeseen ground conditions and utilities not being where it had thought they were, but he was of the view that it had known of these matters when it had bid for the contract [**ibid.**, page 141]. When considering this, however, it is necessary to have in mind that, in relation to Princes Street, rather than have the utilities cleared in advance to permit construction of the tram infrastructure, Mr Gallagher testified that the decision to carry out the infrastructure works and the Multi-Utilities Diversion Framework Agreement ("MUDFA") works at the same time was taken consciously [**PHT00000037**, page 122]. This was a departure from Pricing Assumption 24 mentioned in paragraph 8.64 above that had been built into Schedule Part 4 ("SP4"). I consider that in taking such a decision, there ought to have been a realisation that such a departure from the contract would not only entail additional costs but might require different procedures under the contract to manage the Notified Departures that would inevitably arise. However, this was not done.

BSC witnesses

16.4 In the main, the witnesses from the consortium who were able to provide evidence on this were those from Bilfinger Berger ("BB"). That was to be expected, as the dispute fell within the ambit of its works rather than those of Siemens or Construcciones y Auxiliar de Ferrocarriles SA ("CAF"). The evidence from the witnesses indicates a number of problems over and above the retention of the bus lane. In addition to the fact (which was well known) that the MUDFA works were not complete at the time that the infrastructure works were to commence, there were concerns about ground conditions and that there were voids under the road [see, eg, Mr Foerder **TR100000095_C**, pages 0014–0015, paragraphs 49–50].

²¹ See paragraphs 15.15–15.20.

- 16.5** Mr Walker's view was that the background to the dispute consisted of the failure of **tie** to adhere to the "gentlemen's agreement" that he had made with Mr Gallagher [TR100000072_C, pages 0045–0049, paragraph 89]. He said that there had been an agreement in relation to Leith Walk and that **tie** had, in his words, reneged on that [PHT00000035, page 137]. Irrespective of whether there was such an agreement, there was clearly a concern that if works were carried out without an express understanding that they were additional, BSC might not be paid. He said that this was the reason for the decision to work strictly in accordance with the contract. This alone illustrates that, as commencement of the Princes Street works approached, BSC's concerns about payment for work to be undertaken there were much broader than those restricted to the bus lane.
- 16.6** BSC's concerns about payment for changes related to the contract generally, but there were others that arose specifically out of circumstances on Princes Street. Mr Walker said that the MUDFA works had not been completed and there had been changes from the Base Date Design Information ("BDDI") [TR100000072_C, page 104, paragraph 52]. Although Shandwick Place was not part of the Princes Street works, Mr Walker used it to illustrate BSC's concern about utilities that remained after the MUDFA works had allegedly been completed and their effect on BSC's ability to implement the Infraco contract. In the 700 metres of Shandwick Place there were 302 utilities within the designated working area that had not been moved, despite the MUDFA works being said to be complete. As noted above, **tie** had taken a conscious decision not to move utilities on Princes Street in advance of the Infraco works. In these circumstances, it was reasonable to assume that BSC would encounter utilities in its path, causing disruption to the programme of work in Princes Street. Mr Walker pointed out the practical difficulty that would have arisen had BSC attempted to work under the contract terms in this situation, when he said:
- "[The supplementary agreement] was necessary because, as I described before, if we found an obstruction in one place, then we had to stop until we had it agreed and a TIE change order was received then we would proceed. It was so complex on the ground that 2 metres further down, approximately, you would hit another one, and you would stop again. It was just completely unworkable. The contract was the wrong contract." *ibid*, page 0058, paragraph 104.]
- 16.7** This concern that it would be impracticable to operate the agreement was evident also in the evidence of Dr Keysberg. He said that BSC knew that it would find "a substantial amount of utilities when we started to dig up the road" [PHT00000036, page 44]. He said that the delays to reach agreement as to each change could bring the city to a standstill [*ibid*, page 39], then works would resume until another change was found, at which point they would be at a standstill again. In the following passage of his evidence he illustrated the impracticability of implementing the terms of the contract in Princes Street when utilities had not been moved in advance of the construction works:
- "[I]t would be a complete mess if we had to progress this under the contract regime by raising a Notified Departure for each and every change." [TR100000050_C, page 0018, paragraph 19(c).]
- 16.8** Mr Foerder said that it was clear to him that the dispute was about more than the bus lane. The bus lane issue was simply another example of **tie** failing to act in accordance with the contract that had been in existence for 10 months or more. During that time **tie** had been instructing whatever it wanted to instruct, without issuing **tie** changes and having no contractual basis for the instructions

[PHT00000044, page 193]. Mr Foerder said that, in relation to the MUDFA works, the problems consisted of both works that had not been completed and those that had not been carried out in a way that would permit the infrastructure works to take place. Examples of the former included incomplete diversion of Scottish Gas network infrastructure at various locations, including the Mound; and of Scottish Water infrastructure at various locations, including the Mound, South St David Street to Waverley Bridge and a water main running the length of Princes Street. Issues relating to MUDFA also impacted upon infrastructure design and, consequently, Infraco works. For example, the Crawley Tunnel was uncovered at the foot of the Mound, with a water main running through it. Although its existence was known, its exact location and dimensions were not, and work relating to it had been overlooked in the MUDFA scope of work. When it came to light, Infraco had to develop options, re-design the works and implement Scottish Water's preferred option [TR100000095_C, pages 0017–0018, paragraphs 59–60]. Mr Foerder said that it was the combination of the position in relation to the MUDFA works and the requirement to keep a bus lane open that meant that BSC "couldn't have worked properly" as it would not have exclusive control of the roadway [PHT00000044, pages 15–18]. He said that BSC was concerned that if it proceeded with these works without agreement as to the quantification of the impact of the changes, it would be in a very poor financial situation. BSC considered that the contract mechanism was being entirely neglected by **tie** [*ibid.*, page 25]. Mr Foerder said that this was not a position that applied just in relation to Princes Street [*ibid.*, page 15]. There were concerns as to the many changes that would be required to cope with the utilities that remained, which would mean that the work had to be done in smaller sections [*ibid.*, page 22]. Its concern was that the approach in the contract would not have worked as it would have had to agree estimates for additional work each time an unresolved utility was identified. In addition, it might have been necessary to obtain approval of design changes resulting from the presence of unresolved utilities before calculating and submitting estimates to **tie** for approval [*ibid.*, page 24].

- 16.9** BSC took the view that the effect of clause 80.13 of the contract was that not only was it not *bound* to start work where there were changes and the resultant costs had not been agreed, but that it was not *entitled* to do so [see, eg, Mr Foerder TR100000095_C, paragraph 79]. It was for this reason that it was able to refuse the direction of **tie** to commence work despite the absence of agreement as to costs.

Comments

- 16.10** The first issue to consider is the effect of clause 80.13 of the contract. In view of the wording of that clause, which had been inserted at the insistence of **tie**, I consider that BSC was correct in its view that it was not entitled to start works. It is significant, however, that such an issue could occur only when a Notified Departure arose under the contract – although it would not matter what had given rise to the Notified Departure. In February 2009, BSC was refusing even to start work, in the expectation that Notified Departures would arise. Even though I consider that such expectation was justified, it was an innovation on the contract to refuse to work until a new basis for payment was agreed simply on the basis of problems that were foreseen. In adopting this approach BSC was in breach of its contract with **tie**. In the context of Mr Foerder's criticisms of **tie** and BSC's insistence on applying the terms of the contract rigorously, it is ironic that BSC chose to act in a manner that was not consistent with the terms of the contract. Its conduct in this regard resulted in additional pressure on **tie**.

- 16.11** BSC's concern was that Notified Departures would arise in such numbers that there would be difficulty in operating the contractual mechanism for agreement of change. I agree that the mechanism was complex and was unsuited to addressing the situation in which a number of Notified Departures might arise each day. By the time that the contract was signed, the way in which SP4 had developed meant that it should have been foreseeable that such a situation would arise. This was therefore undoubtedly a failing in the drafting of the contract but, as noted above, it should have arisen only where there had been an actual – as opposed to an anticipated – event giving rise to a Notified Departure from the contract terms.
- 16.12** The complex contractual mechanism for the agreement of change was not, however, the only problem. As will have been apparent from Chapter 15 (Contractual Disputes: May–December 2008), which considers the disputes that arose, the estimates for additional costs submitted by BSC were overstated and were sometimes significantly inflated. It may be said that it was hoped that the partnering ethos that was referred to in the contract [[CEC00036952](#), Part 1, page 15, clause 6.1] would mean that this would not happen. If that was what was in mind, I consider that it was naïve and wholly unrealistic. Very substantial sums of money were at stake in the contract. Anyone in the legal teams or the **tie** management team with experience of disputes under contracts such as this one and the claims that were being made would have been aware that such claims are often overstated and that resolving them after the work has been carried out can take time, even when using the adjudication procedures now available. It should have been obvious that to expect to have such disagreement resolved before any works could be carried out would vastly prolong the works.
- 16.13** In view of the breadth of BSC concerns generally, the obvious question is why they emerged only as the Princes Street works were about to start. Mr Flynn claimed that it was not a deliberate strategy to focus the issues between the parties on a part of the construction with a high public profile [[PHT00000045](#), page 120]. Dr Keysberg said that BSC did not raise its concerns only once the road was blocked and that it had told **tie** very clearly beforehand [[PHT00000036](#), page 47]. There is no evidence at all, however, to support the view that BSC made it known to **tie** prior to the meeting on 9 and 10 February that it would not carry out works unless it was paid on a "demonstrable cost" basis. There had been no mention of that at the outset when Mr Brady attended the TPB in October 2008 and the need to keep a bus lane open was discussed. It was said that it could be accommodated, and there was no suggestion that it would lead to great difficulty [[PHT00000038](#), pages 154–161]. Neither was any comment made to the effect that the position in relation to utilities would mean that the contract was unworkable. When questioned about it by counsel for the **tie** employees, Dr Keysberg agreed that Mr Sheehan's email of 18 February 2009 was a demand to be paid on a "cost-plus" basis and that this was a change from the position that had existed for some months [[PHT00000036](#), page 90]. I reject the claims of Dr Keysberg and Mr Flynn that the timing was not deliberate. The works to close Princes Street had been under way for some time by the time that BSC's position was disclosed; and they had begun in January 2009 and were programmed to be complete by mid-February [[CEC01053731](#); [CEC00988024](#), Parts 1–2; [CEC00988026](#)]. In fact, it was not until 21 February 2009 that preparatory works were complete so that the traffic diversion could be implemented [[CEC00573427](#), page 0013], but it would have been clear for some time that the closure was imminent. To give notice of just three days prior to the completion of the enabling works to create the traffic diversion was, to all intents and purposes, raising the issue only once the

road was blocked. It would have been obvious to anyone that this put **tie** in a very disadvantageous position and exposed it to public and political pressure, at local and national levels, to resolve the issue. This may have informed Mr Mackay's impression that **tie** was being "held to ransom" [TR100000113_C, page 0077, paragraph 286]. I consider this in paragraph 16.16 below.

- 16.14** Mr Mackay said that in February 2009 there was a completely different attitude at BSC from that which had gone before [PHT00000038, pages 157–158 and 161], and I accept that assessment. He said that the demands found in the letter of 18 February had not even been raised at the meeting that took place on 17 February between **tie** and BSC. It had been referred to on 9/10 February but, as I note above, the fact that the question posed by **tie** at the meeting on 17 February was answered only by an email the next day suggests that the position of BSC was still developing and hardening. I accept that this must be seen against the background that, in December 2008, BSC had decided that it would not carry out works to implement a change in the absence of agreement as to costs. Nonetheless, I conclude that the position of BSC had developed from December 2008 such that, by 18 February 2009, a decision had been made to take a hard line not only in relation to agreement as to the overheads arising out of the bus lane and implementation of the notified change, but also in relation to all costs that would arise from the Princes Street works. I consider that, by then, it was obvious to BSC that there were many utilities remaining in Princes Street that would clash with the works that it was to carry out. The existence of these utilities would give rise to a Notified Departure in terms of SP4, and the decision was made to press this issue prior to implementing works and actually encountering the remaining utilities even although it had not been canvassed in any detail in the correspondence leading up to this point.
- 16.15** In his evidence, Mr Foerder said that, had a notice been given under the contract that would have entitled BSC to the additional costs arising from the bus lane, it would have started work [PHT00000044, page 25]. That is inconsistent with the notice that had been issued on 12 January. It is also inconsistent with BSC's position, which emerged in mid-February, that it was necessary that costs were agreed before a notice would be implemented. In addition, having regard to his evidence as a whole and his expressed concerns about the other problems on Princes Street, I consider that the decision of BSC was entirely unrelated to the existence of a notice or its belief as to its existence. This dispute was clearly about more than a bus lane. The question is: why did it erupt when it did? Although Dr Keysberg considered that all "the reputational damage" from a blockage of Princes Street would lie on BSC [PHT00000036, page 48], I consider that it would have been obvious to BSC that a situation in which Princes Street had been closed but no works were being carried out would put great pressure from retailers and the public generally on CEC and from CEC on **tie**. This would give BSC the upper hand in any negotiations as to the basis for payment. I agree with the suggestion by **tie** that the timing was deliberate so as to cause maximum embarrassment to it with a view to providing the most favourable outcome for BSC. In this regard, it largely succeeded. Faced with media pressure and directions from the Scottish Ministers and CEC, **tie** had little alternative but to give in to the demands of BSC, as I consider below.
- 16.16** Mr Mackay used the emotive expression of being "held to ransom" to describe what was being done [TR100000113_C, page 0077, paragraph 286]. Mr Jeffrey stated that, at a meeting in July 2009, Dr Keysberg had observed: "this contract allows us to hold you to ransom" [PHT00000032, pages 63–64]. While this was later than the commencement of the Princes Street dispute, it provided Mr Jeffrey with an insight

into the strategy that had been, and was being, adopted by BSC. Dr Keysberg denied making such a comment, but I accepted the evidence of Mr Jeffrey in this regard. He was a more impressive witness than Dr Keysberg, and I formed the impression that he was credible and reliable. He had no reason to fabricate evidence – and the comment reflected the position of BSC, as will be explained below. However, any connotation of impropriety or illegality implied in Mr Mackay's comment overstates matters in what is, at its heart, a commercial contract in which each party is entitled – and may be expected – to put its own interests first. While BSC may have taken advantage of the situation to create and press an advantage, it is remarkable that **tie** appeared to sleep-walk into it. **tie**'s response when the dispute arose tends to show that there was little understanding of the contract mechanisms and no real grasp of the scope of the problem that existed. Waiting until the matter had crystallised on the most prominent street in Edinburgh put **tie** in the worst possible negotiating position. In view of the difficulties that arose in relation to Leith Walk and the demands for payment that were made there, **tie** should have had some awareness of the problem. With such an awareness, it could – and should – have developed a strategy as to how it could be addressed in a way that would protect the interests of **tie**/CEC. This was not done.

Intervention by the Scottish Ministers

- 16.17** As was noted in Chapter 3 on the involvement of the Scottish Ministers in the project as a whole, Mr Swinney asked to meet Mr Mackay and, at that meeting, told him to "get it sorted" [[PHT00000038](#), page 96]. Mr Mackay said that he was reluctant to give BSC more money and did not consider that that could be justified but that, in light of the comment made to him by Mr Swinney, he suggested to Dr Keysberg that Princes Street could be dealt with on a "demonstrable cost" basis as a one-off situation [[ibid.](#), page 97; [TR100000113_C](#), page 0079, paragraph 291]. It is not surprising that BSC accepted this proposal because, as can be seen from the chronology above, it was something that had been demanded by BSC before the meeting between Mr Swinney and Mr Mackay.
- 16.18** When questioned about it during the Inquiry, Mr Mackay was not clear how **tie** had got to the stage of offering to pay for all the work on a "demonstrable cost" basis when the only dispute in terms of the documentation concerned approximately £1,500 in relation to the bus lane [[PHT00000038](#), pages 107 and 140]. Mr Mackay noted, however, that the dispute was about more than that. It appears also that he was influenced by the claim by BSC that the works as a whole would cost an additional sum of £50 million to £80 million [[ibid.](#), page 144]. In contrast, Mr Walker denied that it was ever represented that agreement of this additional sum was a precondition for commencement of works on Princes Street, and I accept his evidence on this point. Nonetheless, it is understandable that when considering demands to change the basis of payment under the contract, Mr Mackay would be concerned at such estimates.
- 16.19** The meeting with Mr Swinney was not the only involvement of the Scottish Ministers. On 26 February 2009, just as the dispute was developing, Mr Stevenson wrote to Councillor Dawe, the leader of CEC, to seek reassurance that there would be early settlement [included within [CEC01891494](#), page 0006]. Mr Stevenson said that in doing so he was:
- "simply trying to make sure my political opposite numbers, in the Council, remembered the nature of the commitment we had made to the project. I think that is what I read when I read my letter of 26 February 2009." [[TR100000142_C](#), page 0054, answer 116.]

16.20 I disagree with his characterisation of his intervention; it was an overtly party political act. It is hard to see any purpose in sending that letter that is either legitimate or appropriate. It represents nothing more than political point scoring and could serve only to exacerbate matters by raising the tension. Mr Stevenson was not even in a position to indicate in his oral evidence to the Inquiry what his state of knowledge had been at the time or what information he had relied on. Perhaps recognising this, he sought to play down the point scoring against CEC by saying:

"It is therefore quite reasonable that we should seek to make common cause with the City of Edinburgh Council against Bilfinger Berger who were just sitting on their hands not doing anything, because that was what the letter was about." [ibid.](#), page 0055, answer 119.]

16.21 There are a number of problems with this assertion. The most striking is that the letter that he had sent was not, on any reasonable reading, making common cause with the CEC. The reference to the wish of the Scottish Ministers having been defeated by other political parties gives a much better indication of the nature of the letter. The more fundamental problem with Mr Stevenson's statement, however, is that it is not clear what standing the Scottish Ministers had to intervene. They had quite deliberately stepped back from taking a position that would have given them a role in the management of the project, and then, at the first sign of a significant problem, they sought to give directions as to what should be done. Mr Stevenson's suggestion that the purpose of his letter was simply to make sure that "we do not, as politicians of different political parties, head off in different directions" [ibid.](#) lacks any credibility. It is therefore highly ironic that he claims that adding other parties to a negotiation would only cause difficulty [ibid.](#), page 0058, answer 128]. He appears to be unwilling to adopt his own advice.

Outcome and aftermath

16.22 There were two versions of the Princes Street Supplemental Agreement ("PSSA"). The first was signed on 20 March 2009, but only on behalf of **tie** and BB [\[CEC00334456\]](#). The second version, identical to the first, was signed on 29 May 2009 by all four parties to the agreement – namely **tie**, BB, Siemens plc and CAF [\[CEC00302099\]](#); Mr Foerder [PHT00000044](#), pages 28–29]. I presume that the error in execution of the first version of the agreement was attributable to the fact that BB was the only member of the consortium involved in the Infraco works on Princes Street at that time. The PSSA stipulated that works should commence on 23 March. The immediate consequence of the PSSA was that works started on Princes Street on that date, but it appears that there were adverse consequences in the longer term.

16.23 The PSSA represented a concession by **tie** that the works in this location would be carried out on the "cost-plus" basis of payment that had been requested by BSC. The rates that would be paid were specified in the PSSA, but BSC would be entitled to payment for all the time taken. This meant that it was not necessary to reach agreement as to the existence of changes or the value of the work that would be required to implement them. Advice sought by Mr Ramsay, on behalf of Transport Scotland, from Dundas & Wilson ("D&W") noted that there was no fixed-price element at all in the works in the PSSA [\[PHT00000012\]](#), pages 224–228]. Even if taken in isolation, this indicates how far matters had come from the intentions that underlay the procurement strategy and the contract negotiations. It was a departure from what had been one of the fundamental precepts of the procurement strategy.

- 16.24** Apart from requiring the Infraco contractors to commence work in Princes Street on 23 March, clause 5 of the PSSA also required them to “submit a construction programme to demonstrate the intended progress of the Princes Street Works within 7 days” [[CEC00302099](#)]. The construction programme that was submitted showed works commencing on 23 March 2009 and running all the way through until March 2010 without a break for either the Festival or Christmas. However, not long after work commenced, **tie** and its stakeholders made it clear that Princes Street would need to re-open to traffic on 29 November 2009 for the Christmas season. Infraco contractors were instructed to take whatever action was required to achieve that opening date, including working 24 hours per day and 7 days per week [Mr Foerder [PHT00000044](#), pages 35–36; [TR100000095_C](#), pages 0016–0017, paragraph 57]. This change necessarily increased the cost of the Princes Street works but, more significantly, I consider that it illustrated the mismanagement of the contract by **tie** and CEC, both of whom, before concluding the PSSA, ought to have considered the need to open Princes Street for Christmas trading. If the earlier opening date had been stipulated at the outset, planning could have been undertaken to consider the available options, which might not have included the expense of working for 24 hours each day, such as completing smaller sections of Princes Street that would enable it to be re-opened during the festive season.
- 16.25** When the concluded PSSA was presented to the TPB at the meeting on 15 March 2009, Mr Bell is recorded as having said
- “that there will be no increase in liability to tie, compared to that previously, and that there is no material difference in the way costs would have been agreed.” [[CEC00888781](#), page 0009.]
- 16.26** Mr McGarrity said the same to Mr Ramsay [[PHT00000013](#), page 9], and Mr Ramsay, in turn, reported within Transport Scotland that it would not involve paying BB any additional monies [[TRS00016963](#), paragraph 2]. As well as being important for the purpose of managing the budget, this was relevant to the law of procurement. A variation of the terms of the contract to entitle the contractor to a price greater than that stated in its bid could render the procurement process unlawful. As the law stood at that time, this could have opened up the possibility of the disappointed bidder challenging the contract or seeking damages. A report dated 22 April 2009, to CEC from Mr David Anderson and Mr McGougan, noted that the PSSA represented no further transfer of risk to the public sector [[CEC02083772](#), page 0002, paragraph 3.3]. Mr McGougan explained that the risk of increased cost associated with ground conditions had always remained with **tie**/CEC so that it had always been anticipated that the contract price for the Infraco works, including those in Princes Street, would increase as a result of unexpected ground conditions. The increase would be offset by the risk allowance for such a contingency. This view that no further risk was being passed to **tie** contrasts with the evidence from Mr Mackay that within **tie** there was an awareness that the costs under the PSSA would be very much greater than the sums initially talked about in February 2009. Mr McGougan was correct to note that, in terms of the contract as it had been signed, there would have been a claim for additional costs in respect of many Notified Departures and that there was therefore already a liability on **tie** in addition to the “fixed” contract sum. The question was the size of this pre-existing liability and how it compared with the sums that became payable under the PSSA. Mr Murray said that a lot of work was carried out before the agreement to assess the likely liability that it would generate. He noted, however, that it was difficult to determine what the original contract price was for this element of the works [[TR100000249](#), pages 0008–0009, paragraph 17].

- 16.27** On any view, however, the sums payable under the PSSA were greater than would have been paid under the Infraco contract if the changes had not arisen and were greater than had been anticipated when the PSSA was signed. In an email in December 2009, Mr Jeffrey noted: "We have now completed Princes Street, but at vast expense, and way over budget. (do we know how much?)" [TIE00032413]. The precise amount of the additional cost is not clear. Mr McGougan noted that the amount in the contract for Princes Street was £2 million, but the cost rose to £11 million [TR100000060_C, page 0072, paragraph 190]. Mr Poulton said that costs were £9 million greater than they would have been under the contract, although "elements" of this would have been payable in any case [TR100000115_C, page 0048, paragraph 220]. An email from Mr Rush to Mr Fitchie sent in April 2010 referred to costs increasing from the original £2.8 million to a sum between £8 million and £13 million [CEC00445284]. Dealing with the estimates for the works, Mr Coyle noted that the anticipated costs under the PSSA were £8.3 million compared with the £3.7 million that was the sum in the original contract [TR100000144_C, page 0059, paragraph 62]. Whatever difficulties Mr Murray considered there were in making an assessment of contract costs prior to the PSSA, they are much greater now. It is simply not possible for me to make an estimate of what the costs would have been had there been no PSSA and each Notified Departure had been priced and paid for in terms of the Infraco contract.
- 16.28** Even although the PSSA resulted in a net increase in cost allowing for risk transfer, it might nonetheless have represented good value for money had it resolved the problems that were inherent in the contract. The problem was that it did not do so. Mr Ramsay noted that advice from D&W regarding the PSSA made the following comments:
- "[It] does not finally resolve any of the underlying issues and may have opened the way to further disputes not necessarily limited to the matters originally in dispute. It is not evident that this agreement offers a sound basis upon which the parties can develop a commercially agreed recovery programme. It would certainly not be a good precedent for the final documentation." [PHT00000012, page 227; TRS00031282.]
- 16.29** The impact of the PSSA would at least have been limited had the justification for it been the need to provide a bus lane or in some other respect it had related solely to Princes Street, but that was not the case. Both parties were aware of the underlying issue of the incomplete MUDFA works.
- 16.30** From the start of 2009, BSC did not carry out any on-street works under the standard payment terms specified in the contract [Mr McGarrity TR100000059_C, page 0287, paragraph 30 and page 0319, paragraph 36; Mr Jeffrey PHT00000033, page 77]. The Princes Street on-street works were carried out under the PSSA. Some other on-street track-laying works were carried out under instructions issued under clause 80, which meant that BSC was entitled to agreed additional sums. Mr Foerder gave evidence that on-street works were carried out at Lindsay Road retaining wall, Victoria bridge and Tower Place bridge on a "goodwill basis" [PHT00000044, page 119]. These were works to produce new structures rather than to lay tracks [Project Director's Report, April 2010, CEC00420346, page 0013]. Mr Foerder recognised that no track was actually installed from Haymarket to the west end of Princes Street or from the east end of Princes Street to York Place under the Infraco contract terms [PHT00000044, page 120].

- 16.31** Mr Mackay explained in evidence that, not long after the PSSA was signed, the idea of a supplemental agreement covering all on-street works was raised by BSC [Mr Mackay [PHT00000038](#), page 109]. The main events in relation to this may be summarised as follows.
- (a) At a meeting in May 2009, representatives of BSC said that they would not be starting any more on-street works unless they had a supplementary agreement similar to the PSSA. BSC said that it would contest every part of the contract change mechanism and that it could take six months to resolve each dispute [[TIE00033088](#)].
- (b) In an email of 31 July 2009, Mr Jeffrey said that he had met Mr Foerder the previous day, when Mr Foerder had said that BSC would not start any on-street works without a supplemental agreement, which would affect the start date for works at Shandwick Place and Leith Walk [[CEC00667242](#)].
- (c) On 30 July 2009, Mr Foerder sent a "final settlement" proposal to **tie** [[TIE00031089](#)]. In addition to terms that entailed payment to BSC for delays to the contract and a mechanism for assessing claims for changes from BDDI to IFC drawings, it required that there would be an agreement that all on-street works would be carried out on a "cost reimbursable" basis.
- (d) On 4 August 2009, Mr Jeffrey rejected Mr Foerder's proposal [[TIE00033401](#)].
- (e) By letter dated 6 August 2009, BSC again indicated that it would not work on Shandwick Place without a supplementary agreement [[TIE00088884](#)]. This letter is ambiguous in that, in part, it appears to be directed to raising concerns that the PSSA is insufficiently broad and that it will have to be amended. Nonetheless, the letter clearly identified the same issue as existed before: that the IFC drawings contained changes from the BDDI drawings and that this required a Notified Departure. It said that, on that basis, BSC was not in a position to undertake works at Shandwick Place.
- (f) Representatives from **tie** and BSC met on 6 October to explore the possibility of using the PSSA as the basis for a wider On-Street Supplemental Agreement ("OSSA"). It appears that there may have been some irritation on the part of BSC that it was not going to get the additional agreement that it believed had been within its grasp [Mr Walker [TR100000072_C](#), page 0064, paragraph 113].
- (g) At the TPB meeting on 21 October 2009, Mr Bell reported that BSC was refusing to carry out on-street works unless it was provided with a "cost-plus" agreement. The minutes of the meeting envisaged that a new on-street agreement would be brought before the TPB meeting in November [[CEC00681328](#), page 0009].
- (h) The minutes of the November meeting of the TPB record that discussions to reach an OSSA were continuing. This approach was approved by the Board and it shows that, in principle, **tie** was willing to concede the position [[CEC00416111](#) page 0007].
- (i) In February 2010, BSC proposed an OSSA. This would have entailed that all the on-street works would be carried out on the same basis as the works in Princes Street – on a "demonstrable cost" basis. This was said to be justified by the lateness of the MUDFA works on all street sections [Mr Foerder [TR100000095_C](#), page 0055, paragraph 170]. This proposal was rejected by **tie**.
- (j) The minutes of the TPB meeting on 10 March 2010 record that the terms that BSC sought to impose had been rejected [[CEC00420346](#)].

- 16.32** As is noted above, at the time of the Princes Street dispute, Mr Mackay had been reluctant to enter into a new agreement. When he did so, he considered that it should be strictly a one-off agreement [[PHT00000038](#), page 109]. Nonetheless, as disputes accumulated (see Chapter 17, Adjudications and Beyond) and it was clear that virtually no progress was being made under the contract with the on-street sections of work, the idea of a further agreement obtained some traction and a draft was prepared. Within **tie** there was recognition that, in the absence of an agreement such as the PSSA for other on-street works, it would be difficult to get the infrastructure built. For example, Mr Bell said that it would be impossible to build the tramway through the on-street section of the city with the existing Infraco contract [[TR100000109_C](#), pages 0139–0140, answer 110]. All this is recognition that, as it was drafted, the contract was not fit for purpose. Nonetheless, it was also recognised that a new agreement akin to the PSSA in respect of other on-street sections would move risk to **tie**, would increase costs and would be inconsistent with the public procurement exercise that had been undertaken. As is noted above, this could lead to a challenge from the unsuccessful bidder and a claim by it for damages.
- 16.33** The fact that it was necessary to conduct on-street works prior to removal of the utilities was a failure in the intended contract methodology and a departure from the basis on which the works had been procured. This failure had an immediate and expensive effect on the works. The issues that arose in relation to works in Leith Walk and Princes Street disclosed the potential for the contract wording to produce a situation in which a minor dispute would mean that the works could not proceed. If BSC said that there was a Notified Departure, **tie** was unable to compel BSC to carry out the works until agreement was reached as to whether there was a change and, if so, its financial consequences. The scope for delays resulting from this should have been apparent to **tie** and CEC before the contract was signed. It should have been the subject of advice from DLA at that time. Despite this, nothing was done to address it and, although the PSSA meant that the works were carried out, the problem remained. Indeed, in that **tie** had acceded to the demands of BSC to make payment on a "demonstrable cost" basis in order to get the works done, it is reasonable to conclude that the positions of **tie** and CEC were now materially worse. This was the first real test of the contractual arrangements, and they were found wanting from the **tie**/CEC perspective.
- 16.34** Having regard to the limited on-street works before the Princes Street dispute, the manner in which the matter was raised in relation to Princes Street, the conduct attempting to secure an OSSA and the absence of further on-street works, the issue arises as to whether BSC ever intended to carry out on-street works under the contract provisions. If they did not, it would be consistent with Mr Walker's claim that his position had always been that the price would be £50 million to £80 million greater than the contract price. On balance, however, I do not consider I am in a position to reach that conclusion.

Chapter 17

Adjudications and Beyond

17.1 By mid-2009, the Princes Street Supplemental Agreement ("PSSA") had made it possible for works to get under way, but it had not resolved the underlying issues between the parties. The PSSA made provision for the creation of a Project Management Panel ("PMP") to "monitor implementation of the Infraco ["Infrastructure contract"] Works as a model for momentum on progressing the Infraco Works" [CEC00302099, page 0004, clause 3.5]. What this means is not immediately clear, but it appears that it was intended to provide a forum to address the issues between the parties. It was duly established and met on a number of occasions. Initially it appeared that progress was being made even though it was apparent that there were issues outstanding [minutes of Tram Project Board ("TPB") meeting on 3 June 2009, CEC00983221, page 0007]. Nonetheless, by the start of July 2009 it was apparent that the issues at the heart of the disputes between the parties – in particular, those concerning changes – remained outstanding [minutes of TPB meeting on 8 July 2009, CEC00843272, page 0007]. As a result, there was a meeting of senior directors of the parties on 22 June 2009, at which the point was made that work would not progress in a satisfactory manner while the core commercial disagreements remained unresolved [CEC00783725, page 0006]. There was then a week of mediation in June 2009 [Mr Jeffrey TR100000097_C, page 0019, paragraph 121]. This exercise also failed to achieve a breakthrough, however [CEC00376412, page 0015], leading Mr Jeffrey to inform Bilfinger Berger, Siemens and CAF ("BSC") that **tie** Limited ("**tie**") might pursue a more formal approach [CEC00843272, pages 0007–0008]. This chapter considers the actions taken in pursuit of that approach.

Contract provisions

17.2 In common with most contracts for large construction projects, Schedule Part 9 to the Infraco contract contained a number of formal procedures by which disputes between the parties might be addressed [USB00000045]. These covered a range of degrees of formality. Initially there was a requirement for a meeting between representatives of the parties. If that did not work, the matter could be escalated to preparation of position papers and meetings of the chief executives of the parties; and if that did not achieve resolution, only then was there the option to proceed to mediation, adjudication or litigation. A number of disputes on key issues were taken to adjudication, so it is appropriate to consider briefly what this entails. It is a procedure very familiar to those who work with building contracts. The Housing Grants, Construction and Regeneration Act 1996 had made it mandatory that some form of adjudication procedure be included in any construction contract. It is intended as a procedure by which a decision on a disputed matter will be provided by an independent third party. That third party need not be a lawyer, and decisions are often made by engineers, architects, surveyors and others. The dispute could be of a factual nature but can also include the interpretation of the contract and the manner in which it should be applied to the facts. The decision is made within a short timeframe and, once made, it is immediately enforceable. It is not, however, a final disposal of the issue. It is open to either party to raise the matter later in a court action or in an arbitration. If that is done, the decision of the adjudicator has no binding force in those proceedings: the parties, in essence, start with a clean slate. The option of disputing the decision in further proceedings can, however, be removed by agreement, and that was done in the contract that emerged from the Mar Hall mediation, which I will consider in Chapter 19 (Mediation and Settlement).

Decisions in February and March 2009

17.3 In order to understand fully the decisions that were taken once the post-PSSA mediations broke down, it is necessary to go back to the time when the Princes Street dispute had first emerged. Two formal dispute resolution procedures were instigated on 19 February 2009 [presentation to TPB for 11 March 2009, [CEC00933351](#) and the Paper on Dispute Resolution Procedure submitted to the **tie** Board and TPB, [CEC01001220](#), page 0003]. One concerned the failure to agree the estimate for the costs of the **tie** change consisting of retention of the bus lane, and the other concerned the issue of whether BSC was obliged to commence work on the basis of the notice that had been given. Following the commencement of those procedures, the **tie** Board and the TPB requested that they be given an analysis of the options that were available to them in view of the situation that had developed. They wanted to know the options available to them to achieve various objectives, including minimising delays and resolving disputes.

17.4 In response to the above request, a paper to the **tie** Board and TPB for the meetings on 11 March 2009, prepared by Mr McGarrity, firmly recommended that matters should be pursued through the contract dispute resolution procedure ("DRP") [[CEC00933931](#)]. The view expressed in the paper was that this

"demonstrates our determination to preserve the terms of the contract we have agreed, exposes the failures of Bilfinger to perform to other members of the consortium and helps minimise further delays as we can instruct the commencement of work whilst matters are being pursued through DRP" [[ibid.](#), page 0001].

17.5 The paper accepted that "[a] prolonged DRP campaign" was unlikely to be in the interest of either party. The strategy proposed was to use it as a means to an end, "to force a more constructive resolution of issues in accordance with contract" and to achieve greater cost certainty [[ibid.](#)]. It recognised that this would require a change in the contractual positions that had been adopted by Bilfinger Berger ("BB") and expressly contemplated that it might be removed as the civil engineering partner within the consortium and replaced with another contractor. The paper considered but discounted the options of terminating the Infracore contract, **tie** stepping in to take over BB's role and negotiating a settlement of the contractual disputes and programme. It noted that the last option was what BB wanted and would involve working on a "cost plus" basis [[ibid.](#), page 0002]. Significantly for what was to follow in 2011 when the parties had reached deadlock and undertook mediation, this paper also considered the possibility of truncating the line. Various different points at which the line could be terminated were considered. Termination at York Place/Picardy Place was one of the options considered, but the conclusion in respect of it was that it would mean the loss of both economic benefits and the opportunity to carry high volumes of passengers and reduce bus traffic volumes.

17.6 A further paper [[CEC01001220](#)] for the same meetings on the DRP noted that **tie** was preparing for a series of "surgical" applications of the DRP. The items to be referred were said to be ones with a strong likelihood of success, were "blockers" that were holding up work and items of particular commercial/contractual significance. This report referred to the issues relating to Princes Street that had been referred to the DRP and, applying the criteria in paragraphs 2–3 of the report, it stated:

"the next tranche of items being validated at present is highlighted below:

- Application and calculation of Preliminaries.

(This impacts the agreement of all changes across the works, even if the direct cost is already agreed.)

- Base Date Design Information (BDDI) definition.
(Base building block to measure changes from and BSC are trying to redefine certain drawings and hierarchy. Particularly relevant as a precursor to the likely dispute over design development and changes from BDDI to IFC ["Issued for Construction"])
- Inclusion of Hilton Hotel Car Parks works with the Construction Work Price and therefore not a change.
(A straightforward disagreement over whether it qualifies as Accommodation Works (a provisional sum drawdown) or is included in the Works price. This has broader application.)
- Edinburgh Park INTC 091 Estimate.
(An incompetent and grossly inflated estimate submission.)
- Evaluation of Costs associated with V26-V31 agreed extension of time entitlement.
(Time already agreed and goes to the basis of all future Preliminaries calculations for any legitimate extension of time)" [ibid](#), page 0003 paragraph 4].

17.7 The report did expressly note that the outcome could be success for Infraco rather than **tie**. However, **tie** did not consider that to be a high risk in the case of issues already referred to the DRP or those under active consideration for referral, but "it should be considered as a possibility" [ibid](#), page 0004, paragraph 7]. It was stated that the possibility of losing had been mitigated by careful choice of disputes and that there would be challenge internally and by DLA Piper Scotland LLP ("DLA") as well as engagement with the Tram Monitoring Officer and City of Edinburgh Council ("CEC"). At the 11 March meeting, the TPB supported the DRP approach and programme as set out in the report [[CEC00888781](#), page 0005, paragraph 3.3].

Legal advice in April and May 2009

17.8 On 15 April 2009, Mr McGarrity presented a further paper to the TPB on the strategic options [[CEC00633071](#), page 0005, paragraph 2.3]. The paper [[CEC01010129](#)] noted that there had not been any softening in the position of BSC on key areas including the liability for cost of design evolution despite the establishment of the PMP. It commented that, in addition to "facilitating more constructive resolution of issues in accordance with the contract" [ibid](#), page 0001], part of the objective in referring matters to the DRP was to expose details of the disputed matters to all members of the consortium. This appears to refer back to the possibility that the other members of the BSC consortium might remove BB. As to the strength of **tie**'s position, Mr McGarrity is recorded as having said that:

"DLA were confident of **tie**'s position with regard to the principle [sic] areas of contractual disagreement with BSC and this is to be supplemented by reinforcing technical analysis and legal opinion" [[CEC00633071](#), page 0006, paragraph 2.8].

17.9 Mr Mackay is noted as having said that he wanted to be sure of **tie**'s position, as that would provide confidence in negotiations [ibid](#)].

17.10 Mr Fitchie confirmed that in April 2009 DLA had given advice that it was confident of **tie**'s position in relation to the contractual agreement [[TR100000102_C](#), page 0249, paragraph 8.33]. The basis of this view was that it considered that an adjudicator presented with legal submissions and confident expert witness evidence as to how Pricing Assumption 1 ("PA1") should be read from an engineering and technical

standpoint would resolve any ambiguity in **tie**'s favour. At the end of May, DLA instructed senior counsel, Mr C MacNeill QC, to provide advice intended to assist **tie** in deciding whether to instigate the DRP process [*ibid*, page 0249, paragraph 8.35; TPB meeting of 3 June 2009, [CEC00983221](#), page 0007]. As is common in such situations, the advice was sought by reference to a prepared document summarising the factual position [brief for Senior Counsel, [CEC00962477](#)]. In his oral evidence, Mr Fitchie said that he had not prepared this [[PHT00000018](#), page 47] but his written statement said that he had written it "for the most part" [[TR100000102_C](#), page 0250, paragraph 8.35]. Whatever its provenance, it is a lengthy document much of which is taken up with setting out the view that had already been reached within DLA. Among other things, the note asked Mr MacNeill for advice as to what was encompassed within the expression "normal design development" in terms of the contract. On 1 June 2009, a consultation was held with Mr MacNeill to discuss the matters raised in the brief and he was then to provide a written record of his views. The presentation to the joint meeting of the TPB and the **tie** Board on 3 June 2009 [[CEC01007729](#), page 0026] and the minutes of that meeting [[CEC00983221](#), page 0007], noted that an Opinion had been sought from a QC and a briefing had been held. Both recorded that the written Opinion was expected on 3 June, and the presentation said "[n]o radical differences highlighted" [[CEC01007729](#), page 0026].

- 17.11** Mr MacNeill set out his views in a note dated 2 June 2009 [[CEC00901460](#)]. He responded that whether works fell within the term "normal development and completion of design" would be a matter of professional opinion and judgement. I assume that he had in mind engineering opinion and judgement. If so, this view is unsurprising as it is manifestly an engineering issue. The briefing note had been worded in such a way that Mr MacNeill had not been asked – and he did not volunteer any view as to – the more fundamental question of whether, standing the wording of Schedule Part 4 ("SP4"), that expression was relevant to the determination of the rights and obligations of the parties. He was not asked for his views on the key legal issue: whether, if changes were considered "normal design development", it would mean that they would not amount to a Notified Departure.

Decisions by **tie** in July–September

- 17.12** As is noted in the minutes of the meeting of the TPB on 8 July 2009, Mr Jeffrey met Dr Keysberg and Dr Schnependhal on 6 July 2009, to tell them that **tie** considered that it had no option but to pursue a more formal route [[CEC00843272](#), page 0007]. Although this and the discussions at the March meetings referred to in paragraphs 17.4–17.7 above appear to indicate a concluded intention to proceed to adjudication, the decisions of the TPB after the meeting indicate that the issue was in fact still one for discussion. At the joint meeting of the TPB and the **tie** Board on 8 July 2009, Mr Jeffrey identified four options to address the problems with the Infraco works [[CEC00783725](#); [CEC00843272](#), page 0008].

1 Reaching a negotiated settlement with BSC.

2 Taking the formal contractual approach. The presentation indicates that the first element of this was to "[p]rogress selected issues through formal DRP process to adjudication – prioritised to the high value, risk and delay items and keeping a focus on the detail" [[CEC00783725](#), page 0010]. It was also the intention that BSC would be instructed to implement changes in the meantime.

3 Reducing or re-phasing the scope of BSC works.

4 Ending the BSC contract.

- 17.13** Mr Jeffrey was perhaps well placed to present a review of this nature, as his involvement with **tie** post-dated the March discussions, having joined **tie** only three months earlier, and having first attended the TPB on 6 May 2009 [CEC01021587, page 0005]. His lack of involvement with the conclusion of the contract meant that he was in a position to provide some objectivity. His recommendation to the Board was that it pursue the second option of taking the formal measures under the contract. One of the reasons for recommending this option was that it would “[f]orce the hand of the consortium partners – Siemens and CAF – if replacement of BB in consortium is ever contemplated” [CEC00783725, page 0011]. The TPB agreed to pursue Option 2, but said that more information would be required before formal notices were issued to BSC [CEC00843272, page 0008].
- 17.14** In light of the decision to pursue the second option, Mr Bell stated to the meeting that a presentation would take place, within two weeks, on the matters that could be taken to adjudication. The Inquiry has not found a record of any such presentation within two weeks of 8 July, but three weeks later there was a further meeting of the TPB. In the presentation to that meeting on 29 July Mr Jeffrey indicated that 15 items had been identified for DRP referral and that these would be split into five tranches. The first tranche included the first extension of time claim and a dispute about the Hilton Hotel car park. The second tranche concerned Gogarburn bridge and Carrick Knowe bridge, and the third tranche included the Russell Road bridge. Four of the disputes related to BDDI – the issue of whether changes to the design after November 2007 meant that BSC was entitled to additional payment – and two of them concerned extensions of time sought by BSC to carry out the works. The presentation noted that a “challenge team” was in place and that its function would be to scrutinise the strength of each case and test it for weaknesses [CEC00791514, page 0016].
- 17.15** The presentation to **tie** and the TPB on 29 July set out the pros and cons of the DRP option [ibid, page 0011] and it is clear from the minutes of the meeting that Mr Jeffrey made it clear that this option was not risk-free [CEC00739552, page 0009]. The position was stated more strongly in the minutes of the August meeting, where there is a note that Mr Jeffrey stressed that 100 per cent success in each matter considered was highly unlikely [CEC00848256, page 0008]. Despite this, neither the papers given to the meetings nor the records of discussion at the meeting contain any consideration of the position that **tie** would be in if the decisions went against it, and there is no consideration of what options would remain open in that situation. In the July minutes there is a statement that the DRP process need not play out to a conclusion and that the parties could reach agreement at any stage, but there is no consideration of what would happen if agreement was not possible and **tie**, for any reason, wanted to withdraw. It should have been apparent to those making the recommendations that any unilateral abandonment of the procedure would be seen as a capitulation in relation to the issue in dispute and that the position of **tie** would thereby be weakened. This should have been brought to the attention of the TPB and taken into account by it in making its decision.
- 17.16** The decision to instigate DRPs should be seen in its context. It was taken against a background of very little progress having been made in getting any Infracore works done. In the Project Director’s Report to Transport Scotland in July 2009 is a table that discloses that although it was planned that, by that time, 55 per cent of the engineering works required over the whole route should have been done, only 5.7 per cent had been completed [CEC00843272, page 0058]. It is therefore easy to see that there may have been a hint of desperation in the choice to pursue DRP.

Challenge team

- 17.17** One of the papers for the March meeting had stated that internal challenge was one of the means to mitigate the risk that **tie** might lose in any disputes referred to DRP and, as noted in 17.14 above, the presentation to the meeting on 29 July noted that each case to be referred to DRP would be scrutinised. To this end a panel was established and, in addition to personnel from **tie** and existing legal advisers, a solicitor new to the Edinburgh Tram project (the "project"), Mr Nolan, was brought in. He was a partner in McGrigors and he explained that his role was not to consider the legal advice that had already been given but to view matters with a "fresh pair of eyes" [[PHT00000046](#), page 118].
- 17.18** Mr Nolan said that the first challenge meeting he attended was in August 2009 and related to the dispute in relation to Gogarburn bridge. The issue in that dispute was whether the differences between the BDDI drawings and the IFC drawings amounted to a Notified Departure, giving BSC an entitlement to additional payment. In large part, this turned on the meaning to be given to PA1 in SP4. In a paper prepared after he had attended the first challenge session, Mr Nolan stated that the answer to the issue would turn on the facts [[CEC00805685](#)]. This was because the dispute was presented to him on the basis that whatever changes there were did not amount to changes of "design principle, shape, form and outline specification". If that was the position, there could be no departure from PA1 and the question of normal design development would not arise. If that was the view being taken, it begs the question why the dispute was being referred to DRP. If the outcome depended entirely on the facts, it would not be capable of establishing a precedent that would be useful in other instances. In fact, despite the presentation to Mr Nolan, the arguments that were before the adjudicator assumed that there had been a change that engaged the terms of PA1 and strayed well into the more fundamental issues between the parties concerning interpretation of the contract. These are considered further below.
- 17.19** Although, on the hypothesis on which it was presented to him it did not apply to the Gogarburn dispute, Mr Nolan recognised that if PA1 were to be given its literal meaning, the fact that a change in design principle, shape, form and outline specification, etc., arose from normal design development, would not prevent it from constituting a Notified Departure such that BSC was entitled to additional payment. He said that he raised this at the session but that Mr Bell took the view that the change from BDDI to IFC that it was considering did not fall foul of the words at the end of PA1 because it would not amount to a change of design principle etc [[PHT00000046](#), page 127]. Again, this approach appears inconsistent with the rationale for pursuing the formal contractual approach as expressed in the meeting of 29 July. It would leave unresolved the real issue between the parties, and which was holding up the works. It also did not reflect the argument that was actually presented. I return to this below.
- 17.20** What was Mr Fitchie's position in all this? Mr Nolan said that Mr Fitchie attended the challenge sessions [[ibid](#), page 119], but Mr Fitchie made no reference to them. These were sessions to consider whether to initiate contract procedures with a view to getting a decision in favour of **tie**. Clearly, the decision to do this had to proceed on the basis that its arguments were "correct" and would be preferred by the adjudicator. According to Mr Fitchie's written and oral evidence to the Inquiry, he was of the view that there was a problem in the wording of the contract and that the cost risk arising from development of designs had not been transferred to BSC. Although he was very evasive when questioned about this, when I asked him directly he said that his view was that any development from BDDI would entitle BSC to seek

a variation [[PHT00000017](#), pages 166–167]. Even if, for some reason, it had not been done earlier, the challenge sessions would have been the point at which to make his views on this clear. A process was being started which would lead to decisions which were intended to shine a very bright light on the issue of interpretation of PA1. Mr Nolan even said that he discussed the issue of interpretation of PA1 with Mr Fitchie and that he said nothing to the effect that he considered that there were dangers for **tie** in these provisions [[PHT00000046](#), page 128].

- 17.21** A retained legal adviser who was aware of his client's interests and was of a view that a course of action which the client was proposing to take would lead to an outcome adverse to the client's interest or was likely to do so would be bound to bring that to the client's attention. The client might disagree with that opinion or might decide that for various reasons it wished to proceed nonetheless, but that does not remove the obligation to advise. Mr Fitchie accepted that he was bound by his duty to **tie** to raise his concern [[PHT00000017](#), page 170]. However, in his evidence to the Inquiry he accepted that he had not done so [*ibid.*, page 168] and could not explain why this was so [*ibid.*, pages 173–174]. I return to the issue of Mr Fitchie's position further below.

The early referrals and outcomes

- 17.22** It is not necessary to consider the totality of the decisions on all disputes, and I therefore examine here the principal decisions and consider the actions in light of them.
- 17.23** In a decision dated 15 October 2009, the Adjudicator, Mr Howie QC, determined in favour of **tie** in a dispute concerning Hilton Hotel car park [[BFB00053325](#)]. The dispute was as to whether BSC was obliged to carry out works at the car park in the absence of any further instruction to proceed. The dispute was referred to DRP by **tie**, which claimed that there was such an obligation. BSC claimed that before it was obliged to start it had to receive an instruction intimating that a licence had been obtained from the landowners, permitting required access to land. In support of this it relied on clause 18.17A of the contract, which required it to take all necessary steps to ensure that CEC was not put in breach of its obligations under specified agreements. It said that to enter on the land without confirmation that a licence was in place to permit it would put CEC in breach of its obligations. It is immediately apparent that this is a narrow issue, with limited consequences. Mr Howie made the determination for which **tie** had argued, and to that extent it was successful. However, Mr Howie did not uphold the argument that **tie** had advanced. He concluded that the works at the hotel car park were not part of the Infraco works and therefore clause 18.17A did not apply. In the reports to the TPB and Transport Scotland it was said that the decision was awarded in **tie**'s favour [see, eg, [CEC00681328](#), page 0008]. Although that was certainly true of the result, it was not true of the means by which it was reached.
- 17.24** The next outcome from an adjudicator was on 16 November 2009 in two disputes which had been referred to Mr Hunter, a Chartered Quantity Surveyor, concerning the Carrick Knowe bridge [[CEC00479431](#)] and the Gogarburn bridge [[CEC00479432](#)]. Both concerned the issue of whether changes from the BDDI to the IFC drawings gave rise to a Notified Departure and therefore went to the core of the differences between the parties. This was the issue that had been latent since the emails between Mr McEwan, Mr Fitchie, Mr Bell and Mr Bissett at the end of March [paragraphs 11.69–11.79 in Chapter 11 (Contract Negotiations)]. The changes that had occurred in the design were not themselves in dispute, and the issue was as to how the contract wording would be applied to them.

- 17.25** Although in relation to the Carrick Knowe bridge **tie** sought a declaration that the estimate for the works in question should be £71,757.37 excluding VAT [CEC00479431, page 0009, paragraph 6.19], in general the issue was not what value should be placed on the works but whether they were Notified Departures. The argument for **tie** as noted by the adjudicator was that, in order to be able to claim, BSC would have to prove that the change in design from BDDI to IFC exceeded normal development and completion of designs [*ibid*, page 0007, paragraph 6.10]. It is immediately obvious that this was not the way that Mr Nolan recorded the issue as having been presented to him at the challenge session. There, it did not turn on whether it was normal development, but was an issue of fact as to whether there had been a change in design principle etc.
- 17.26** Mr Hunter's decisions were almost identical. He decided that the majority, but not all, of the claims that Notified Departures had occurred were justified. He refused all the orders that had been sought by **tie** in its reference to adjudication.
- 17.27** In the arguments presented to the adjudicator, **tie** focused on the issue of what obligation was being undertaken by BSC. It was noted that it was an obligation to complete the works in accordance with the Employer's Requirements. Putting the matter very shortly, the consequence of this was said to be that any development of the BDDI intended to ensure fulfilment of those requirements was part of the normal development of designs and could not justify additional payment. As Mr Hunter identified, however, there was a distinction between the question of what works BSC was obliged to undertake on the one hand and the question of its entitlement to payment under the contract, including SP4, on the other [CEC00479432, page 0020, paragraph 7.46]. Although BSC had to satisfy the Employer's Requirements, the price was only for the design shown in BDDI and normal development of that design, but anything more meant that there was an entitlement to additional payment.
- 17.28** The steps in Mr Hunter's reasoning may be outlined as follows.
- SP4 was intended to address the fact that design was incomplete at the time of concluding the contract and BSC could not be aware of how BDDI would be developed in some regards. The schedule dealt with the "unknown or insufficiently developed" elements [*ibid*, page 0015, paragraph 7.17].
 - If the development of designs from that shown in the BDDI to meet the Employer's Requirements was more than the normal course of development, the risk of the additional cost was borne by **tie** [*ibid*, pages 15–16, paragraph 7.20].
 - He said that: "the Employer's Requirements have in terms of price for the works been clarified in section 3.1 of Schedule Part 4 and thus limited by the BDDI and the Schedule Part 4 agreement in respect of the agreed price" [*ibid*]. The meaning of this is not easy to follow, but it appears to mean that the works included in the price are taken to be limited in the way identified and therefore it is not the Employer's Requirements that are limited but the scope of what is included in the price.
 - It may be the case that a matter is "alluded to in the Employer's Requirements ... but because of the lack of complete design had not been sufficiently developed in terms of specification to become part of the price" [*ibid*, page 0016, paragraph 7.21]. This would mean that BSC was required to undertake the works (because it was part of the Employer's Requirements), but it would be a Notified Departure entitling BSC to additional payment.

- Any matter that goes beyond the normal design development of what was shown in BDDI would be a Notified Departure [\[ibid, page 0016, paragraph 7.21\]](#).
- The above point does not mean that *every* change from BDDI is a Notified Departure [\[ibid, page 0016, paragraph 7.22\]](#).
- The BDDI and not the Employer's Requirements are the starting point for considering Notified Departures [\[ibid, page 0018, paragraph 7.32\]](#). The obligation that is included in the price is limited to normal development of what is shown in the BDDI. This means that "if something is not in any way addressed on the drawing then I cannot see how it can subsequently be developed". It would follow from this that if a matter was not included in a drawing that was part of the BDDI, the cost of providing it was not included in the price and it would constitute a Notified Departure if the Infraco contractors were required to do so. I return to the significance of this below.
- Mr Hunter said that the proper approach was to identify changes between the BDDI and IFC, consider whether they were changes in design principle, shape, form or specification and then consider whether they are normal design development. If they were, they would not constitute a Notified Departure [\[ibid, pages 0018–0019, paragraphs 7.36–7.39\]](#).

17.29 The final point noted above does not give effect to the wording of the contract and may be considered an error. The error is substantially in favour of **tie**. It gives primacy to the question of whether something is normal design development over the issue of whether it is a change of design principle etc. In my view, it fails to acknowledge the proviso at the end of PA1. This is surprising as the point was clearly argued by BSC and it is even expressly referred to as a limit on what may be normal design development by Mr Hunter in his decisions [\[ibid, page 0017, paragraph 7.26\]](#). However, even with this apparent error in **tie**'s favour, the outcome was that most of the changes were found to be Notified Departures. On a more general level, it was significant that Mr Hunter stated that "quite clearly uncertainty in pricing has not been removed as the subject matter of the dispute referred to me clearly shows" [\[ibid, page 0014, paragraph 7.12\]](#). I entirely agree with him in this regard. Even leaving aside the outcome of the particular dispute, this should have served as a critical warning to **tie** that the wording that it had accepted to get agreement on the Infraco contract meant that it had compromised any certainty in the contract price.

17.30 Although the financial effects of the ruling are not quantified in the decision, the adjudicator required **tie** to pay 75 per cent of his fees and BSC to pay 25 per cent. Although only a very rough guide, this gives some indication of where the balance of success lay. It is nonetheless important to note that some of the claims from BSC were rejected. Had **tie** not contested the adjudication, it would have had to accept liability for the whole of the claim made by BSC and paid these amounts to which there was no entitlement. However, in that most of the changes had been found to be Notified Departures it is not surprising that BSC saw the outcome as a victory [Mr Foerder [TR100000095_C](#), page 0048, paragraph 149]. The position within **tie** was much less clear. It seems that there was a reluctance on the part of the senior personnel to acknowledge the full ramifications of Mr Hunter's decision. In his oral evidence, Mr Jeffrey said:

"There was a degree of disappointment. And as I say, shock. I don't think anybody had expected – and in reasonably clear terms, Mr Hunter had preferred the Infraco's interpretation of the contract." [\[PHT00000032, page 107\]](#)

17.31 He said that it gave an insight that the contract might not mean what the personnel in **tie** thought it meant and that, taken at face value, it meant that it was not possible to predict a final cost for the project. When questioned about this further, he agreed that that would be a catastrophic scenario for the project [*ibid.*, pages 112–113]. However, this position was not apparent in the reporting at the time. There was a meeting of the TPB just two days after the decisions were issued. It is perhaps unsurprising that the outcome was not referred to in the Project Director's report or the report to Transport Scotland included with the papers for the meeting [CEC00681328] as they would have been drafted and possibly issued before the decision was available. The presentation to the meeting did not give any more detail [CEC00835831] but the minute of the meeting records that Mr Jeffrey explained the outcome of these two decisions to the Board [CEC00416111, pages 0006–0007]. At the meeting, Mr Hogg asked whether the interpretation of the contract had changed and queried whether a review of the strategic direction was necessary. The minutes note:

"It was reiterated that it is too early in the process (for either party) to establish precedence at this stage in the process, and it was agreed that the current strategic direction should continue." [*ibid.*, page 0007.]

17.32 In the papers for the TPB and Transport Scotland in December 2009 [CEC00416111] neither the Project Director's report nor the report to Transport Scotland made reference to the content of the decision, but a risk report did refer to the fact that the adjudicator had preferred Infraco's case. The Project Director's report in the papers for the TPB meeting on 13 January 2010 remained silent on the matter, but the Report to Transport Scotland said in relation to the decision simply that, "the Adjudicator found largely in favour of the position taken by BSC" [CEC00473005, page 0047, paragraph 2.2]. In questioning by counsel for the Inquiry and by counsel for former **tie** employees in relation to this Mr Jeffery agreed with the propositions that the fees for the adjudication were split and that there were elements of works that, despite the interpretation he had reached, were not Notified Departures. None of that is in dispute. If the outcome was considered, however, it is clear that the result had been very much in favour of BSC and if the intention had been to establish a principle that would be useful in future cases it had notably failed.

17.33 On 18 November 2009, DLA gave advice to **tie** as to its options to challenge the decision [CEC00479430]. This considered only challenges that might be made to the enforceability of the decision and did not consider raising court proceedings to consider the merits of the dispute afresh. At about this time **tie** resolved to obtain advice from another Queen's Counsel, Mr Keen QC.²² He gave his advice initially in a consultation and followed it up with a written Opinion on 14 January 2010. Prior to receipt of the written Opinion, DLA prepared a summary dated 9 December 2009 to draw together the advice of DLA, McGrigors and Mr Keen as to the interpretation of SP4 [CEC00651408]. It is apparent that in some respects the advisers were not in agreement. One such area concerned the position in relation to items that were not shown at all in the BDDI (section 2.3). DLA and Mr Keen were recorded as agreeing with the position taken by **tie** that as PA1 was only concerned with "amendment" to the BDDI, it had no application if there was nothing shown in the BDDI, as, in that situation, there would be nothing to "amend". Part of the rationale for this approach was that the price for the Infraco works included the overhead electrical lines that would be provided by Siemens and for which it had never been intended that Parsons Brinckerhoff would provide the design. If the price included only matters which were shown in the drawings, it would mean that there would be an entitlement

²² Now Lord Keen of Elie.

to additional payment in relation to all the work that would be carried out by Siemens. That was clearly not the intention of the parties. McGrigors took a different approach and agreed with Mr Hunter's restriction of design development such that it would include only development that could be determined from the information available within the BDDI. In relation to the meaning of "normal development and completion of designs" both DLA and McGrigors endorsed the **tie** position that it included all that was required to develop the BDDI to the level of detail necessary to construct works to meet the Employer's Requirements. That argument had, however, been rejected by Mr Hunter. Mr Keen took a different, but unspecified, view.

- 17.34** In December 2009, a further note was provided by DLA to respond to four questions that had been raised by **tie** management [[CEC00578621](#)]. This version is marked, "Draft – Work in progress", but the Inquiry is not aware of a later version. This focused on the issue of how a Notified Departure was to be valued once it was established that further sums were due, and it provided a written recommendation that Mr Hunter's decision should not be challenged. This was, however, on the same basis as the advice given in November, in that it solely considered challenge on the basis of some defect in the manner in which the decision had been taken and did not consider raising a court action or starting arbitration to reconsider the merits of the dispute.
- 17.35** The outcome of this consideration was that there was no challenge to this decision. Mr Jeffrey said that this was because **tie** had the opportunity to launch further DRPs before other adjudicators. While that is true, it would not change the fact that even where, as I noted in paragraph 17.29 above, an interpretation of the contract accepted by an adjudicator favoured its interests, **tie** had been unsuccessful. Although Mr Jeffrey had referred to the possibility of **tie** instigating further dispute resolution procedures, in fact the next decision of an adjudicator on the BDDI–IFC was on a reference by BSC. It was in a dispute arising out of a retaining wall in Russell Road, and the decision was given by Mr A Wilson, a Chartered Civil Engineer, on 4 January 2010 [[CEC00034842](#)]. Once again, the dispute centred on whether elements of the works amounted to Notified Departures. The adjudicator decided that they were.
- 17.36** Mr Wilson recognised the difficulty with PA1 in that its wording stipulated that normal design development was to be an exception from the specified prohibitions on change but then said that normal development excluded any of the specified prohibitions. He described this as tautological [[ibid](#), page 0019, paragraph 94], but I think that it is better characterised as circular or self-defeating: the exception can never apply, as the situation in which it would be relevant (the development in question amounts to one of the prohibited changes) is also the one that means that it is disapplied. Unsurprisingly, he concluded:
- "It appears that something has gone wrong with the language of Section 34.1.1 [ie PA1] as, on the face of it, on a literal reading some part must be redundant to give it meaning." [[ibid](#), page 0020, paragraph 100.]
- 17.37** He considered the components of the expression "design principle, shape, form and/or specification" and gave a definition for each [[ibid](#), page 0021, paragraph 104] and then, drawing together these various interpretations, he reached a conclusion as follows:

"Pricing Assumption Section 3.4.1.1 on a proper construction should read

'Design prepared by the SDS Provider will undergo the normal development and completion of design and will not in terms of design principle, shape, form and/or specification be amended from the drawings forming the BDDI (except in relation to Value Engineering).'

Normal development and completion of design means those changes that an experienced contractor and his engineer can expect in providing full construction information.

Normal development of design is the process of analysing a structure and ensuring that, for example, the concrete and reinforcement are adequate to resist the specified forces. Completion of design is the process of finalising designs, receiving comments from relevant approval bodies, checking of design calculations and drawings, completing drawings.

Design principle is a fundamental source in the formulation of an idea and turning it into a practical reality; Shape is the total effect produced by the outlines of a thing; Form is the external shape or appearance of an object as distinct from the matter of which it is composed; and Specification is that provided in the contract documents specifying the nature and quality of the work.” [libid](#), pages 0024–0025, paragraph 127.]

- 17.38** Although this view of what was intended can be said to be reasonable, it innovates on the wording of the clause to a material extent. This is perhaps recognised by Mr Wilson in the passage quoted when he says that it is what PA1 “should read”. This reformulation of the contract still does not indicate what the outcome will be when there has been normal development of designs *and* that development amounts to a change of design principle etc. However, when Mr Wilson came to apply his test to the changes before him, he gave primacy to the requirement that there should be no change of design principle etc. So, in relation to the changes to foundations and piling he considered that these were changes that might be expected as part of design development but they were nonetheless a Notified Departure as there had been a change of shape and form [libid](#), page 0029, paragraphs 154–157]. This was the opposite of the position that had been reached by Mr Hunter who said that if a change of design principle etc was a normal design development, it was not a Notified Departure.
- 17.39** BSC had sought to argue that the price related solely to works comprised within the BDDI, but Mr Wilson rejected that approach. In relation to the position where a matter was not shown at all on the BDDI, however, he stated that the use of the word “amendment” indicated that for there to be a Notified Departure there had to be something shown on the BDDI drawings in the first place [libid](#), page 0021 paragraph 102]. This accords with the approach of DLA and Mr Keen, recorded in the advice from 9 December 2009, and I will return to it below when considering further disputes.
- 17.40** The reaction within **tie** to this decision was that the interpretation that it preferred had succeeded. I find this difficult to understand. The conclusion that the price was not solely for works as included in the BDDI meant that it would also include works arising from normal development of that design. The practical consequence of this was that when a Notified Departure did occur, the assessment of additional costs would not simply be determined by the increase compared with BDDI; the baseline for comparison would be the BDDI as subjected to a process of normal development. This would undoubtedly lead to savings, and to that extent was favourable to **tie**. Overall, however, it appears to me that Mr Wilson’s interpretation presented difficulties for **tie** in the following respects.
- (a) He found that the changes he was considering were Notified Departures [libid](#), pages 0028 and 0030, paragraphs 149 and 160 respectively].

(b) It still meant that the question of whether something was a Notified Departure would have to be decided on the facts of each change. This meant that arguments as to interpretation could not provide an answer to all the disputes such that **tie** could insist that BSC should simply carry on with the work.

(c) Most importantly, it meant that changes that arose from normal development and completion of the designs would be Notified Departures if they were changes of design principle etc.

17.41 When Mr Nolan was asked about Mr Wilson's decision, he was frank and said:

"But there were certainly bits in it which involved a more sophisticated consideration. So we did draw comfort from it – we being tie and McGrigors – but it still left us – this is the point I want to make fairly and squarely. There was still a massive problem. We lost the adjudication. tie lost the adjudication." [PHT00000046, pages 151–152.]

17.42 This frankness may be contrasted with the information circulated about the decision at the time. In the papers for the TPB meeting on 13 January 2010 [CEC00473005], Mr Bell's report and the report to Transport Scotland merely record that the issue had been determined on 4 January [ibid, pages 0012 and 0047]. The report to Transport Scotland said that the decision would be reported in the next period and that.

"[a] significant saving resulted (>£400K) on the estimate presented by BSC and the adjudicator agreed with **tie** on many of the principles in dispute" [ibid, page 0047].

17.43 I agree with the first part of this statement. Although Mr Foerder was adamant that the savings were exaggerated, they are in fact correctly recorded. Mr Foerder's position was that **tie** overstated the position by saying that BSC sought £4.5 million and was awarded only £1.4 million, whereas the truth was that that it had sought only £1.8 million [PHT00000044, page 188]. It is apparent, however, that the claim was only that **tie** had saved £400,000. That is quite accurate. This is an important consideration. If it had not been resisted, **tie** would have paid a claim that had been significantly overstated by BSC. It can therefore be said that to this extent **tie** was vindicated in resisting the claim. To have paid the claims in full would have amounted to a waste of substantial sums of public money, which would have been unacceptable. This put **tie** in a difficult position. On the one hand BSC was claiming more than they were entitled to, so **tie** was bound to challenge the claims but, on the other, time and effort in challenging the claims, together with the fact that no works could take place until the matter was resolved (see below), meant that progress in the works fell further and further behind schedule.

17.44 I do not, however, agree with the second part of the statement – that the adjudicator agreed with **tie** on many of the principles in dispute. The dispute was referred to adjudication with a view to determining that the changes in question were not a Notified Departure. On this, the adjudicator found for BSC. Although there were clearly some arguments in respect of which the adjudicator found in favour of **tie**, I do not consider that this justifies the statement made. Mr Jeffrey was challenged as to whether the statement in the report was accurate and, in examination by counsel for the former **tie** employees, his attention was drawn to the fact that the adjudicator found that the price was not solely for BDDI, that there had been a saving on the amounts claimed by BSC and that the fact that the matter was referred to DRP meant that **tie** had been able to issue instructions to require that the works should proceed [PHT00000033, pages 95–102]. His comments on the points to which he was referred

are correct to some extent. In my view, however, to state that the adjudicator had agreed with **tie** on many of the principles in dispute did not accurately represent the decision and would not give the reader an accurate impression of the outcome. The ability to instruct the consortium to proceed was not a matter on which the adjudicator had ruled. While there had been a determination that the price did not just reflect BDDI, on the more important issue of whether a Notified Departure had arisen, the decision overall favoured BSC. The issue of reduction in the claims made by BSC was not an issue of principle. Although one of the justifications for taking cases to adjudication noted at the outset had been that **tie** could instruct BSC to commence the works to which the dispute related [paragraph 17.4 above; *ibid.*, page 96] this was not a matter established in the adjudication. So although, in response to a question from counsel for **tie** employees, Mr Jeffrey said that he thought the report was an accurate summary, when I asked him whether he considered that it was a full and frank disclosure of the outcome of the decision he agreed it was not [*ibid.*, pages 103–104].

- 17.45** The lack of information in the reports provided in advance of the January TPB meeting might suggest that detail would be provided and discussion would take place at the meeting, but the minutes of the January meeting make no express mention of it, although it is recorded that there was a detailed discussion of the DRP/adjudication process [CEC00474418, page 0007, paragraph 3.5] and there was nothing about it in the presentation to the meeting. On a matter as significant as this I consider that it would not be adequate simply to give an oral explanation during the meeting. It was a very important matter and required careful consideration. It is something of which written notice should have been given in advance of a discussion if it was to be meaningful and effective and decisions were to be taken on a properly informed basis. In relation to Transport Scotland, Mr Jeffrey noted that there were other channels of reporting in addition to the written report referred to above. As I have indicated in Chapter 3 (Involvement of the Scottish Ministers), it is not satisfactory that it is necessary to rely on informal reporting to remedy shortcomings in implementation of formal reporting procedures. Despite the further decision, the minutes repeat the comment from November 2009 that it was “too early in the process to establish a clear precedence on some of the points of principle disagreement” [*ibid.*]. It is clear, however, that it was no longer the intention solely to use the DRP to achieve **tie**'s objectives. The minute notes that Mr Jeffrey gave details of the strategy to be used in future and was to present options to the March meeting of the Board. I consider that meeting below.
- 17.46** On 14 January 2010, shortly after Mr Wilson had given his decision and the day after the TPB meeting, **tie** obtained the written Opinion from Mr Keen QC [CEC00648853]. Although it is watermarked “Draft”, the Inquiry is not aware of any later version. Further, although it was completed after the decision of Mr Wilson, it had been sought and the discussions had taken place earlier, and it considered the options only in light of the decisions of Mr Hunter. Mr Keen noted that the effect of the decisions was that any part of the design of the works required to fulfil the Employer's Requirements that was not included in the BDDI would constitute a Notified Departure, creating an entitlement to additional payment [*ibid.*, pages 0002 and 0005, paragraphs 4 and 8 respectively]. He stated that he considered that this conclusion was wrong [*ibid.*, page 0005, paragraph 8]. The basis for his view appears to lie in the fact that a Notified Departure arises where the facts or circumstances “differ” from the base case assumption (which included the pricing assumptions but was actually much wider). His view was that “differ” denoted making something “unlike, dissimilar or different”. If nothing had been incorporated into the BDDI in

relation to an element of the Employer's Requirements and something was then added later, it would not be a Notified Departure as it did not "differ" from anything in the BDDI. Also, if there was an outline design in the BDDI which was developed in a way that did "not render it unlike, dissimilar or different to the outline in the [BDDI]" he considered that too would not amount to a Notified Departure [*ibid.*, page 0006, paragraph 9]. Significantly, however, in response to a question about the interpretation of PA1, he said that he preferred the argument that had been advanced by BSC that any change in design principle etc is a Notified Departure [*ibid.*, pages 0008–0009, paragraphs 11–13]. He considered that the argument that **tie** had been advancing did not take account of the proviso [at the end of paragraph 3.4.1 in [USB00000032](#)] that normal development excludes changes of design principle, shape and form and outline specification. This was the interpretation adopted by Mr Wilson and, as I have indicated above, it is also my view.

- 17.47** Although the report to Transport Scotland in January said that the decision would be reported in more detail in the next period, no details were in fact given. The papers for the TPB meeting on 10 February referred to Mr Wilson's decision but did not make any statement as to the outcome and noted only that the decision was under review [[CEC00474418](#), page 0028, paragraph 2.2]. The presentation to the meeting made no reference to the decision [[CEC00376422](#)]. It is apparent from the minutes of the February meeting that the issue was not discussed [[TIE00894384](#)]. In the presentation to the March meeting there is still no reference to the contents of the decision.
- 17.48** The difficulty with the picture created by these reports did not stop with the TPB and Transport Scotland, however. Mr N Smith of CEC accepted that reports to Councillors of 24 June 2010 [[CEC02083184](#)] and 14 October 2010 [[CEC02083124](#), page 0007, paragraph 2.50] that said that the outcomes "in terms of legal principles" were "finely balanced" were not accurate [[PHT00000006](#), pages 85–86; [TRI00000280_C](#)]. He accepted that he had drafted this element of the report. He said he could not recall where the wording had come from but thought that the phrase had come from Mr Jeffrey [[PHT00000006](#), page 86]. From what I have seen of the reports to the TPB and Transport Scotland it seems probable that the sentiment – if not the phrase – originated within the **tie** executive team. That, however, does not excuse the actions of Mr N Smith in drafting the inaccurate reports, as I will discuss more fully in Chapter 18 (CEC: May 2008–2010).
- 17.49** In the presentation to the March 2010 meeting came the beginnings of a retreat from the advice previously given. It stated:
- "the language in the Contract is open to differing interpretations and whilst there is a strong common sense argument which militates against BSC's interpretation uncertainty does exist as to how far a court would go in supporting **tie**'s interpretation." [[CEC00575128](#), page 0008.]
- 17.50** Although this moved from the confidence that had been expressed up until then, in my view it did not go far enough in reflecting the extent to which BSC's approach had prevailed over **tie**'s. The issue is further clouded in that the minutes of the meeting record that Mr Jeffrey stated that independent legal advice had been obtained and that this affirmed **tie**'s approach to the enforcement of the contract [[CEC00420346](#), page 0007]. In light of the advice given, the TPB concluded:
- "The approach adopted appears to have had a significant impact on BSC and the basis on which **tie** can seek to achieve an acceptable legal and commercial

outcome is now considerably clearer. **Accordingly, the TPB approved the following strategy:**

- Continue to pursue **tie**'s rights under the existing contract with vigour and seek acceptable resolution of the main disputes in accordance with the agreed action plan." [*ibid*, page 0008.]

- 17.51** At about the same time, a "Minute of Tram Meeting" dated 16 March 2010 records a meeting attended by Mr David Anderson, Mr McGougan and Mr N Smith from CEC, and Mr Jeffrey and Mr Dunn from **tie**. It notes that "Tie will not challenge adjudications" [*CEC00475671*, page 0001]. This does not suggest that there was confidence in **tie**'s arguments. There is no record of the decision whether to raise court or arbitration proceedings having been brought before the TPB at all. In view of the role that had been given to the TPB in relation to the management of the relationship with BSC, it would have been appropriate that they were involved in the decision. Although I have not found evidence of the reason for this action, when viewed objectively it can be seen as another example of information being withheld and scrutiny avoided.
- 17.52** The Project Director's report for the TPB meeting on 10 March stated that an additional DRP relating to Gogar depot access bridge had been commenced by BSC and that **tie** had commenced two further DRPs in relation to track drainage and works at Tower Place bridge on 10 February and 25 February respectively [*TIE00894384*, page 0012]. The decision in respect of the Tower Place bridge works was given by Mr Hunter on 19 May 2010 [*CEC00373726* as amended by *CEC00325885*]. It was accepted for the purposes of this adjudication that there had been a Notified Departure under clause 3.4.19 of SP4 rather than clause 3.4.1. The issue in this instance concerned how to identify the baseline from which the Notified Departure should be assessed. The BDDI was defined by reference to the design issued to BSC as at 25 November 2007. Clause 2.3 of SP4 stated that it meant:
- "the design information drawings issued to Infraco up to and including 25th November 2007 listed in Appendix H to this Schedule Part 4" [*CEC00373726*, page 0009, paragraph 6.5].
- 17.53** Instead of listing the drawings, Appendix H merely said: "All of the Drawings available to Infraco up to and including 25th November 2007." [*ibid*] This adjudication highlighted the dangers of this approach. The parties could not agree what was available to Infraco at the relevant date. The argument for **tie** was that drawings were available to BSC in an electronic data room and that these contained drawings in addition to those issued on CDs to BSC prior to the November cut off. Mr Hunter found that he could not conclude with certainty that either of the drawings relied on by **tie** for the purposes of its arguments were in the data room. He went further, however, and was unwilling to say even that the whole content of the data room was made available to BSC. This created further scope for dispute in relation to each possible Notified Departure as to what baseline should be taken. The omission of the list of design information drawings up to and including 25 November ought to have been identified by **tie** and its advisers prior to the signature of the contract. Had they done so there would have been no dubiety about the information available at the relevant date. Their failure in this regard is indicative of a desire to sign the contract in haste without undertaking the necessary checks to ensure that all relevant documents upon which reliance was placed were properly identified and included within the contract.

- 17.54** The matter of the contractual issues arising from the adjudications and, in particular, the interpretation of PA1 was the subject of a report to **tie** dated 23 March 2010 from McGrigors [[CEC00591754](#)]. This noted that while there was a "stateable" argument that something had gone wrong with the wording, it was extremely difficult to demonstrate the result that had been intended. When a legal adviser uses the term "stateable" in relation to a position that might be advanced by a party to a dispute it means that there is not great confidence of its prospects of success. More importantly, McGrigors noted that showing that something had gone wrong was only the first part of what would have to be demonstrated. It would also be necessary to show what the parties had in fact intended. The report discussed a number of possibilities but was not able to state a clear solution. This is a striking contrast to the information that had been given to the TPB less than a fortnight previously that independent legal advice affirmed the approach taken by **tie**.
- 17.55** The arguments that had been included by Mr Keen in the Opinion that he provided in January were put to the test in an adjudication concerning track drainage. The point he considered as to the correct position when something was not shown on the BDDI drawings had in fact arisen in both the Carrick Knowe and Gogarburn adjudications [Gogarburn decision, [CEC00479432](#), pages 0015 and 0018, paragraphs 7.20 and 7.32 respectively; Carrick Knowe Decision, [CEC00479431](#), pages 0013–0014 and 0016, paragraphs 7.20–7.22 and 7.33 respectively] as well as the Russell Road adjudication [[CEC00034842](#), page 0021, paragraph 102]. Mr Hunter's decision in the Carrick Knowe and Gogarburn decisions implied that if something was not shown, it would follow that BSC had not been able to price it and therefore it would be a Notified Departure, leading to further payment. Mr Wilson, on the other hand, appeared to take the view that if there was nothing on the BDDI drawings, there could not be an "amendment" and this might support an argument that it was not a Notified Departure. On those occasions the point had arisen as a side issue but in the track drainage dispute the argument took centre stage.
- 17.56** Mr Coutts QC was appointed adjudicator in relation to the track drainage dispute and gave his decision on 24 May 2010 [[TIE00231893](#)]. The adjudication concerned more than one change but, in relation to one concerning what was referred to as Section 7A, **tie** argued that there could be no departure from the drawings as there were no BDDI drawings for that part of the works. As the works were not specified in the earlier drawings, the drawings could not be considered to have been amended and there was accordingly no Notified Departure. This was rejected by Mr Coutts, who considered that "amendment" was broad enough to include additions. The argument was not advanced in any further proceedings.
- 17.57** Until Mr Wilson's decision in relation to the Russell Road retaining wall, the focus had been on whether there was an entitlement on the part of BSC to additional payment for a Notified Departure. There was, however, another effect of these disputes that was also causing concern, namely, the fact that the progress of the Infraco works was very substantially behind schedule. The papers for the TPB meeting in May 2010 note that BSC had failed to commence on-street works and refused to progress works until the estimates in relation to changes were agreed under clause 80 of the contract [[CEC00245907](#), page 0018]. The difficulty lay in the contract mechanism regulating changes to the contract. A Notified Departure was deemed to be a Mandatory **tie** Change [SP4, [USB00000032](#), page 0009, clause 3.5]. Clause 80 of the Infraco contract regulated all **tie** changes. Clause 80.13 said:

"Subject to Clause 80.15, for the avoidance of doubt, the Infraco shall not commence work in respect of a **tie** Change until instructed through receipt of a

tie Change Order unless otherwise directed by **tie**." [CEC00036952, Part 2, page 0195, clause 80.13.]

17.58 The difficulty lay in reaching agreements in respect of the estimates of the costs of carrying out the works. If the parties did not agree the estimate, the works could not proceed. If BSC submitted an inflated estimate, **tie** was faced with the choice of agreeing it and bearing the increased cost or disputing it with the result that the works would be delayed. The position was more difficult where **tie** did not even agree that a matter was a Notified Departure so as to trigger the change mechanism in the contract. That would mean that it would not engage in discussions with a view to agreeing the estimate, whereas BSC, being of the view that there was a change, considered that it could not start works until agreement had been reached. This was a problem that had been inherent in the clause 80 wording from the moment that the contract was signed. Wording that meant that work could not proceed in the absence of agreement as to the price was insisted on by **tie** in the contract negotiations. This was presumably in the belief that it would give it some control over price increases. That would only be the case, however, if there was an option *not* to proceed with the work in question. In a construction contract that would typically be the case in a situation in which the employer wanted to make some change to the works after the contract was signed. If the price was too high to be capable of agreement, the employer would have the option simply not to proceed with the change. A lack of agreement as to an acceptable price in that situation need not hold up the works. The difficulty here was that the way in which the pricing assumptions had been framed was such that Notified Departures and the entitlement to additional payment would arise even in completing the works required by the contract. As this was work which had to be undertaken to fulfil the Employer's Requirements, there was no scope to decide that it should not take place and the deadlock could not be avoided. This might have been of little effect had there been only a few changes arising under the contract. When taken with the plethora of assumptions in SP4 and the knowledge that there would be departures from them, however, clause 80 presented a problem that was bound from the outset to arise. It put **tie** in a very difficult position. The way that the contract had been drafted put pressure on **tie** to accept even overstated estimates of the cost and this was apparent to Infracore. It is notable that where adjudicators quantified the sums to which Infracore was entitled, claims were reduced substantially. In the adjudications relating to Russell Road, Tower Bridge, the Depot Access Bridge and S7A track drainage the total of the sums claimed was £4,454,222 and the total of the sums awarded to Infracore was £2,754,511.56, being approximately 62 per cent of the sums claimed. It seems to me that a reduction of 38 per cent of the sums claimed is indicative of significantly inflated estimates. Moreover, as discussed in paragraph 19.83 below the evidence about claims by Infracore was not confined to those referred to adjudication. The Audit Scotland Report refers to claims by BBS prior to December 2010 from which it appears that 198 claims were settled by **tie** paying to BBS £23.8 million against the sum of £44 million claimed by BBS, representing 54 per cent of the sum claimed [ADS00046, Part 1, page 0021–0022, paragraph 44 and Exhibit 5]. Although for the reasons given in paragraph 19.83 I consider that it is over-simplistic to compare the sums originally claimed by BBS in respect of notified changes with those ultimately paid by **tie** for these changes, nevertheless it is an adminicle of evidence tending to support my view that excessive claims were made. It is also of note that the Audit Scotland Report records that in the same period BBS withdrew 139 claims without pursuing them.

17.59 Although the issue was initially overshadowed by the question of whether or not changes were Notified Departures, McGrigors considered the problem of the lack of progress that resulted from the operation of clause 80 as early as their advice on 23 March 2010 [CEC00591754]. As was noted in paragraph 17.57 above, clause 80.13 was subject to clause 80.15. That stated:

"Where an Estimate has been referred to the Dispute Resolution Procedure for determination, but it is deemed by **tie** (acting reasonably) that the proposed **tie** Change is urgent and/or has a potential significant impact on the Programme, ... **tie** may instruct Infraco to carry out the proposed **tie** Change prior to the determination or agreement of the Estimate by issuing a **tie** Change Order to that effect." [CEC00036952, Part 2, page 0195.]

17.60 The disadvantage of **tie** issuing a Change Order under clause 80.15 was that in terms of clause 80.16, BSC would then be entitled to claim payment on the basis of demonstrable costs. That was the basis on which it had been agreed that the Princes Street works would be done. It was recognised that it was likely to increase the cost of the works and for that reason, **tie** was reluctant to use that approach. The issue was whether there was any way to get around the prohibition in clause 80.13 other than using the express terms of clause 80.15 and, in particular, whether reliance could be placed on the words "unless otherwise directed by **tie**" at the end of clause 80.13 [ibid].

17.61 The advice given by McGrigors was to the effect that rather than giving an instruction under clause 80, it would be more effective if an instruction was given under clause 34.1. This stated:

"The Infraco shall construct and complete the Infraco Works in strict accordance with this Agreement and shall comply with and adhere strictly to **tie** and **tie**'s Representative's instructions on any matter connected therewith (whether mentioned in this Agreement or not) provided that such instructions are given in accordance with the terms of this Agreement and will not cause Infraco to be in breach of this Agreement." [ibid, Part 2, page 0103.]

17.62 It was considered that this would not conflict with clause 80.13 as that clause only referred to works that were required by a **tie** Change and the instruction under clause 34.1 was not accepted to be a **tie** Change [CEC00591754, pages 0036–0037, paragraphs 17.10–17.16]. The Report noted that advice had also been sought on this issue from Mr Keen and that he agreed with the parts of the report dealing with clauses 80 and 34.1.

17.63 The ability to give directions to order BSC to commence work was put to the test in an adjudication concerning works to create an underpass at Murrayfield. BSC declined to start works on the basis that what was required amounted to a Notified Departure or a Mandatory **tie** Change and that the contract required that they should not start work until a price had been agreed for the additional works. At the time **tie** disputed the estimate of additional costs *and* that there was a Notified Departure but they later conceded the latter point. The dispute for adjudication was not concerned with the question of the costs but considered only whether work should be commenced without the cost estimate having been agreed. An instruction had been issued by **tie** to BSC to carry out works in an attempt to get matters moving. The instruction stated that if the works were a Notified Departure then it would be deemed to have been given under clause 80.13. The instruction would mean that BSC had been "otherwise directed" in terms of that clause. The Instruction also referred to clause 34.1 and the obligation of Infraco to comply with instructions from

tie's representative. BSC specifically queried whether the reference in the letter of 19 March to clause 80.13 was correct and it was confirmed that it was. Infraco maintained their position that as there was no agreed Estimate and no Change Order, **tie** was not entitled to issue an instruction under clause 80.13 or 34.1 and in the absence of agreement on the additional costs it was not bound to start the work in question. Infraco referred the matter to adjudication and **tie** responded issuing an instruction under clause 80.15 that the work should be done on the basis that the work was urgent. However, in giving that instruction, **tie** stated expressly that it did not supersede the earlier instruction.

- 17.64** The Adjudicator appointed was Lord Dervaird and he gave his decision on 7 August 2010 [[BFB00053462](#)]. He accepted that clause 80.13 had the effect that **tie** could issue an instruction to proceed notwithstanding the non-receipt by Infraco of a **tie** Change Order. However, he said that it did not follow that **tie** was able to issue instructions under clause 80.13 except where the contents of an Estimate have been agreed. He noted that clause 80.13 which contained the prohibition on starting work in the absence of agreement was expressly stated to be subject to clause 80.15 which entitled instructions to be issued when the Estimate had been referred to the DRP and the work was considered by **tie** to be urgent. He had regard to the fact that BSC would be entitled to payment on a demonstrable costs basis if instructed under clause 80.15 but would have no such entitlement if instructed under clause 80.13. He considered that the entitlement to payment on a demonstrable costs basis was a protection for BSC and its absence in relation to clause 80.13 indicated that the instruction could not be given under that provision in order to deprive BSC of the intended contractual protection. This was the case despite the inclusion within clause 80.13 of the words "otherwise directed" [[CEC00036952](#), Part 2, page 0195]. The instruction in the letter of 19 March was therefore ineffective. **tie** lost the adjudication.
- 17.65** As with the disputes concerning the Gogarburn and Carrick Knowe bridges, the argument presented to Lord Dervaird had not quite been the one that was envisaged by McGrigors in their report and approved by Mr Keen. The instruction was expressly given under clause 80.13 rather than clause 34.1. The view of McGrigors and Mr Keen after the decision was therefore that it had not settled what was meant by "otherwise directed" in clause 80.13 and had not addressed the argument that the instruction could be given under clause 34.1 [[CEC00129396](#)]. In light of this, their recommendation was that **tie** should proceed to DRP in relation to an instruction issued under clause 34.1 as soon as possible. This was not done, however. Mr Jeffrey said that by the end of the month it was clear that the DRP strategy should no longer be pursued [[PHT00000033](#), pages 97–98] or, as he put it in his statement, "every avenue that we had sought to pursue had proved to be ineffective in one way or another" [[TRl00000097_C](#), page 0046, paragraph 276]. I agree with this assessment. The strategy that had first been implemented in March the previous year had on any reasonable view failed to achieve its objectives.
- 17.66** In reviewing the strategy of adjudications, the most striking aspect is that the policy would work only if **tie** were to be in the right. Otherwise, it would result in a situation in which it would be the position of the consortium that would be vindicated. Mr Nolan was of the view that he had given advice that if they went to court and lost, it would be very damaging to **tie** [[PHT00000046](#), pages 158–159]. This means that there were two aspects to consider; what advice was available as to **tie**'s position and had the proposed arguments been scrutinised. I have noted above that the efficacy of the challenge sessions was undermined in that the issues identified in the course of them were not the ones that were actually argued. I cannot say whether

tie personnel – and Mr Bell in particular – were aware that the basis on which the dispute was presented to Mr Nolan and the others at the challenge sessions was inaccurate but they certainly should have been. The sessions were intended as a safeguard to protect **tie** by scrutinising and testing thoroughly the arguments that would be advanced but it could do so only if the correct arguments were identified. This would have been obvious to anyone within **tie** involved in these sessions.

- 17.67** In that the policy that was pursued in taking matters to adjudication was said to have been to preserve the terms of the contract it should have been obvious that advice was required as to the legal effect of the terms of the contract. It is notable that the general decision to proceed to DRP was taken before formal legal advice was provided, although by the time that the individual dispute procedures were instigated, advice had been taken both from solicitors and counsel. The issues that had been considered were dictated by a narrow view that had been formed of the dispute by the advisers, and the issues were not approached and evaluated as widely as they could and should have been. Nonetheless, advice having been taken, **tie** personnel cannot be criticised on that front. It is necessary, however, to consider the position of DLA.
- 17.68** The statement from Mr Fitchie that DLA was confident of the contractual position of **tie** [TR100000102_C, page 0249, paragraph 8.33] is in marked contrast to his evidence to the Inquiry regarding concerns about the contract, in which he said he was fully aware of the problems in the contract and had given warnings on this matter. Alongside this, it is necessary to consider that Mr Fitchie remained silent as to any concerns as to interpretation of the Infraco contract during the challenge sessions. Finally, it is of note that once the adjudication decisions had started to come in there was a focus on the genesis of the wording in SP4 and PA1. In particular, McGrigors was instructed to investigate and report upon the circumstances surrounding conclusion of the Wiesbaden Agreement and the Infraco contract. This was known as Project Challenge. When asked why he had not mentioned his concerns about the contract during this exercise, Mr Fitchie said:
- "I do not recall whether I specifically drew this matter to McGrigors' attention during their Project Challenge phase. But if I'm allowed to qualify that by saying I was placed in an extremely difficult position in relation – during Project Challenge, and the reason is this. And I think it must come over from my evidence. That my position on this is that Schedule Part 4 and Wiesbaden were documents and contractual, commercial, financial and engineering arrangements that tie wanted to have, and so the responsibility in my mind for doing that lay with tie. And meeting in Project Challenge and having your lawyer tell you in front of another lawyer – law firm that it's your fault didn't seem to me to be the right way to approach Project Challenge." [PHT00000017, page 169.]
- 17.69** There are a number of ways in which the conflict in the evidence may be resolved. The first is that Mr Fitchie may truly have been unaware of the problems inherent in the contract wording and that the claims to the contrary in his evidence to the Inquiry are simply false. The second is that he was aware of the problems and for some reason decided not to voice them at the time that future strategy was being determined. There is theoretically a further option: that he was aware of the concerns at the time of contract close but, 12 months later when the problem that he had foreseen arose, he forgot that he had had these concerns.
- 17.70** The final option is fanciful, and I discount it. Of the other two options, the first is perhaps the most straightforward – that is, of course, leaving aside the fact that it

entails a deliberate attempt to mislead the Inquiry. However, as I have noted above in Chapter 12 (Contract Close), there is at least a hint in the email of 31 March 2008 [CEC01465933] that Mr Fitchie was aware of the problems that would arise if the contract was concluded in the form of the then current draft. This leads me to the remarkable conclusion that, despite his awareness, he said nothing when the strategy was under consideration and when the situation was being investigated. Why would he possibly have done this? It is not enough to say that he did not want to be in the position of saying "I told you so" [PHT00000017, page 168]. The very nature of the challenge sessions that he attended was to subject the arguments to scrutiny and avoid **tie** taking a route that was a dead end. Whatever his motivation, it was a critical failing. Had he done as he ought to have and brought the issue to the fore I consider that it is likely that a different strategy would have been adopted. Of course, this would not have changed the wording of the contract that was the source of the problem. To the extent that the contract meant that **tie** had undertaken a liability greater than had been intended, that would have remained. It should have meant, however, that less time and effort would have been wasted in pursuing a strategy that was likely to fail. That time and effort translated to delay in the project which in turn meant further costs over and above the additional liability that had inadvertently been accepted.

17.71 The full range of **tie**'s motives in pursuing the DRPs also seems questionable. Attempting to uphold what it considered to be its contractual rights was one thing, but to attempt to force BB out of the consortium was quite another. It seems that a view had been taken within **tie** that it was right and BB was wrong, and this meant not only that **tie** should prevail but that it could expect the consortium to be re-formed to suit it. This is epitomised in the presentation to the TPB of 10 February 2010, which contained the following:

"The moral case - That BB have, from day 1 and consistently since then, through a combination of claiming over 500+ changes and 'holding the city to ransom' (primarily through slow progress), sought to undermine the proper operation of the contract with a view to extracting more money from the client." [CEC00376422, page 0025.]

17.72 The same presentation referred to an "abuse" of SP4 by BB. This would be an extreme view in any circumstances but, coming after adjudication decisions that had largely vindicated BB's position on the matters of principle, it was truly remarkable. The rhetoric represented a complete failure to take the sort of objective view that was necessary if balanced judgements were to be made as to what was to be done.

17.73 Should a court action have been raised to get a definitive view on the interpretation of the Infraco contract? In my view it is unlikely that this would have helped. Not only was it probably correct that a change of design principle etc *would* have amounted to a Notified Departure; the question of whether that was the case would have to be answered on the facts of each dispute. This means that the best outcome of any action would have left the matter to be determined on a case-by-case basis. This would be of no assistance to **tie**, as the issue would have to be determined repeatedly in relation to each change. Even leaving aside the issue of the possible additional costs, the delay that would result under clause 80 while these determinations took place would be devastating for contract progress. Although I consider that the decision not to pursue the matter in court was probably correct, it is not satisfactory that there is no proper record of the consideration given to this issue, the factors taken into account and the basis on which the decision was taken.

The importance of this matter will have been obvious to all involved. A decision of that importance on a publicly funded project should be taken in a way that is fully transparent.

Further and alternative action

17.74 As I noted in paragraph 17.45 above, at the January 2010 meeting of the TPB Mr Jeffrey was to prepare options for future conduct of the relationship with BSC for the March Board meeting. Immediately following the January meeting he sent an email calling an emergency meeting of the **tie** executive team [[CEC00623955](#)]. His email noted that **tie** was again facing a

"situation where the very future of the project, not to mention the future of TIE and all our own personal, emotional and professional investments in this project are at stake" [libid](#), page 0001].

17.75 He identified that the three options that **tie** had were:

- (1) termination of the whole Infraco contract;
- (2) negotiating BB out of the consortium; and
- (3) "[c]arrying on slugging it out with [Bilfinger] in an uneasy marriage" [libid](#), page 0002].

17.76 As matters developed over the remainder of 2010, the contract remained in place and BB remained a party, but increasingly a war of attrition developed until a decision was made to attempt mediation. It is useful to give an outline of some of the principal activities undertaken in the remainder of the year, to provide some context for the discussions that took place at Mar Hall in 2011.

Reporting to the March 2010 meeting

17.77 The report setting out the state of the project was first drafted in mid-February 2010 and was revised a number of times up to and then following the TPB meeting on 10 March. The work was known as, and the report was titled, "Project Pitchfork" [[CEC00142766](#)]. This was a reference to the various prongs of the approach that was in contemplation [Mr Jeffrey [PHT00000032](#), pages 102–103]. Although the report was drafted by Ms Clark, as would be expected Mr Jeffrey was also involved in its preparation [[TR100000097_C](#), page 0047, paragraph 285] and the report itself indicates that various members of the **tie** executive team were involved [[CEC00142766](#), pages 0038–0039]. The report summarised as follows the position that had come to exist:

"The Infraco Consortium has achieved 14% of the physical construction of tram infrastructure compared to 75% anticipated in the programme within the Infraco Contract by the end of February 2010. Utility diversion work under the MUDFA Contract and related agreements with utility companies (including all telecoms cabling) is expected to be complete by December 2010, some 24 months later than in the Infraco programme. The design work, which has been under the control of Infraco since Financial Close, is expected to be substantially complete by April 2010, some 18 months later than in the Infraco programme. No reliable revised programme to completion has been agreed to deal with these delays and the most recent submission from BSC sought to confirm a commencement of revenue service date of October 2013, compared to July 2011 in the Infraco Contract. Construction of the tram vehicles has proceeded to programme.

"The full project cost estimate has recently been revised to c£540m plus X, a factor which is driven by the cost of delay and other matters of dispute between **tie** and Infraco. X is difficult to estimate with any certainty because of the nature and complexity of the matters in dispute, but the signs are that it will take the full project cost into the range of £600m – £650m." [ibid](#), page 0006.]

- 17.78** Although the report describes the events that had led to the creation of the situation then facing the project, in my view it does not tell the whole story. It does not set out in frank terms the debate that led to the Princes Street problems and the ongoing BDDI-IFC disputes. This omission is material because if decisions were to be taken as to what should be done from this time it was clearly important that the decision makers should have a proper understanding both of the situation that existed at the time and the circumstance that brought them to it.
- 17.79** The report noted that, as early as December 2009, it had been concluded that the policy of pursuing DRPs was not delivering the required outcomes. It stated:
- "Whilst **tie** had achieved the objectives of getting work started at some locations put into dispute and significantly driving down the final value of Estimates being submitted by BSC, success had not been as visible on matters of legal interpretation and especially on the principles of the Pricing Assumptions contained in Schedule Part 4 of the Infraco Contract." [ibid](#), page 0009.]
- 17.80** The report hides behind circumlocutions and, once again, does not accurately state the outcome of the adjudications. The problem was not that success was not "visible"; it was largely absent. This issue persisted into a further draft of the report on phase 2 of Project Pitchfork that was drafted in June 2010 and revised periodically until October that year [[CEC00088220](#)]. It noted that the policy of promoting DRP "has brought a positive outcome for the project overall compared to the claims submitted by the Consortium" [ibid](#), page 0013, paragraph 4.1]. It provides a table of the outcomes of the adjudications that bears little relation to reality. For Gogarburn and Carrick Knowe it merely says that a decision was made, and the "savings" were given. In relation to Russell Road it stated that a decision was made but it then stated that the sum payable was agreed and that there was a saving of £2.2 million. Neither statement was correct. In relation to the adjudication concerning track drainage in section 7, the report did state that the decision favoured Infraco on the issue of principle, and it referred to savings. The comment in relation to Lord Dervaird's decision on the Murrayfield underpass is that it was found that clause 80.13 could not be applied, but the report then stated that the issue was "ability to instruct rather than the costs at this location" [ibid](#), page 0015]. That was the issue that Lord Dervaird had decided against **tie**. The report also referred to numerous reasons why it had been successful for **tie** to be involved in the DRP, including the fact that work was carried out at the locations where the matters in dispute had been referred to adjudication [ibid](#), page 0021], but that was an incidental effect of the reference rather than a justification for it. The report correctly noted that there had been a saving and, even although, as I noted above, they were not accurately stated, it cannot be disputed that had **tie** not stood its ground, the result would have been that BSC would have been paid overstated claims. This is another example of an issue that has arisen in relation to many aspects of the Project: an unwillingness to provide candid and accurate reporting of the position.

The March 2010 TPB meeting

17.81 The minutes of the March 2010 TPB meeting record that Mr Jeffrey reported to the Board members on the ongoing issues facing the project, including **tie**'s desire to operate the existing contract mechanisms robustly. He advised that an analysis of independent legal advice, including Counsel's Opinion, had affirmed **tie**'s approach [[CEC00420346](#), page 0007]. I have not seen legal advice to that effect. The reference to external legal advice having affirmed **tie**'s approach to seeking to enforce the Infraco contract cannot be reconciled with the advice that I have outlined above. A presentation was also given to the TPB. As I have observed in paragraph 17.49 above, this noted that the language in the contract was open to differing interpretations and that:

"whilst there is a strong common sense argument which militates against BSC's interpretation uncertainty does exist as to how far a court would go in supporting **tie**'s interpretation" [[CEC00575128](#), page 0008].

17.82 The minutes record that, following discussion, the TPB approved the following strategy: "Continue

- ... to pursue **tie**'s rights under the existing contract with vigour and seek acceptable resolution of the main disputes in accordance with the agreed action plan;
- The options and opportunities discussed in detail with the TPB to be pursued in accordance with the agreed action plan;
- Actively address affordability and incremental options, including operational and financial viability;
- Reach a resolution of the key matters with BSC;
- Confirm a new way of working with BSC which mitigates against further dispute risk;
- Report progress regularly to the TPB, especially in relation to cost estimates, programme forecasts and potential scope changes in the context of funding availability and the structure of delegated authority which will govern any material changes; and
- Report to the next TPB on progress and advise the Board on the emerging timetable to resolution.
- Continue to update Transport Scotland and CEC and the Non-Executive Directors on developments on regular and detailed basis. DMcG suggested that the FCL Sub-Committee could be an appropriate means of achieving this." [[CEC00420346](#), page 0008.]

17.83 It is apparent that many of these (eg "[r]each a resolution of the key matters with BSC" and "[c]onfirm a new way of working with BSC") can be seen as aspirations or a "wish list" rather than any firm plan of action. Others are merely restatements of what should already have been taking place by way of reporting. What remains does not offer any new insight or direction for the project.

Further work on the BDDI-IFC dispute

17.84 In the period after the meeting, further work was done in relation to the meaning of SP4. On 31 March 2010, Mr Nolan emailed the senior personnel within **tie** to say that he had had another meeting with Mr Keen [[CEC00592602](#); [CEC00592603](#)]. They were both of the view that although it was clear that something had gone wrong with

the wording and that arguments could be made to support an interpretation of SP4 that was more satisfactory to **tie**, neither was confident that the court would accept the alternative wording that they suggested [*ibid.*, page 0003]. They recognised that, as drafted, the contract placed almost the whole of the risk of design changes on **tie** and that Infracore had said that it was not willing to accept the risk of design development. The argument that something had gone wrong with the wording was described as “stateable”, and Mr Nolan accepted that this was a term used by lawyers to mean that the argument was there to be made but that the prospects of success were not good [*PHT00000046*, pages 165–166].

17.85 In his email Mr Nolan said that he wished to test the arguments further with leading counsel in London who had experience in commercial litigation, and he suggested that they consult Helen Davies QC. This consultation took place in the following month and, on 29 April, he provided a note of the discussions that had taken place and the advice that Ms Davies had provided [*CEC00323248*; *CEC00323249*]. She agreed that if PA1 were to be given a literal interpretation, the proviso at the end deprived the opening words of meaning. Her advice was that it was unlikely that it had been intended that the opening words were to be deprived of effect or that the proviso was intended to be empty of meaning but that it was difficult to give it any meaning that did not undermine the opening words. This was the problem that had been identified in McGrigors' advice from 23 March. The solution that emerged from the consultation was that, by using the concept of normal development and completion of design, the parties to the contract had intended that there would be an exercise of engineering judgement to determine whether any amendment from BDDI could be described as the normal development and completion of the design. Two arguments about how this could be done were considered. The first was that something would not be a Notified Departure if it had been necessary to make the design work in accordance with the contractual, statutory or best practice requirements. The second argument was that an amendment that was reasonably foreseeable to a reasonable contractor in the position of Infracore would not be a Notified Departure. In many situations the arguments would overlap. Both arguments, however, would be required to be considered for each amendment on a case-by-case basis and the prospects of them being upheld by a court were considered to be uncertain. Mr Nolan said that there was no great confidence in the arguments [*PHT00000046*, page 185]. The conclusion that the answer to the question was fact specific and would have to be considered individually for each amendment was highly material. Mr Nolan noted that there were eventually 850 alleged Notified Departures, so the need to consider each was a “huge problem” [*ibid.*, pages 169–171]. Unsurprisingly in view of the advice, this was not pursued further in adjudications, but it was included in the position papers submitted to the Mar Hall mediation [*ibid.*, page 185].

Project Carlisle

17.86 This project did not come into existence until after the March meeting. It was overseen and directed by Mr Rush. He had been brought in by Mr Jeffrey at the start of 2010 to assist in managing the situation that had developed with BSC. He explained that he received a call in March 2010 from Mr Flynn, a Director of Major Projects at Siemens, requesting a private meeting [*PHT00000033*, page 131]. Mr Rush said that the aim of the discussion at the meeting and the project that followed was to see whether the contract could be amended in order to provide CEC/**tie** with certainty [*ibid.*, page 132]. This was to take the form of a new agreement in which there would be a maximum price for a reduced scope of works. The meeting took place in Carlisle, which was how the project acquired its name.

- 17.87** In pursuit of this goal, on 29 July 2010, BSC sent a guaranteed maximum price proposal to **tie** [CEC00183919, Parts 1–2]. This covered works to construct the full infrastructure from the east end of Princes Street to the Airport and some enabling works for the remainder of the original scope of works. The price that it said would be required for this was for a sum greater than anticipated by **tie**/CEC. Mr Rush noted that in terms of the previous overstatement of claims in adjudications this was not surprising, he said that it nonetheless created “panic” in CEC and **tie** that they could not afford the offer that had been made [PHT00000033, page 148]. The offer was still on the basis of pricing assumptions albeit that they had been reduced in number. In response, **tie** prepared and intimated a counter-offer on 24 August 2010 [CEC00221163; CEC00221164; CEC00221165; CEC00221166; CEC00221167]. This noted that it was a requirement of any agreement that **tie** should have certainty as to both price and time. To do this, any entitlement to additional payment under SP4 was removed. This offer had a price for works from the Airport to Waverley Bridge and another for works from Waverley Bridge to Newhaven. It was to be entirely in the discretion of **tie** whether BSC was called upon to undertake the second part of the works.
- 17.88** The proposal made by **tie** was not satisfactory to BSC and it made a further counter proposal by way of letter dated 11 September 2010 [CEC00218042]. This covered works only from Haymarket to the Airport. Again, the price was higher than had been hoped for within **tie**. The covering letter stated that the consortium had sought to remove exclusions and caveats that had been in the previous offer but that as **tie** had not resolved outstanding issues, this had not been possible. The letter said that it was a “Full and Final Offer” [ibid, page 0001] and that BSC was not willing to entertain any further discussions of the **tie** counter-proposal as it was “totally unrealistic both in terms of it’s [sic] pricing structure and level of risk transfer back to Infracore” [ibid]. The offer itself said that the **tie** approach had sought to transfer risks to BSC many of which were not quantifiable. BSC said that it was willing to accept risk where it could be quantified but that the remainder must remain with **tie**. This was a clear echo of the communications that had taken place in the context of the original conclusion of the contract.
- 17.89** Mr Rush explained that an analysis had been carried out of the price sought by BSC in its second Carlisle offer and that it was apparent that the difference in respect of Siemens’ work was greater than that for BB [TR100000141_C, page 0009]. He characterised the Siemens price as “opportunistic” as there had been no change in the work required of it since the BDDI. He considered that it was probably intended to correct errors in its tender. This was, however, denied by Mr Flynn and Mr Eickhorn for Siemens [PHT00000045, pages 136–137; PHT00000046, pages 21–22, respectively]. Notwithstanding the statement that the BSC offer was “Full and Final”, **tie** responded with a counter-offer on 24 September 2010 [CEC00129799; CEC00129800; CEC00129801; CEC00129802; CEC00129803]. It is apparent from the terms of the offer letter that BSC had in fact continued to work with **tie** in an effort to reach an agreement. The **tie** counter-offer was for a line from the Airport to St Andrew Square. The **tie** counter-offer was not accepted and there were no more substantive discussions.
- 17.90** On 29 October 2010, BSC wrote to **tie** [CEC00079219] responding to a letter of 19 October 2010 [CEC00132507]. The response from BSC appeared to take contradictory positions. On the one hand it said that it had not withdrawn from Project Carlisle but on the other that it would not participate further in meaningless discussions and that, in the absence of what it termed a reasonable response to

its proposals, the effort to achieve a Project Carlisle-type agreement had “run its course” [CEC00079219]. This is consistent with Mr Jeffrey’s account of a telephone conversation on 7 October 2010 in which he said that Mr Walker had said that BSC had no appetite for Project Carlisle [CEC00099403].

- 17.91** The position that had been advanced by BSC was rejected because it was considered too expensive. The differences in price were summarised in a spreadsheet²³ that was produced later by Mr Coyle in the context of the mediation [TIE00355078]. It showed that BSC was seeking £450.6 million and that **tie** was willing to pay £314.3 million in total for works by the consortium. The gulf between them was very large. However, Mr Jeffrey explained that the core issue was not so much the headline price but the fact that it still contained assumptions in relation to the price and that this would not provide the degree of certainty required by **tie** [PHT00000033, pages 46–47; TRl00000097_C, page 0044, paragraph 266]. It will be recalled that certainty was one of the principal objectives of the proposal at the outset. Although an agreement had not been reached, the proposal that had been discussed formed the basis of the Project Phoenix proposal that was later considered at mediation [Mr Rush PHT00000033, pages 147–149; Mr Foerder PHT00000044, page 147]. I consider that mediation in more detail in Chapter 19 (Mediation and Settlement).

Termination

- 17.92** In his email convening the emergency meeting in January 2010 [CEC00550672], Mr Jeffrey had described the termination option as the least attractive one. Nonetheless, it played a part in the approach taken by **tie** throughout 2010. There were different strands to the thinking in relation to termination. One was that there would be termination by mutual agreement allowing **tie** to go on and re-procure works with a new contractor. The second strand was that there would be termination unilaterally by **tie** in respect of breach of contract on the part of BSC. The arguments for termination also arose in different contexts. In part it was considered a goal to be pursued in its own right, but it was also used as part of the strategy to get agreement in Project Carlisle. This was in the hope that an accumulation of Remediable Termination Notices (“RTNs”) served under the Infraco contract would undermine BSC’s negotiating position [Mr Fitchie TRl00000102_C, pages 0270–0271, paragraphs 8.147–8.150]. Once it was apparent that the Project Carlisle negotiation would not produce an agreement, however, termination was pursued solely as an end in its own right *ibid*, page 0274, paragraph 8.170; Mr Jeffrey PHT00000033, pages 47–48].
- 17.93** Early in 2010, legal advice was taken by **tie** on the application of the contract terms. On 29 January 2010, DLA provided an outline of the termination provisions in the contract [CEC00444298]. Later, the report prepared by McGrigors on 23 March 2010 [CEC00591754], which was considered in paragraph 17.54 above in the context of the interpretation of the contract, also considered the termination provisions.
- 17.94** If termination was to take place without the agreement of BSC, it was necessary for **tie** to rely on the terms of clause 90. It made provision for termination of the contract by **tie** on the basis of default by Infraco [CEC00036952, Part 3, pages 0210–0214]. The term “Infraco Default” was defined in the first Schedule to the Contract *ibid*, pages 0263–0264] and contained several elements. Those that were of interest to **tie** were:

“(a) a breach by the Infraco of any of its obligations under this Agreement which materially and adversely affects the carrying out and/or completion of the Infraco Works”

²³ Referred to as the “deck chair spreadsheet”.

and

"(j) the Infraco has suspended the progress of the Infraco Works without due cause for 15 Business Days after receiving from **tie**'s Representative a written notice to proceed" [\[ibid\]](#).

- 17.95** For **tie** to be entitled to terminate the contract on these bases, it was required to give notice to BSC of the default that had occurred (an RTN). In response to an RTN, BSC was required to prepare a rectification plan. If **tie** did not accept the plan or, **tie** having accepted it, BSC did not adhere to it, the contract could be terminated on five days' notice.
- 17.96** The service of RTNs was overseen by Mr Rush with assistance from DLA [Mr Rush [PHT00000033](#), page 132; Mr Fitchie [PHT00000017](#), page 36]. RTNs were served in August, September and October, and it is useful to look at the legal advice that was obtained in relation to them. In June 2010, DLA again sought advice from Mr Keen [[CEC00337188](#); [CEC00337189](#)], but there does not appear to be any contemporaneous written record of the advice given. Mr Rush recalled that Mr Keen had advised caution in relation to the notices and had been, as Mr Rush put it, "very forthright on the possible adverse – adverse effect of terminating the contract" Mr Rush also commented that Mr Keen had almost gone as far as "saying it's almost impossible to terminate the contract" [[PHT00000033](#), page 163]. An email from Ms Glover of DLA dated 23 September [[CEC00207814](#)] refers to getting comments "on the RTN" but it is not clear that this is the same one on which advice was sought in DLA's July letter. In relation to one matter it notes that it is "ok for this to go in if there are facts to support it" and this makes it clear that there had not been a review of the underlying merits on that occasion. In his statement, Mr Fitchie said that Mr Keen had advised that if **tie** was going to issue RTNs, **tie** would need to show material breaches of contract based on good factual information [[TR100000102_C](#), page 0326, paragraph 11.23]. Further light is shed on this by a report on what was called Project Resolution, which was prepared for the TPB and updated from time to time by Ms Clark. The final version, dated 22 December 2010, noted:

"Counsel did also confirm that it would be necessary for **tie** to provide evidence of adverse breach of contract to substantiate termination. However, it was not necessary to compile and test the body of evidence prior to the issue of RTN's [sic]. We took a conscious decision in light of time pressures from CEC to issue RTN's [sic] without having compiled this evidence but recognising that such evidence would need to be completed prior to any termination." [[CEC02084200](#), page 0048.]

- 17.97** Although this does not identify the date of the advice to which it refers, it is consistent with the narrative that I have given. Overall, the picture is one in which **tie** served the notices before evidence to support them was marshalled, but advice was given that it would be necessary to gather evidence to substantiate the allegations in any notices that it was serving.
- 17.98** McGrigors became involved in the consideration of termination on the basis of the RTNs at the end of 2010 [[PHT00000046](#), page 178]. As the mood turned more to using the notices to terminate the contract rather than merely to apply pressure to BSC, it was again decided to consult Mr Keen for his views, and a meeting with him took place on 4 November 2010. In addition to Mr Rush and Mr Bell representing **tie**, it was attended by Mr N Smith and Ms Campbell from CEC and representatives of DLA and McGrigors. The record of the meeting makes it clear that the outcome was that further investigation was required of various matters in order to establish

the strength of **tie**'s position in relation to proving the Infraco defaults that had been made the subject of RTNs [CEC00101459, page 0003, paragraphs 5.1–5.3].

17.99 I find it remarkable that sufficient investigation work to reach a defensible position had not been carried out before the notices were served and even more remarkable that it still had not been carried out by November, by which time it was clear that **tie** might want to be in a position to exercise rights under the contract. They were formal notices in relation to a matter in which substantial sums of money were at stake. It was envisaged that reliance would be placed on them to terminate the contract. If they were intended as a bluff, it should have been obvious that it was one that would be called. If they were not a bluff, it was reckless not to have gathered the necessary evidence. It left **tie** in a situation in which it could not follow through on threats because it could not be sure that it could prove its claims. Mr Jeffrey had not been directly involved in the work to serve the RTNs and said that he felt frustration that they had been served prior to having established a robust basis for them [PHT00000033, page 50]. Even if, as is suggested in the Project Resolution report, the decision to serve the notices was taken because of time pressure from CEC, I consider that to have been foolhardy. The notices should not have been served without the necessary supporting evidence. However, having served the notices without any evidential basis, it was obvious that it would be necessary to undertake investigations immediately afterwards to ensure that there was a sound evidential basis to support the notices in any subsequent litigation. Without such an investigation the service of the notices would be no more than sabre-rattling and risked undermining **tie**'s negotiating position if it transpired that they had been served without a proper evidential basis.

17.100 Shortly after the meeting with Mr Keen on 4 November, CEC decided that it wished to obtain its own advice in relation to the RTNs and the proposal to rely on them to terminate the contract. Mr Maclean sought advice from Mr Dennys QC, who specialised in the area of construction disputes in England, and then emailed Mr Jeffrey on 26 November with a summary of the advice that he had been given [CEC00013537]. This was recorded as being:

"To put this more clearly, termination on the basis of the present RTNs would not be advisable. However on any view, given progress to date by the consortium on the delivery of the works, it would appear probable that if properly investigated and formulated, valid grounds of breach could be articulated effectively in due course." *ibid*, page 0002.]

17.101 He also advised that the RTNs should not be tested through the contract DRP.

17.102 Further advice was provided to **tie** by Mr Keen and McGrigors [TIE00080959, Parts 1–2]. Mr Keen provided Opinions on 22 November 2010 and 1 December. In his advice of 22 November, he noted that the operation of the contract was such that

"unless **tie** is absolutely certain of being able to serve a valid termination notice such a course of action would carry considerable risk" *ibid*, Part 2, page 0037].

17.103 In his advice dated 1 December, Mr Keen considered that the terms of the notices that had been served were such that if reliance were placed on them to terminate the contract, there was a material risk that **tie** would be found to have acted wrongfully (*ibid*, Part 2, page 0045). On 14 December, McGrigors then provided further written advice to **tie**, in which it agreed that it would be unsafe to rely on the existing notices in the absence of a detailed analysis of all available material to enable a view to be taken on whether an Infraco default could be established

[\[ibid, Part 1\]](#). Again, as a reaction to this, Mr Jeffrey expressed frustration that, having gone down this route, **tie** was being told that it lacked the factual material justifying the notices [\[PHT00000033, page 57\]](#). Mr Rush, on the other hand, claimed that by this time it was embarking on the mediation process and he may even have been relieved by the advice in that it underscored that termination was not the best option [\[ibid, page 172\]](#).

- 17.104** The possibility of termination had been pursued in one form or another for much of 2010. It is clear that it had taken up a lot of time and effort. Legal advice had been obtained on a number of occasions. Despite that, just as **tie** approached the stage at which it might have had to decide whether to take the final step to terminate the contract, it was advised that the work that had been carried out was not sufficient for it to be able to do so with any confidence. This arose from a failure to act in accordance with the advice that it had consistently been given. I very much doubt that relief was its reaction. I do not doubt that the advice that it was not prudent to proceed was correct but, in effect, it closed off the last possibility for **tie** to manage the situation that had developed under the contract. Using the contract dispute resolution machinery, seeking an agreement and attempting to terminate the contract had all run into the sand.
- 17.105** As the relationship between **tie** and BSC deteriorated, in September 2010 BSC indicated that it would stop works at a number of locations where it considered that it was working in the absence of an obligation to do so under the contract. From the start of November, it started to demobilise its site resources and those of its sub-contractors [\[CEC02084200, page 0016\]](#). The Project Director's report to the TPB for the meeting at the end of October noted that BSC had intimated that it would ramp down construction works at various locations and that there had been media reports that staff and sub-contractors were being laid off [\[CEC00014055, page 0017; Mr Bell \[TRl00000109_C\]\(#\), page 0158, paragraph 133\]](#). Although **tie** disputed BSC's entitlement to take such action, it was clear not only that the various strategies had failed to provide the desired breakthrough, but that, two and a half years after the contract was signed and while substantially behind programme, the works were grinding to a standstill. This was the context in which the mediation proposal took shape.

Chapter 18

CEC: May 2008–2010

Introduction

18.1 Following the award of the infrastructure contract ("Infraco contract") and the tram vehicle supply and maintenance contract ("Tramco contract") in May 2008, various issues arose that confirmed the earlier concerns of the "B team" about the accuracy of the information provided to the City of Edinburgh Council ("CEC") by **tie** Limited ("**tie**") and **tie**'s apparent resentment of the "B team" seeking clarification of information provided to CEC. These concerns were discussed in Chapter 13 (CEC: Events during 2006 and 2007) and Chapter 14 (CEC: January–May 2008). These and other issues relating to the role and conduct of CEC officials between May 2008 and the end of 2010 are considered in this chapter.

Relationship between **tie** and CEC

18.2 In Chapter 14 (CEC: January–May 2008), I have commented upon **tie**'s apparent lack of transparency with CEC officials throughout the Edinburgh Tram project (the "project"), as disclosed in the evidence of Ms Andrew. It appeared to me that the Director of Finance and the successive Directors of City Development, being the directors responsible for the project, placed undue reliance upon **tie**. In particular, they sent **tie** draft reports prepared by them for submission to councillors, to enable **tie** to comment upon them and to suggest amendments that they invariably accepted. Moreover, difficult or awkward questions from a member of the "B team" could result in a complaint to CEC senior management, who responded by supporting the complaint. As was explained more fully in paragraph 14.7 of that chapter, Ms Andrew had personal experience of such a complaint. It appeared to her that **tie** did not understand that CEC's officials had a duty to question them to ensure that CEC's interests were being protected. The incident involving Mr Hamill's manual adjustment of the quantitative risk analysis ("QRA") referred to in that chapter and discussed more fully in paragraphs 18.3–18.7 below occurred during the period covered by this chapter. It was also further evidence of **tie**'s apparent resentment at CEC's scrutiny of the project, as was Mr Jeffrey's reaction to Mr N Smith's email to him requesting information from **tie**, which will be discussed in paragraphs 18.9–18.12 below.

18.3 On 11 June 2008 Mr Hamill, **tie**'s Risk Manager, provided Mr Coyle with an updated QRA, to reflect the changes made to the risk allowance at financial close [[TIE00352465](#); [TIE00352466](#)]. Requests for an updated QRA had been made by CEC on 12 and 20 May [[CEC01222120](#); [CEC01246325](#)]. What Mr Hamill failed to disclose to Mr Coyle, however, was that the QRA spreadsheet, unlike previous versions provided to CEC, was not simply a product of the QRA computer software but contained a figure that had been "hard-entered" by Mr Hamill. Although I will deal with this incident in the context of **tie**'s assessment and reporting of risk (see Chapter 21), it is also relevant in the context of the relationship between **tie** and CEC.

18.4 By way of background, Mr Hamill gave evidence that as the commercial negotiations between **tie** and Bilfinger Berger Siemens ("BBS") progressed in the first half of 2008 he was instructed by senior individuals at **tie** (Mr McGarrity and Mr Gilbert) to make changes to the risk allowance, without having received an explanation as to why these changes were being made. When he tried to query that, he was told, in colloquial terms, to "get back in your box" [[PHT00000023](#), page 43] and to follow the instructions that he was given. He was concerned that he was in danger of losing his

job if he kept challenging the making of changes to the risk allowance. In relation to the adjustment to the risk allowance that took place after financial close, he was instructed to adjust the QRA to reduce the allowance for general programme delay by £1.3 million, for reasons that were not explained to him. He told his superiors that changing one figure in the QRA would (marginally) change all the other figures, as the computer software would undertake fresh calculations for all the items in the QRA. He stated that he sent the email noted in paragraph 18.5 below so that his colleagues at **tie** were aware that in order to make the instructed reduction of £1.3 million in the QRA without all the other figures changing he would have to "hard enter" the reduced allowance for general programme delay in the QRA spreadsheet [[ibid](#), pages 39–64].

18.5 In an internal **tie** email sent on 27 May 2008 to Mr Bell, Mr McGarrity, Ms Clark and Mr Murray, Mr Hamill explained that it was not possible to reduce the value of one risk in the QRA without affecting all the others [[CEC01288043](#)]. The email stated:

"Therefore, in order to get round this problem, I have basically 'pockled' the spreadsheet and hard-entered some values. This solves the problem and helps us get the final result past CEC as I doubt they will notice what I have done.

"I will revert to normal practise [sic] for future QRAs however in this instance I think this is the best way to do it in order to avoid unnecessary scrutiny from our 'colleagues' at CEC."

18.6 Mr Hamill asked the recipients of his email to confirm, by 30 May, that they were content with his proposed approach and that he would take no response as being acceptance. None of the recipients of the email appears to have responded to Mr Hamill to advise that they disagreed with his proposed approach.

18.7 Although the effect of the change may not have been material in the context of the project as a whole, what is of concern is that **tie** presented a spreadsheet of the QRA to CEC under the pretence that all the figures in it had been produced by the QRA computer software (and, therefore, had a statistical validity) whereas, in fact, the figure for the risk of general programme delay had been entered manually by **tie**. What is also concerning is the fact that Mr Hamill had taken steps to manipulate the risk allowance figure for general programme delay in order to achieve the desired final result without having received any satisfactory explanation for that course of action. Although he did so on the apparent instructions of Mr McGarrity and Mr Gilbert, and with the knowledge of Mr Bell, Ms Clark and Mr Murray, who acquiesced in his actions by their failure to object to the procedure that had been adopted by him, it is clear that Mr Hamill thought that what he had been instructed to do was irregular and designed to mislead CEC officials. I have reached that conclusion based upon his evidence that he was unhappy with presenting a QRA containing a figure that was unjustified and that he sought clarification from Mr McGarrity and other members of the management team, including Mr Gilbert, but did not receive a satisfactory explanation. Despite that, he made the manual change. In the email mentioned in paragraph 18.5 above, his reference to having "pockled" the figures and his expressed view that he did not think CEC officials would notice what he had done as well as his statement that he had changed the figure manually on this occasion "in order to avoid unnecessary scrutiny" by CEC officials clearly illustrate his knowledge of the irregularity and the unlikelihood of its being detected. His explanation that his actions were based upon a fear of dismissal if he did not comply with the instruction from senior management does not justify the action that he took; rather, it reinforces my view that he was aware that he was participating in a scheme to avoid legitimate scrutiny by CEC officials. His explanation provides an insight into the management culture within **tie** at that time as well as the relationship between **tie** and CEC.

- 18.8** In Chapter 14 (CEC: January–May 2008), I have referred to Mr Hamill's evidence that the relationship between some of the **tie** employees and some of the CEC officials was not harmonious. I concluded that it was indicative of a culture within **tie** of failing to co-operate fully with CEC. In particular, I considered that it was suggestive of **tie**'s unwillingness to share information that might have a negative effect on the project or that would cause CEC to undertake independent investigations of the contract suite and the allowance for risk. It seems to me that the manual reduction of a figure by £1.3 million, without telling CEC what had occurred, and the absence of any justification for the reduction, is an example of what members of the "B team" referred to as **tie**'s lack of transparency with CEC.
- 18.9** Another indication of **tie**'s lack of co-operation with CEC officials was its practice of complaining about the scrutiny of the project undertaken by members of the "B team". As was mentioned in paragraph 18.2 above, this had occurred earlier with Ms Andrew. A further example occurred with Mr N Smith in August 2010. Following a meeting between **tie** and CEC to discuss the option of terminating the Infracore contract, Mr N Smith emailed Mr Jeffrey on 27 August 2010, setting out his views on what CEC required to inform its decision-making process. Mr Jeffrey forwarded Mr Smith's email to Mr Fitchie and others at **tie** on 30 August 2010, noting:
- "I have explained to Dave Anderson that I consider this e-mail unhelpful and symptomatic of the CEC input lacking focus. I am seeing Dave to discuss this on Wednesday." [CEC00098050, page 0001.]
- 18.10** Mr N Smith gave evidence that, around this time, he was taken aside by Mr Maclean, Head of Legal and Administrative Services at CEC, and was told that a complaint had been made by senior **tie** management that Mr Smith was asking some difficult questions and that someone should have a word with him. Mr Maclean explained to Mr Smith that although he was required to have a word with him, he wanted Mr Smith to continue to ask such questions [PHT00000006, pages 75–76]. Mr Smith gave evidence that he was not surprised that **tie** had complained about his asking difficult questions. He stated that any time a member of the "B team" asked difficult or searching questions of **tie**, his perception was that a phone call would be made to someone more senior in CEC and either the issue would disappear or pressure would be brought to bear upon the member of the "B team", or a position would be taken with which members of the "B team" did not agree [ibid, page 76]. In his evidence Mr Maclean explained that the Chief Executive, the Director of Finance or the Director of City Development had asked him to speak to Mr Smith about this matter, but he could not recall which senior official it was [PHT00000008, pages 45–46].
- 18.11** In his evidence Mr Maclean also explained that Mr Smith's email to Mr Jeffrey had been sent with his approval, if not at his request. The questions in Mr Smith's email were perfectly sensible ones to be asking. He considered, however, that Mr Smith's email had signalled a change of approach to which **tie** had not previously been accustomed and that Mr Jeffrey's response was a sign of resentment by **tie** of any interference or scrutiny by CEC. Mr Maclean considered that the approach of CEC's officials prior to that time had not questioned or scrutinised **tie** adequately to protect CEC's interests, and that that approach needed to be changed. He was of the opinion that Mr Jeffrey's comment in his email to Mr Fitchie and others [CEC00098050] was indicative of a wider problem in the relationship between CEC and **tie** whereby it was assumed that there was no difference in position or interests between CEC and **tie** and that there should be the appearance of little or no challenge by CEC. This resulted from the "one family" approach advocated by Mr Aitchison, which wrongly assumed that the interests of **tie** and CEC were aligned but which was not adopted

by **tie**. Between September and December 2010, it became increasingly clear to Mr Maclean that **tie** was failing and was resenting and resisting CEC's involvement. It also became increasingly clear that CEC's supervision was not adequate and that legitimate concerns were being, and had been, ignored. The more interest that Mr Maclean or others began to show, the greater the irritation and push-back from **tie** [PHT0000008, pages 44–48; TR100000055_C, pages 0016–0017, paragraph 51].

- 18.12** Mr Maclean was a solicitor from private practice with experience of commercial contracts, who had only recently become involved in the Tram project following the retirement of Ms Lindsay as Council Solicitor. I found his assessment of the weaknesses in the relationship between **tie** and CEC to be highly persuasive. It explained the resistance of **tie** to independent scrutiny before the approval of the Final Business Case ("FBC") as well as the later inaccurate reports to CEC about the nature of the contract and its progress, which are mentioned in other chapters (see Chapters 8, 10, 12–14 and 17). The "one family" approach advocated by the Chief Executive (Mr Aitchison) explained the past failures of CEC's senior management to protect CEC's interests as **tie**'s guarantor. In particular, it had failed to subject the project to careful independent scrutiny.
- 18.13** A further indication of the nature of the relationship between **tie** and CEC is reflected in the fact that, by mid-2009 at the latest, senior CEC officials began to share the expressed concerns of the "B team" about the reliability of **tie**'s reporting to them. This will be discussed in paragraphs 18.20–18.24 below.

CEC's concerns over **tie**'s reporting

- 18.14** A report to the Internal Planning Group ("IPG") on 25 March 2009 noted:
- "It is recommended that independent expert dispute and project management advice is sought to ensure that the Councils [sic] best interest [sic] are being met and that a full understanding of the Council's liabilities are identified."
[CEC00892626, page 0003.]
- 18.15** That was against the background that **tie** had acknowledged: "that the very future of the project might rest on the ability of **tie** to be successful on all major points of contractual principle in dispute" [libid, page 0006]. The report recognised the need for **tie**'s chairman to provide CEC's Chief Executive with a report on the issues that were subject to the dispute resolution procedure ("DRP") and for the provision of daily updates together with weekly written reports [libid, page 0011]. In that context there were meetings between representatives of **tie** and CEC officials at various levels. Some of these meetings included members of the "B team" who were also the recipients of information from **tie**. Their involvement in these meetings did not allay the concerns about the relationship between **tie** and CEC that they had expressed at various stages including prior to the approval of the FBC and Financial Close.
- 18.16** By email dated 7 April 2009, Mr C MacKenzie provided an update of a meeting that he and Mr N Smith had had with Mr Fitchie and Mr McGarrity in relation to the DRP [CEC00900404]. In his email Mr C MacKenzie noted **tie**'s broad categories of disagreement with Bilfinger Berger, Siemens and Construcciones y Auxiliar de Ferrocarriles SA ("BSC"). The areas of dispute included the issue concerning which party had assumed the risks of "normal design development". Moreover, BSC's position was that until it was given unfettered access to work sites it would not lift a spade. Mr C MacKenzie noted that trust required to be built, both between CEC and **tie** and between **tie** and BSC. He noted that it was very clear that CEC was not in receipt of full disclosure from **tie** in the latter half of 2008 and in early 2009 and

that there was a need for **tie** to be more transparent with the Tram Monitoring Officer ("TMO"). Mr C MacKenzie noted that the Infraco contract terms were developed and concluded effectively without reference to CEC. In an email dated 11 March 2009 to the Chief Executive of CEC, which will be discussed in paragraph 18.36 below, he had stated that Council officials did not know whether the contract was sound and in all respects in the Council's best interests as client and funder. In his email dated 7 April 2009, Mr C MacKenzie also observed:

"The subject matter of the contentious points comes as no surprise. The B Team clearly stated what it believed to be risky areas for the project before a premature Financial Close; some of these matters are now heading towards DRP." [\[ibid, page 0004.\]](#)

- 18.17** By email dated 9 April 2009, Mr C MacKenzie circulated a note of his meeting with Mr Fitchie and Mr McGarrity [\[ibid; CEC00900405\]](#). It recorded that 350 Notified Departures were then in process. In respect of which party had responsibility for design management and evolution, the report noted:

"The main problem here stems from the fact that design was not complete at Financial Close. We understand from tie that the design part of the contract therefore had to be based on a number of agreed assumptions ... The reality appears to be that such assumptions were based on the hope that the parties would agree matters commercially. However, it further appears if BSC seeks to stick to the contract terms absolutely, this will likely not favour tie. In short, we understand that the contract does not define 'normal design development' (which tie advise BBS are responsible for) on the basis that it is a term understood in the market. It now appears that it is more a 'term of art' capable of different interpretations." [\[ibid, pages 0001–0002.\]](#)

- 18.18** Mr N Smith agreed with Mr C MacKenzie that there was a lack of trust between **tie** and some officials at CEC, particularly those officials in the "B team". He stated that, throughout his involvement in the project between 2007 and 2008, his feeling was that **tie** did not often share full information with CEC. CEC officials would ask difficult questions and it would often take some time to get the information out of **tie**. He said that he was left with a feeling that he did not know whether he had the full picture [\[PHT00000006, pages 38–40\]](#).

- 18.19** Mr Coyle gave evidence that the quality of reporting from **tie** was poor, in that it was inconsistent and patchy and explanations regularly appeared to change [\[TR100000144_C, page 0056\]](#); see also Mr Coyle's email dated 23 July 2009, which noted that information on the Multi-Utilities Diversion Framework Agreement ("MUDFA") seemed to change continually – [CEC00666481](#).

- 18.20** The difference between the concerns of the "B team" at this stage and their earlier expressed concerns was that by mid-2009 they were shared by senior CEC officials. Mr Aitchison gave evidence that, in early 2009, his understanding of the extent to which the Infraco contract was for a fixed price had not substantially changed from his understanding when the Infraco contract was awarded in May 2008. I accepted his evidence on this matter because it reflected his reports to the Policy and Strategy Committee of CEC on 24 February 2009 and to the full Council on 12 March 2009, which will be mentioned in paragraph 18.35 below in the context of the Princes Street dispute. In both of these reports he referred to the Infraco contract as being a "fixed price" contract. From the impression that I formed of Mr Aitchison when giving his oral evidence to the Inquiry I am certain that he would not have repeated that description of the contract that had appeared in earlier reports prior to Financial Close if he

had become aware that it was inaccurate. Increasingly, however, from around the summer or autumn of 2009, he considered that things were becoming less clear [PHT00000041, pages 157–158]. He shared Mr David Anderson's concerns, expressed in an email dated 23 July 2009 (noted in paragraph 18.23 below) about the reliability of the information being provided by **tie**. In addition, there were issues about what was commercially sensitive and could be reported publicly. **tie** and CEC could not reveal figures that could have potentially damaged **tie**'s negotiating position with BSC. That also impacted adversely on the extent to which Council officials were able to provide the Council with realistic options. Mr Aitchison stated that, unfortunately, in the summer and autumn of 2009, there were too many variables and uncertainties to allow accurate reporting of strategic options. That, in fact, became a problem throughout the next 12–18 months [TR100000022_C, pages 0063–0064, paragraphs 186–187].

- 18.21** Mr McGougan gave evidence that he also began to have concerns about the information coming from **tie**. These concerns had grown over time and started after the beginning of problems in respect of **tie**'s supervision of the MUDFA works and its supervision of the works on Princes Street. By the summer of 2009 there was concern, across the Council, about some of the information coming from **tie**. Mr McGougan emphasised, however, that it was very difficult for **tie** to provide definitive information, because so many of the key issues were subject to legal dispute [TR100000060_C, page 0074, paragraph 194]. Although it may well have been difficult to put into the public domain sensitive information that might have affected **tie**'s negotiating position with BSC it is also important to recognise that the difficulties concerning the information provided by **tie** to CEC predated the approval of the FBC and the signature of the Infraco contract. Unlike Mr Aitchison, Mr McGougan as Director of Finance was one of the two directors responsible for the project. As was discussed in Chapter 13 (CEC: Events during 2006 and 2007), he and Mr Holmes had agreed to commission independent experts to review and quantify the risks to CEC associated with the Infraco contract and the Tramco contract but acceded to **tie**'s suggestion to replace that with an Office of Government Commerce ("OGC") review. It seems to me that each of them must bear some responsibility for failing to protect CEC's interests as guarantor of **tie**'s obligations to BSC.
- 18.22** Mr David Anderson recalled some reporting to the Tram Project Board ("TPB"), from around late autumn 2008, that there were some issues in relation to the interpretation of the contract. However, the first that he really became aware of the extent of the dispute between **tie** and BSC was as the Princes Street "stand-off" emerged in early 2009 [TR100000108_C, page 0037]. The main thrust of **tie**'s reporting to the TPB was that the vast majority of Infraco Notices of **tie** Change ("INTCs") were invalid and would be challenged [*ibid*]. He described a "dawning realisation" on his part that the cost of changes, differences in interpretation of the contract as to which party bore responsibility for the changes, delays in design completion, slow mobilisation of BSC and unsatisfactory progress of the MUDFA works were cumulatively putting pressure on the programme budget. When the Princes Street dispute arose, however, it became very clear that the programme budget was at risk [*ibid*, pages 0050–0051].
- 18.23** Mr David Anderson considered that **tie** was not as open and transparent as it should have been when reporting to CEC on the Princes Street dispute and, more generally, in relation to the disputes with BSC mentioned below and in Chapter 17 (Adjudications and Beyond). He felt that **tie** portrayed the situation as being due solely to an exceptionally aggressive commercial stance being adopted by the consortium (in particular, Bilfinger Berger ("BB")). Although Mr Anderson considered

that BB was taking an aggressive commercial stance, he did not believe that CEC was getting the full information that it needed at that stage, particularly about weaknesses in the contractual position and delays in design that were attributable to **tie**. In an email dated 23 July 2009, he had noted that he was “very anxious” about the reliability of the information being provided by **tie** (these comments being made in the context of **tie**'s best-case estimate for the cost of the project having moved from £534 million to £560 million without adequate explanation) [CEC00666481]. After Mr Jeffrey became Chief Executive of **tie**, and got up to speed with the details of the project and the weaknesses in the contract, Mr Anderson considered that a much more forthright and realistic view of the status of the project was provided [TR100000108_C, pages 0055–0056 and 0059]. Mr Anderson felt as though he was “between a rock and a hard place” when reporting to councillors. Although there was a need to give councillors the fullest possible picture of the problems, and revised cost estimates, there was pressure from **tie** not to report information or figures that might find their way into the public domain, thereby undermining **tie** in its negotiations with BSC. Although the range of revised cost estimates was shared with senior councillors, he felt uncomfortable that these matters were not shared formally with other councillors, and he was not sure that the correct balance had been struck [ibid, pages 0064 and 0066].

- 18.24** Mr Inch gave evidence that there was an emerging concern in relation to **tie**'s relationship with BBS, which appeared to be becoming more confrontational. He began to doubt **tie**'s abilities in some respects, and its lack of sharing and transparency was worrying him. In that regard he detected almost an arrogance on the part of **tie**, which was irritating and was not well received by Council staff, who felt that they were being regarded as nuisances as opposed to people with whom to work to achieve a common goal. Mr Aitchison had raised with **tie** the fact that there required to be a more open and transparent relationship between **tie** and CEC. The Council was in a difficult situation in that it was being given reassurance by specialists at **tie** that everything was all right, whereas junior Council officials were saying the opposite [TR100000049_C, pages 0048–0050, paragraphs 123, 127 and 128].

Disputes

- 18.25** Early notice of the dispute that would arise between **tie** and the consortium in relation to which party bore the risks arising from incomplete design and design development was provided in July 2008 by an external peer review of the project, instructed by **tie**, which noted that:

“It is unclear to the review team where risk lies for design development. BBS and tie in interview considered risk lay with the other party.” [CEC01327777, page 0006.]

- 18.26** Moreover, by email dated 28 August 2008, Mr Fraser noted that it could be anticipated that **tie** would have to engage on extensive compensation events with its contractors and that he had been led to believe that BSC was preparing a multi-million-pound claim against **tie**. In a reply dated 29 August 2008, Mr C MacKenzie observed:

“This sounds rather ominous, but not altogether surprising. I cannot recall the number of warnings given by the “B Team” about the risk of claims materialising in this project.” [CEC01057495]

- 18.27** Mr C MacKenzie gave evidence that disputes were expected, given his knowledge at the time when the parties entered into the Infraco contract, and that it was no

surprise when they did emerge. His expectation of disputes was derived, in part, from a general overview of the contract, as opposed to any detailed consideration of it. It was also derived from a sense that **tie** and BSC did not seem to have a satisfactory contractual relationship [[TR10000054_C](#), page 0104, paragraph 210].

- 18.28** At a meeting of the **tie**/CEC legal affairs group on 27 October 2008, Mr Bell reported that there were no formal disputes with any of the contracts but as contract management and implementation progressed there was the potential for a dispute to arise. Issues then under discussion between **tie** and BSC included a "point of principle" relating to the Base Date Design Information ("BDDI"). Other issues related to the delayed provision of Issued for Construction ("IFC") drawings as well as what constituted "normal design development" and whether work at the Hilton Hotel car park was included in the Infraco works. Although Mr Bell considered that BSC might have a valid point in some of these issues, they would be dealt with on a case-by-case basis. He appeared reasonably optimistic about **tie**'s prospects of a successful outcome, based upon its analysis, which was supported by DLA Piper Scotland LLP ("DLA") and independent contract consultants [[CEC01166757](#)].

Princes Street dispute

- 18.29** In early 2009, a dispute arose between **tie** and BSC in relation to the planned commencement of works in Princes Street. The circumstances of the dispute and its resolution on 20 March 2009, resulting in the Princes Street Supplemental Agreement ("PSSA") and the completion of the work in Princes Street on a demonstrable cost basis, were more fully discussed in Chapter 16 (The Princes Street Dispute). That chapter principally considers the dispute from the perspective of **tie** and BSC. However, in paragraph 16.24 of that chapter I have also noted that after work commenced in Princes Street there was a change in the construction programme at the insistence of **tie** and its stakeholders, notably CEC. That change was made to ensure that Princes Street would re-open to traffic on 29 November 2009 for the Christmas season. Prior to the Tram project it was customary to have an embargo on utilities works and resulting roadworks during the Christmas and New Year period and during the Festival period. Although it would be possible to undertake roadworks during these periods as an exception to the embargo, that would require special circumstances and the agreement of the relevant convenor and the local councillors whose wards would be affected [[TR10000099_C](#), pages 0072–0073, paragraphs 303–306]. Senior officials in CEC ought to have been aware of that political approach to work embargos during these periods and should have taken steps to ensure that **tie** was aware that work in Princes Street should not be undertaken then or to obtain the approval of councillors to an exception permitting such work during those periods. The Inquiry has seen no evidence of CEC officials notifying **tie** of the likelihood of such an embargo or of seeking authority for **tie** to undertake work contrary to it. The failure to address the question of re-opening Princes Street for the festive season before the construction programme was agreed resulted in increased costs and reflected adversely upon the management of the project by both **tie** and CEC. In the case of the latter, councillors and officials were aware, in October 2008, of the disruption caused by the temporary traffic management plans at the foot of the Mound as part of the preparation for the works on Princes Street. They ought to have anticipated disruption throughout the period of work in Princes Street, including during the festive season in 2009. In these circumstances, in advance of any agreement about the construction programme for Princes Street, CEC ought to have advised **tie** to ensure that the programme

complied with its desire to re-open Princes Street for the festive season. As was noted in Chapter 16 (The Princes Street Dispute), CEC's failure in that regard necessarily resulted in increased costs associated with the change in the programme of work requiring Infraco to work 24 hours per day and 7 days per week.

- 18.30** On 24 February 2009, Mr Aitchison provided members of the Policy and Strategy Committee of CEC with a report informing them of the current position of the project, which stated that an additional sum agreed with the consortium shortly before contract close in May 2008 for completion of the project had
- "cemented the risk allocation position agreed by the client and consortium, whose three members are jointly and severally liable for its successful completion within the terms of the fixed price contract" [[CEC00682449](#), page 0001, paragraph 2.2].
- 18.31** The utility diversion works were stated to be "well underway [sic] and on target to be substantially completed by July 2009" [*ibid.*, page 0001, paragraph 2.3]. It is notable that the report made reference to the fixed-price contract, confirming that as at that date Mr Aitchison was still under the impression that the contract was a fixed-price one.
- 18.32** The report advised members of the committee that, over the previous two weeks, significant issues had arisen in respect of contractual matters, financial consequences and the commencement of work that had been scheduled to start on Princes Street on 21 February 2009. Discussions between **tie** and BSC had continued over the previous few days, but BSC had failed to give a commitment to commence work on Princes Street in accordance with the contract. Accordingly, on 20 February, **tie**, with the support of CEC and the awareness of Transport Scotland, had issued a statement advising the public that work on Princes Street would not commence on 21 February as planned. Moreover, **tie** had formally activated the DRP in the contract. For legal reasons, it was not appropriate for the Chief Executive to say anything further at that point in time [*ibid.*]. The Policy and Strategy Committee agreed with the recommendation strongly to support the position taken by the **tie** Board, and it noted that the Chief Executive would keep the Council "fully informed on the contractual issues referred to in his report" [[CEC02083836](#), page 0001].
- 18.33** In view of the Chief Executive's obligation, mentioned in paragraph 18.32 above, to keep the Council fully informed on the contractual issues and as part of CEC's due diligence relating to the contractual dispute, CEC officials recognised that they required to obtain information from **tie**. The nature of the information to be provided by **tie** and its frequency were the subject of discussion within CEC on 26 February. Prior to that meeting, by email dated 26 February 2009, Mr Coyle circulated a note of matters that CEC required **tie** to clarify in relation to the contractual dispute [[CEC00858138](#); [CEC00858139](#)]). The note recognised the need for CEC, as guarantor of **tie**'s financial obligations in respect of the Tram project, to be "in touch with the full facts of the dispute", which only **tie** could provide. It stated:
- "The Council should seek a report from tie explaining the actual root of the contractual dispute ... tie need to update the Council on a daily basis on matters relating to the dispute. Currently there is a vacuum of knowledge from the Councils perspective." [*ibid.*]
- 18.34** By letter dated 5 March 2009, Mr Aitchison wrote to Mr Mackay, interim Chairman of **tie**, setting out a number of matters in respect of which **tie** was required to provide regular reports to CEC in relation to the contractual dispute [[CEC00870592](#)]. He confirmed that Mr Mackay was in regular contact with him around this time, in order to keep him informed about what was happening [[TR10000022_C](#), page 0061, paragraph 181].

- 18.35** On 12 March 2009, Mr Aitchison reported to the full Council in similar terms to the report provided to the meeting of the Policy and Strategy Committee on 24 February 2009 noted in paragraph 18.30 above. The report to members again referred to the Infraco contract as being a “fixed price” contract [CEC01891494, page 0001]. Members agreed to continue strongly to support the **tie** Board in its efforts to reach a satisfactory outcome to the dispute with the consortium [CEC00485227].
- 18.36** In paragraph 18.16 above, reference was made to Mr C MacKenzie's email dated 11 March to Mr Aitchison about his report to the Council (mentioned in paragraph 18.35). On 11 March 2009, Mr C MacKenzie received a copy of an email from the Committee Clerk concerning the contents of Mr Aitchison's report to the Council for its meeting the following day. In his response to Mr Aitchison, which was copied to Mr Inch and Ms Lindsay, Mr C MacKenzie did not address the point raised by the Committee Clerk but advised Mr Aitchison that it had been necessary for him to read Mr Aitchison's report. He added:
- “If I may be so bold as to venture a comment, might I say that what the Council officers do not know is whether the Infraco contract is sound and in all respects in the Council's best interests as client and funder. It is just possible that the contract is not robust enough and as a result affordability for the Council becomes an issue. I appreciate we must be seen to be supporting the **tie** board in its contractual dispute, but I feel officers are lacking the requisite information, certainty and confidence at the present time.” [CEC00869667, page 0001.]
- 18.37** As was mentioned in Chapter 14 (CEC: January–May 2008), Mr C MacKenzie received a draft of Schedule Part 4 (“SP4”) of the Infraco contract in April 2008, and he read it. He stated that it was evident to him that clauses 2 and 3 of SP4 excluded a fair amount from the certainty of the lump sum, fixed and firm price of the construction works price. Despite that, it does not appear that he took any steps to alert the Council Solicitor or anyone else to his concerns in that regard. His email to Mr Aitchison might be seen as an oblique reference to his view that the contract was not a fixed-price contract. If that is correct, he ought to have advised Mr Aitchison directly of his view about the effect of SP4 on the issue of price certainty, to avoid perpetuating the misunderstanding of the Chief Executive and councillors.
- 18.38** As I discussed in Chapter 16 (The Princes Street Dispute), in 2008 a dispute arose between **tie** and BSC in relation to works on Princes Street, which was settled by the signing of a further agreement (the “PSSA”) [CEC00302099]. The PSSA amended the Infraco contract by providing that BSC would be paid on a demonstrable cost basis for the Princes Street works. CEC officials as well as **tie** appreciated that, even in the context of a fixed price for sections of the route, such as Princes Street, **tie** would incur the additional cost of Infraco having to deal with unforeseen ground conditions or to remove utilities that remained in the path of the construction works as well as additional costs arising from Notified Departures from the Infraco contract.
- 18.39** At the Council meeting on 30 April 2009, Mr David Anderson and Mr McGougan provided councillors with an update report [CEC02083772]. It stated that, following the commercial difficulties experienced between **tie** and BSC in respect of the works at Princes Street:
- “a supplementary agreement has been entered into ... to allow progression of Princes Street infrastructure works on demonstrable cost. This allows the contractor to be paid on this basis, for Princes Street works only, should they discover unforeseen ground conditions. This represents no further transfer of risk to the public sector.” [ibid, page 0002, paragraph 3.3.]

18.40 Paragraph 3.11 of the report also advised councillors that **tie** had undertaken a recent review of the tram budget. Although additional costs had been incurred as detailed in that paragraph, and any further adjustments would depend on the outcome of commercial discussions and the DRP between **tie** and BSC, it concluded:

“At this stage the range of numbers indicates the base case scenario remains that the full scope of the project can be delivered within previously agreed funding levels.” [\[ibid, page 0003.\]](#)

18.41 The report omitted to advise members of the likely increase in the cost of works on Princes Street as a result of the change from a fixed price for those works to payment on a demonstrable-cost basis. Members reaffirmed the Council's commitment to delivering “tram line 1A” (also known as phase 1a) within the then current funding envelope, and noted the updated position in relation to progress, programme and cost of phase 1a [\[CEC01891440, Part 1, page 0008\]](#).

Other disputes

18.42 Apart from the Princes Street dispute there were numerous other disputes between **tie** and Infraco about the operation of the Infraco contract. By email dated 13 August 2009, Mr Jeffrey of **tie** notified Board members that BSC was refusing to start work on Shandwick Place, which was due to commence at the end of that month, unless the Infraco contract was amended to a cost-plus basis of payment for all remaining on-street works. **tie** had suggested that payment should be made in terms of the Infraco contract, failing which **tie** was prepared to enter into a revised PSSA, but BSC had rejected both of these options as unworkable, maintaining that the only workable option was a cost-plus basis [\[CEC00788086\]](#). Mr McGougan gave evidence that BSC was simply refusing to undertake works that were subject to dispute and that even when specific changes had been agreed BSC sometimes took between six and eight months to provide estimates for **tie**'s approval. The estimates were invariably inflated, in **tie**'s opinion, and could not be agreed, resulting in the matter being subjected to the DRP. He described the situation as a “war of attrition” between **tie** and BSC [\[TR100000060_C, pages 0075 and 0079, paragraphs 196 and 205\]](#).

18.43 On 20 August 2009, Mr David Anderson and Mr McGougan provided councillors with a further report updating them on the progress of the project [\[CEC00738172\]](#). In relation to disputes the report advised councillors that the first DRP had been held on 29 May 2009 and an acceptable solution had been reached for the disputed estimates. However, despite mediation, **tie** and BSC had been unable to agree a revised programme and commercial baseline. As a result, **tie** had sought, and received, the approval of the TPB to take a more formal contractual approach to resolving the outstanding issues. It was noted that **tie** had taken extensive legal and technical advice and was

“confident of its position on the key matters in dispute. However, given the nature of the process and the complexity of certain issues, it is unreasonable to expect that all adjudication outcomes will be awarded in favour of **tie**.” [\[ibid, page 0003, paragraph 3.11.\]](#)

18.44 It was noted that:

"Given the above issues, it is now considered that it will be very difficult to deliver the full scope of Phase 1a within the available project envelope of £545m. Until the key issues are resolved through the contractual and legal process, it will not be possible to forecast accurately a revised budget outturn." [libid](#), page 0003, paragraph 3.12.]

18.45 The Infraco contract prescribed a timetable for the resolution of contractual disputes, and it was expected that the budget and programme implications would become much clearer by January 2010.

18.46 As part of the formal contractual approach to disputes mentioned in paragraph 18.43 above various disputes were referred to adjudication, and these were discussed more fully in Chapter 17 (Adjudications and Beyond). As was discussed in that chapter, **tie** was successful in the dispute relating to the Hilton Hotel car park that was referred to adjudication, albeit on a different basis than that advanced by **tie**. Mr Howie QC issued his decision in that dispute on 13 October 2009 [[WED00000026](#)]. In other disputes, **tie** succeeded in securing a significant saving in the sums claimed by BSC in its estimates submitted as part of the change procedure. However, BSC was successful on the question of principle that the adjudicator had been asked to determine, namely whether the change in question was a Notified Departure. On 16 November 2009, adjudication decisions were issued in the disputes arising under the Infraco contract in relation to Gogarburn bridge and Carrick Knowe bridge [[CEC00479432](#); [CEC00479431](#)]. On 26 November 2009, Mr Fitchie emailed Ms Lindsay a copy of the adjudication decisions and an advice note by DLA [[CEC00479429](#)]. The advice note stated that BSC was likely to seek to rely on the adjudication decisions as they were favourable to BSC's position [[CEC00479430](#)]. DLA recommended that advice be sought from senior counsel on potential grounds for challenging the adjudication decisions.

Reports by CEC officials

18.47 As I have noted in other chapters, senior CEC officials did not subject the FBC to the level of independent scrutiny advocated by the "B team", and they provided councillors with reports that were inaccurate in material respects. These inaccuracies arose because of officials' reliance upon the Chief Executive's "one family" approach, mentioned in paragraph 18.11 above, and their uncritical acceptance of **tie**'s classification of the Infraco contract as being substantially a fixed-price one.

18.48 Bearing in mind the terms of previous reports to councillors before signature of the Infraco contract, and the later reports by Mr Aitchison mentioned in paragraphs 18.30 and 18.35 above, the impression conveyed by them to councillors was that the Infraco contract was one in which a substantial percentage (of the order of 90 per cent or 95 per cent) of the price was fixed, with the remainder being provisional sums [see, eg, [CEC00906940](#); [PHT00000001](#), pages 95–100; [TRl00000015](#), page 0008, paragraph 26; [PHT00000002](#), pages 154–156; [TRl00000016](#), pages 0007–0010, 12–13, paragraphs 20–29, 36 and 40; [PHT00000003](#), page 136; [TRl00000099_C](#), pages 0036–0037, 0050, 0055, 0058, 0065–0068, paragraphs 156, 160, 211, 228, 243, 272 and 280; [PHT00000002](#) pages 64, 68 and 91; [TRl00000086_C](#), pages 0028–0029, 0048–0049, 0056, paragraphs 66, 68, 121–123, 147; [TRl00000092_C](#), page 0025, paragraph 69; [TRl00000125](#), pages 0024–0025, 0032–0034, paragraphs 28 and 42]. That was a false impression.

- 18.49** The update report by Mr McGougan and Mr David Anderson mentioned in paragraph 18.39 above suggested that as a result of the PSSA the fixed price for the Infraco works in Princes Street would not apply and that payment for these works would be on a demonstrable cost. This change only applied to Princes Street works. Although the update report mentioned that the PSSA would not result in a further transfer of risk to the public sector, I consider that it omitted to mention the likelihood of a price increase attributable to the change from a fixed price to a price based upon re-measurement after work was completed. Mr McGougan accepted that the change to payment on the basis of demonstrable cost was likely to result in a price increase [PHT00000043, pages 69–71; TRl00000060_C, pages 0072–0073, paragraphs 190–192]. His explanation for omitting to advise councillors of that likelihood was that only an engineer could answer whether the work could have been undertaken for the allocated fixed price of £2 million. I did not find that explanation to be convincing, and neither was his explanation that it would have been irresponsible to include an assessment of the cost in the update report. It would have been possible to advise councillors that the PSSA was likely to result in an increased price for these works without quantifying that increase. In the result, the cost of the works increased from £2 million to £11 million. Mr McGougan attributed that increase to poor supervision of the works by **tie** and the quality of the contractor's work, resulting in the contractor redoing the work following the resumption of work after the signature of the settlement agreement (MoV5) on 15 September 2011 [CECo2085585].
- 18.50** It is axiomatic that councillors depend upon accurate reports from officials to enable them to take informed decisions. Misleading statements about the contract being a fixed-price contract or about the outcome of adjudications (discussed in Chapter 17, Adjudications and Beyond) rendered the reports inaccurate and tend to suggest a failure by senior CEC officials to protect CEC's interests by subjecting the FBC, the draft Infraco contract and generally the information provided to them by **tie** to independent scrutiny. On any view that was a serious omission. However, the evidence of Mr N Smith's briefing of Mr Maclean and his revision of draft reports to the Council in June and October 2010 caused me to consider whether it was truly an omission, the result of a deliberate policy of withholding information from councillors or simply reckless.
- 18.51** Shortly after Mr Maclean's appointment in December 2009 as Head of Legal and Administrative Services within CEC, Mr N Smith sent him a briefing note about the project by email dated 8 January 2010. In his email Mr Smith stated that the briefing note was highly confidential and that:
- "dissemination of the actual history here could cause serious problems and we definitely don't want to set hares running. Some of it is down to internal politics, but it gives you a flavour of where we are and why ... be very careful what info you impart to the politicians as the Directors and tie have kept them on a restricted info flow. Given current sensitivities it is critical that this remains in place."
[CECo0473789]
- 18.52** The briefing note attached to Mr Smith's email provided a "potted history" of the project, including the difficulties that had arisen, the reasons for these difficulties, potential final costs and possible strategic options. The briefing note ended by stating: "Please also note that Members only have a small knowledge of the above so the info should be treated with caution." [CECo0473790]

- 18.53** Mr N Smith gave evidence that he sent his email because Mr Maclean was going to meet a senior politician from the Scottish National Party ("SNP") and he wanted to make sure that Mr Maclean was fully briefed. Councillors were receiving information through group leader briefings, to ensure that everyone got the same information at the same time. Mr Smith wanted to ensure that Mr Maclean was fully informed but that he was also aware that sensitivities were involved in releasing information to councillors. Mr Maclean was new to the Council, and Mr Smith was concerned that, in trying to be open with councillors, Mr Maclean might say something in Mr Smith's briefing note that either was just Mr Smith's perception, and was wrong, or was something that councillors did not know and should receive via the proper routes for receiving such information. He did not consider that there was any orchestrated campaign to keep information away from members – or that, if there was, he was not aware of it. He also stated that matters relating to the project were finding their way into the press fairly regularly, which he considered was to the detriment of **tie** and CEC, and that the project had become a bit of a "political football". The reference to politicians having been kept on a "restricted info flow" was a reference to the route of the provision of information rather than to the qualitative or quantitative aspects of the information that had been provided. It was necessary to control the route by which information was provided to councillors in order to minimise leaks of information and protect **tie**'s commercial position during the dispute [[PHT00000006](#), pages 53–60; [TR100000071_C](#), pages 0084–0086].
- 18.54** Although Mr Smith stated that the reference in his email [[CEC00473789](#)] to members having been kept on a "restricted info flow" was simply a reference to the route by which they received information (ie through group leader briefings), I reject his evidence in that regard. I consider that Mr Smith's narrow reading of "restricted info flow" is contradicted by the reference in his email to dissemination of the "actual history" having the potential to cause serious problems. I further consider that Mr Smith's narrow reading is also contradicted by the following sentence at the end of the briefing note: "Members only have a small knowledge of the above so the info should be treated with caution." [[CEC00473790](#)] I consider that that sentence is a clear indication that, for whatever reason, members had not been provided with full information in relation to the project. My rejection of Mr Smith's evidence in this regard is also consistent with his subsequent actions in relation to the content of the reports to the Council on 24 June 2010 and 14 October 2010. Even if the contents of the briefing note were merely Mr Smith's perception that councillors were not advised of the "actual history" and were kept on a restricted flow of information, it seems to me that any official having such a perception ought to report his or her concerns in that regard to the monitoring officer because it could amount to maladministration if that perception reflected what was happening. There is no evidence before the Inquiry that Mr Smith reported such concerns to the monitoring officer.

Report to the Council on 24 June 2010

- 18.55** On 24 June 2010, Mr David Anderson and Mr McGougan, the responsible directors, provided councillors with an update on the project, including the then current contractual difficulties with the consortium. The report to the Council, again, referred to the Infraco contract as a "lump sum, fixed price" agreement [[CEC02083184](#), page 0004, paragraph 3.3]. It noted that the contractual programme remained well behind schedule and that there continued to be serious contractual difficulties with BSC. It was unlikely that the project could be delivered within budget, but the overall outcome could not be forecast as long as there remained uncertainty associated with the disputes between **tie** and BSC.

- 18.56** The report stated that the application of the DRP had achieved resolution of a number of issues subjected to the process and had reduced by almost 60 per cent the amounts initially claimed by BSC, saving about £11 million to date, albeit that the improvement sought in infrastructure installation productivity had not materialised [*ibid.*, page 0002, paragraph 2.4]. It also noted:
- “Although the formal adjudications under the DRP have produced mixed results, the advice received has reinforced **tie**'s interpretation of the contractual position on the key matters under dispute ... The outcome of the DRPs, in terms of legal principles, remains finely balanced and subject to debate between the parties.” [*ibid.*, pages 0002 and 0005, paragraphs 2.6 and 3.12.]
- 18.57** The outcome of the adjudications was discussed more fully in Chapter 17 (Adjudications and Beyond), from which it is clear that the statement in the report that the outcome was finely balanced in terms of legal principles was inaccurate. It is unnecessary to undertake a detailed analysis of the adjudication decisions prior to that date because, in his evidence to the Inquiry, Mr David Anderson accepted that, by the time of the meeting of the Council on 24 June 2010, he considered that what was said in the report in relation to the outcome of the adjudication decisions was inaccurate. **tie** was losing the battle, albeit that there was a view from its legal advisers that it might not have lost the battle entirely in relation to legal principles. In addition, **tie** had been successful in reducing the cost sought by BSC for the works that were the subject of dispute [PHT00000043, pages 172–176; TR100000108_C, pages 0087–0088]. Although **tie** had intended to enter into a lump-sum, fixed-price contract, the pricing assumptions in SP4 frustrated that aim. The practical effect of **tie**'s losing the adjudication decisions clearly invalidated its interpretation of the contract [*ibid.*, page 0087]. In his evidence Mr Anderson stated that he did not draft the section of the report about the outcome of the DRPs and was not clear where it came from but in that context referred to Mr N Smith in the legal department [PHT00000043, page 172; TR100000108_C, page 0088].
- 18.58** Mr McGougan, the co-author of the report along with Mr David Anderson, considered that in the early stages the result of the adjudications was mixed success, but later it became clear that for **tie** “things were not improving in relation to the results of the adjudication”. He assessed the date of that change as being “well into 2010” [PHT00000043, page 77]. In view of the passage of time between his involvement in the project and giving evidence it is understandable that Mr McGougan was unable to be more precise about the date of that change. That evidence does not contradict the evidence of Mr Anderson, who accepted that what was said about the outcome of the adjudications in this report was inaccurate [*ibid.*, pages 172–177]. Mr Anderson's evidence was also consistent with the evidence of Mr N Smith (mentioned in paragraph 18.59 below) that, with hindsight, he did not consider that the statement about the DRP decisions in the report was correct. Both Mr Anderson and Mr McGougan, as the authors of the report, accepted that they had responsibility for its accuracy even although they were relying upon colleagues within the legal department to provide the appropriate wording relating to the outcome of the DRPs in terms of legal principles.
- 18.59** Mr Smith gave evidence that, although a lot of legal dialogue was going on at the time, with hindsight, he did not consider that what was said in the report about the DRP decisions was correct. Although those decisions had resulted in savings from the amounts claimed, there was a knock-on impact of **tie**'s losing the underlying legal arguments. He associated the phrase “finely balanced” with Mr Jeffrey, but he

did not know whether it had come from him [PHT00000006 pages 85–87]. Following Mr Smith's evidence at the public hearing, and Mr David Anderson's query about the source of the relevant sentence, the Inquiry undertook further investigations into the various revisions to this report as well as to the report to the Council meeting on 14 October 2010. The outcome of those investigations was that Mr Smith had sent an email dated 11 June 2010 to Mr McGougan and Mr Anderson, stating that he had agreed "a few comments from Richard" [CEC00246713]. That tended to support his original impression that the phrase "finely balanced" emanated from Mr Jeffrey. He also stated in his email that (paragraphs) "3.13 and 3.5 are now correct" [ibid]. Paragraph 3.13 included the sentence about the outcome of the DRPs being finely balanced, and the tracked changes disclosed that Mr Smith had added that sentence [CEC00246714, page 0005]. In a supplementary statement to the Inquiry, he accepted that he had inserted the relevant sentence into the report although when he originally gave evidence he could not recall doing so [TR100000280_C, page 0001].

- 18.60** It appeared from his evidence overall that Mr Smith sought to justify on two counts his inserting into the draft report the inaccurate sentence about the outcome of the adjudications. The first was that it might have emanated from Mr Jeffrey [PHT00000006, page 86]. Even if that were the case, it did not justify his inserting an inaccurate statement into a report that he knew was intended for councillors who were entitled to rely upon the accuracy of information provided to them by officials. The second was that there was no discussion or challenge of the sentence despite the fact that the draft report was subject to review by a number of individuals from CEC, **tie** and DLA [TR100000280_C, page 0001]. This is an astonishing position to adopt. It suggests that it is in order for an official to include a statement in a draft report that he knows to be inaccurate, because he expects others reviewing the draft to correct the inaccuracy. It fails to recognise the obligation of all officials not to mislead councillors, which would occur if others failed to notice the error. It also fails to appreciate that on issues of interpretation of legal decisions council officials, including senior officials who are not legally qualified, might be expected to rely upon the views expressed by qualified solicitors within CEC. In this case Mr Smith, a qualified solicitor, not only introduced the inaccurate sentence but reassured the responsible directors in his email to them that the paragraph containing that sentence was correct. The failure of others to notice and correct the relevant sentence cannot, and does not, excuse Mr Smith's actions.

Report to the Council on 14 October 2010

- 18.61** Before considering the report to the Council meeting on 14 October 2010, which included a similar inaccurate statement about the outcome of the DRPs, it is important to recognise the significance of Lord Dervaird's adjudication decision in relation to the Murrayfield underpass dispute, issued on 7 August 2010 [BFB00053462]. This was discussed in more detail in Chapter 17 (Adjudications and Beyond), but, in short, Lord Dervaird found in favour of BSC that, having regard to the terms of clause 80.13 of the Infraco contract, BSC was not obliged to start work that was subject to an INTC until an estimate had been agreed for that work. Work could, however, commence if **tie** relied upon clause 80.15, but in that event BSC was entitled to payment for the work on a demonstrable cost basis. This decision caused increased concerns within CEC about the project.
- 18.62** In a memorandum dated 11 August 2010, addressed to Mr Aitchison and copied to Mr McGougan, Mr David Anderson set out his view that, following Lord Dervaird's adjudication decision, he was now "deeply concerned" about the project [CEC00013622]. Mr Anderson gave evidence that his concerns had been growing

for a long time and that **tie** had clearly ended up in a weakened position following the various adjudication rulings that had undermined its view of the contract. He considered that **tie**'s losing the adjudication in respect of the correct interpretation of clause 80 was the end of the road for its endeavours to adopt a more aggressive commercial approach to the dispute [[TR100000108_C](#), page 0091]. Mr McGougan shared these concerns [[TR100000060_C](#), pages 0094–0095, paragraph 240].

18.63 Against that background, Mr David Anderson and Mr McGougan provided councillors with a report for the Council meeting on 14 October 2010 [[CEC02083124](#)]. The purpose of the report was to refresh the business case as requested at the Council meeting on 24 June and to update councillors on recent contractual negotiations and governance arrangements.

18.64 Paragraph 2.50 of the section of the report dealing with the dispute between **tie** and BSC was in the following terms:

"**tie** has been exercising its various rights and remedies under the contract. Further to the figures reported to the Council in June, to date the application of the dispute resolution process to disputed matters has reduced BSC's claims for additional payment from £21.9m to £9.5m (a saving of £12.4m). **tie** remains satisfied that the overall balance of dispute resolution including adjudication outcomes has more than justified its interrogation of the initial claims made by BSC. The overall outcome of the DRPs, in terms of legal principles, remains finely balanced and subject to debate between the parties." [[ibid](#), page 0007.]

18.65 Members endorsed **tie**'s rigorous application of the contract and noted that, in the absence of robust remediation plans from BSC and a change of behaviour in relation to progressing the works, serious consideration would need to be given to termination of the contract and re-procurement [[CEC01891429](#), page 0007].

18.66 Mr McGougan gave evidence that, although he signed off the report to the Council on 14 October, in relation to the text commenting on the DRPs, he was relying on legal advice from the Council's legal staff and from **tie**'s legal advisers [[TR100000060_C](#), page 0099, paragraph 250]. He stated that he thought that success in the adjudications was mixed, but he was aware that, over the course of the disputes, the trend was that **tie** was becoming less successful. The commercial situation (ie the dispute between **tie** and BSC) was a significant factor in how much information members were given, and the wording of reports to the Council was "incredibly important" to CEC officials, **tie** and **tie**'s legal advisers. He was still receiving advice that in terms of legal principles there was an argument to be had [[PHT00000043](#), pages 78–82]. Although I accept that the wording of reports was important to ensure that negotiations between **tie** and BSC were not compromised, that did not justify giving members false information. When confronted with the suggestion that **tie** was losing the DRPs overall but that that was not being reported to members, he replied:

"Well, one, I'm not sure if that's the case or not. But if it had been, I think it might have been damaging to **tie**'s further attempts to secure other legal routes with the contractors, to place that into a public document." [[ibid](#), page 80.]

18.67 It seemed to me that Mr McGougan was being disingenuous. Even on the assumption that he was unsure whether **tie** was losing the DRPs overall, which I do not accept, it is difficult to understand how placing that information into the public domain by incorporating it into a report to councillors could affect **tie**'s decision to pursue other legal remedies. That decision would depend on the strength of the

evidence supporting such a course of action. Although it is true that **tie** was exploring other remedies, including the use of Remediable Termination Notices ("RTNs"), and in that context there might well be legal arguments to be deployed, that is different from the outcome of the DRPs that had already been determined. As with any anticipated legal dispute that envisages future action involving the deployment of legal arguments, there would be uncertainty about the outcome of the use of RTNs. Any assumption, however optimistic or even realistic, about the outcome of such future disputes cannot act as a balance against the known outcome of the matters that have already been determined. To the extent that this evidence was intended to refute any suggestion that the report was inaccurate in its reporting of the outcome of the DRPs, I reject it. I prefer the evidence to the contrary effect of Mr David Anderson (mentioned in paragraph 18.68 below), who accepted that the report was inaccurate about the outcome of the adjudications. Mr Anderson's evidence was also consistent with the evidence of Mr N Smith that, with hindsight, he did not consider that the statement about the DRP decisions in the report was correct.

- 18.68** Mr David Anderson gave evidence that the wording in the report to the Council on 14 October in relation to the outcome of the adjudications was clearly not accurate by that time and should not have appeared in the report [[PHT00000043](#), page 177].
- 18.69** For the sake of completeness, I should deal with Mr David Anderson's evidence about the availability of information to councillors from sources other than reports to the Council. He explained that each party's transport representatives could attend the TPB each month (albeit that the SNP did not take up its seat on the TPB, and the Green Party rarely attended) and were getting updates of the problems as they unfolded. TPB members were aware by June 2010 that the project's contingency budget was almost fully committed and that a number of claims on that budget were attributable to DRP decisions in favour of BSC. In addition, the senior politicians in the administration, namely Councillors Dawe, Cardownie, G Mackenzie, Wheeler and Buchanan, were also briefed by CEC officials on a regular basis about problems as they unfolded. Beyond these members, however, Mr Anderson considered that there was a delay in formally advising CEC of the growing problems [[TR100000108_C](#), pages 0088–0089]. Although councillors were also advised of the general state of play through party briefings, Mr Anderson considered that, with the benefit of hindsight, there might have been an element of optimistic bias in the reporting, with it having been done through the lens of **tie's** view of the world [[PHT00000043](#), pages 176–179; [TR100000108_C](#), page 0096].
- 18.70** Information available to members of the TPB and to senior politicians is different from information within formal reports to the Council upon which councillors as a body rely when taking decisions. The fact that some members may have had other sources of information does not excuse the submission of inaccurate reports to councillors in advance of Council meetings. In fairness to Mr David Anderson, I do not think that he was seeking to excuse the inaccuracy in the June and October reports when referring to these other sources of information. Mr Anderson's perception of party briefings was that the information provided to councillors in that forum might have been unduly optimistic. The Inquiry is unaware of the detail of any information provided at group meetings about the outcome of the adjudications by October. In my view it is unlikely that it would differ from the content of the report to the Council on 14 October, otherwise I would have expected councillors to have taken issue with that report. In any event the availability of information to individual councillors from attending the TPB or meetings of senior politicians in the administration or group meetings is no substitute for providing information to councillors as a whole.

Councillors are entitled to expect officials to report to them as a body, thereby enabling each councillor to take decisions that he or she considers to be correct based upon the formal reports provided to him or her. Needless to say they are also entitled to expect that the reports are accurate.

- 18.71** Both Mr David Anderson and Mr McGougan, as the authors of the report, accepted that they had responsibility for its accuracy even although they were relying upon colleagues in the legal department to provide the appropriate wording relating to the outcome of the DRPs in terms of legal principles. However, Mr N Smith must also bear some responsibility for misleading councillors about the outcome of the adjudications because, as will be noted in paragraph 18.78 below, the final version of paragraph 2.50 of the report was drafted by him when he knew that it was inaccurate. Nevertheless, that does not exonerate the authors of the report, who were aware of the implications of Lord Dervaird's decision.
- 18.72** Mr Smith gave evidence that, looking back, what was said in the report to the Council in relation to the outcome of the adjudication decisions was not accurate. He acknowledged that, at the time, he would probably not have thought that it was accurate to suggest that the overall outcome of the adjudications was finely balanced in terms of legal principles [PHT00000006, pages 100 and 140–141]. He stated that he could not "honestly recall how that wording or where that wording came from" [ibid, page 101] but he was aware of discussions about what should be included in reports and that **tie** had strong views about that.
- 18.73** Mr Maclean gave evidence that the wording that appeared in the report to the Council on 14 October in relation to the DRPs was not in the draft report on which he had been asked to comment. He first became aware of the wording at the Council meeting and he was angry because what was reported was not accurate and, with the benefit of hindsight, was probably misleading [PHT00000008, pages 65–70]. He accepted that what was said in the report to the Council about the outcome of the adjudications was patently an incorrect factual statement and, in his view, could amount to maladministration [ibid, page 77].
- 18.74** In light of the above evidence, the Inquiry decided to ascertain the provenance of paragraph 2.50 of the report. As was the practice in CEC at that time, junior officials drafted a report for consideration of the responsible directors. The directors would be involved in revising the draft report and in signing the final report for submission to councillors in advance of Council or committee meetings. Mr Coyle and Mr N Smith were the junior officials involved in the drafting of the report on this occasion. As with many reports, there were several iterations before it was finalised.
- 18.75** Mr Maclean considered the fifth version of the draft (Draft v1.5) and made manuscript amendments to it that he forwarded to Mr Smith on 6 October. In particular he proposed the deletion of paragraphs 3.49–3.53 inclusive, which related to the DRPs and to the service of RTNs, and drafted an alternative paragraph 3.49 in the following terms:
- "To date tie has been exercising its various rights and remedies under the Infraco contract but the detail of that needs to remain confidential at this stage. However, the Council should be aware that all options are being considered."
[WED00000648, page 0007.]
- 18.76** In his supplementary statement to the Inquiry he explained that he had suggested the above amendments because he thought that neutral wording about the outcome of the DRPs should be used in view of concerns that what had been said in the

June 2010 report might have breached the confidentiality obligations in the Infraco contract. In addition, “the language at paragraphs 3.49 to 3.53 went into detail about the adjudications, sought to justify **tie**’s approach and present them in a favourable light and also gave detail in relation to the RTNs”. He also wished to “buy time” to enable a proper legal analysis to be carried out by CEC (and not **tie**), with the assistance of external legal advisers, before councillors were given a proper analysis and informed recommendations [[TR100000274](#), page 0005, paragraph 2.5].

18.77 By email dated 6 October, Mr Smith sent Mr Coyle a revised draft incorporating Mr Maclean’s amendments and explaining that Mr Maclean was “rightly concerned that disclosing certain of the info could potentially breach the wide confidentiality provisions under the contract” [[WED00000652](#) pages 0023–0032 at page 0023]. He sent a copy of that email and attachment to Mr Maclean and Ms Campbell, a senior solicitor in CEC. On 7 October there were subsequent communications involving Mr Coyle, Mr Smith and employees of **tie** about the content of the report, during which **tie** emphasised the importance to it of the inclusion of information in the report on the DRPs [email dated 7 October 2010 from Ms Haeburn-Little – *ibid*, page 0047]. At 17.27, Mr Coyle sent an email to Mr Jeffrey enclosing what he hoped would be the final version of the report. At 20.01, Mr Jeffrey sent Mr Coyle and Mr Smith a revised report [*ibid*, pages 0035–0046]. Paragraph 2.49 of the draft from Mr Jeffrey was in identical terms to paragraph 2.50 of the final report submitted to members and quoted in paragraph 18.64 above, with the exception of the last sentence which was in the following terms:

“Suggestions in the press that BSC have ‘won 13 out of 15’ adjudications are without any foundation and factually incorrect.”

18.78 On 8 October, Mr Smith sent an email to Mr Coyle, explaining that Mr Maclean was keen not to go further than they had done in June but that it did not seem logical to provide the same figures as had been produced in June and he had updated them. He provided the text of the new paragraph 2.49, which was in identical terms to, and became, paragraph 2.50 of the final report. He then forwarded the email to Mr Maclean and Ms Campbell without any comment [[CEC00036173](#)]. Apart from providing revised figures, the effect of Mr Smith’s amendments was to delete the last sentence included by Mr Jeffrey that is mentioned above and to substitute for it the sentence to the effect that the overall outcome of the DRPs was finely balanced in terms of legal principles.

18.79 In his supplementary statement Mr Maclean said that he did not recollect seeing the email from Mr Smith to Mr Coyle on 8 October 2010 despite it, apparently, having been forwarded to him (albeit with no covering message). Mr Maclean maintained his position that he had been unaware, before the meeting of the Council on 14 October 2010, that his suggested neutral wording, which was mentioned in paragraph 18.75 above, had not been accepted. He did not take issue with the wording in the report in relation to the outcome of the DRPs at the meeting of the Council. He explained that to have done so would have been unheard of and that it would have been a significant breach of protocol for a third-tier officer (as he then was) to correct a director’s report in public and in front of councillors. At the time, he considered that he had given his advice and that if his superiors chose to override that advice, it was their prerogative to do so. Rather than create further confusion, he had taken the view that the better course of action was to continue to pull everything together so that, for the first time, a proper reasoned analysis could be provided to councillors [[TR100000274](#)].

- 18.80** In a supplementary statement Mr Smith accepted that he had inserted the sentence in the report in relation to the outcome of the DRP decisions. Although he could not remember his thinking at the time, he suspected that he had inserted it in an effort to find a middle ground between what **tie** had requested in the draft attached to Mr Jeffrey's last email and what CEC could accept. In his statement he referred to the fact that CEC had instructed Shepherd & Wedderburn to advise it "in relation to the possible contract termination or a variation on this theme" [WED00000652, page 0049] and it was proposed that a comprehensive report would be submitted to the Council in December 2010. He also mentioned that his proposed wording had been sent to Mr Maclean and Ms Campbell as well as Mr Coyle. Finally, he observed that his inclusion of the last sentence in paragraph 2.50 was not questioned at any time [TR100000280_C, pages 0003–0004].
- 18.81** The criticisms of Mr Smith's acts and omissions in relation to the June report apply with greater force to his involvement with the October report. As with the June report, he cannot rely upon the failure of others to question the accuracy of the relevant paragraph. He was aware that Mr Maclean had suggested amendments to the draft report two days before it was finalised and had proposed neutral wording for what became paragraph 2.50. Although Mr Maclean was the head of the legal department of which he was a member, Mr Smith altered that paragraph in an effort to accommodate **tie**'s wishes without seeking Mr Maclean's views. I do not consider that forwarding to Mr Maclean his email to Mr Coyle dated 8 October with no covering message or request for any action by Mr Maclean can provide Mr Smith with any excuse or comfort for his actions on this occasion, the seriousness of which needs no elaboration. Councillors rely upon the accuracy of reports to enable them to take informed decisions. Clearly, on occasions, mistakes may occur in the drafting of reports, but that is not the situation with the October report. Mr Smith inserted the last sentence in paragraph 2.50 of the report, but it did not reflect what he believed at the time [PHT00000006, page 100; TR100000280_C, page 0003]. That is inconsistent with the standards expected of officials and solicitors within a local authority.
- 18.82** The impression created by his evidence is that he inserted that sentence because of the desire by **tie** to have a reference in the report to the DRPs. Having regard to the views that he had expressed to Ms Lindsay as a member of the "B team" about the need for independent advice to protect CEC's interests, it is ironic that he should pray in aid **tie**'s wishes when his primary obligation was to councillors, the responsible directors and the Head of Legal Services.

Re-organisation within CEC legal

- 18.83** In paragraph 18.95 and the subsequent paragraphs I will consider the issue of CEC exercising more control over the project during 2010. Before doing so, it seems appropriate to consider whether there was any lack of clarity about which official had responsibility for providing legal advice to CEC on the project between December 2009 and August 2010 and, if so, whether that delayed the action that CEC ultimately took.
- 18.84** In 2009, CEC required all departments, except education, to make efficiency savings. Mr Inch was the Director of Corporate Services, responsible for "back office services" such as Council secretaries and Council solicitors. He had to make substantial savings in that department, resulting in several employees opting for early retirement. As part of departmental savings Mr Inch created an amalgamated post of Head of Legal and Administrative Services and dispensed with the post of Council Solicitor. Ms Lindsay was the Council Solicitor and submitted a case for her appointment to the newly created post, but Mr Inch rejected that submission. Accordingly she

intimated her desire to retire early rather than participate in a recruitment process for the new post. Mr Maclean was appointed to the newly created post in December 2009. Mr Inch was keen to retain Ms Lindsay's services to enable a proper transfer of her knowledge and experience with the project to Mr Maclean and to delay her retirement for that purpose. In addition, further savings were envisaged by outsourcing some Council services and Ms Lindsay had also been heavily involved in that project, called the alternative business model [[PHT00000007](#), pages 186–190; [PHT00000027](#), page 181].

- 18.85** Ms Lindsay remained employed by the Council, in a specially created post that sat outside the Legal and Administrative Services division. A letter dated 12 November 2009 from Mr Inch to Ms Lindsay (copied to Mr Maclean) stated that, with effect from 1 December 2009, Ms Lindsay would work:

"as part of the Tram Project team representing the Council's interests in the tram project including:

- (i) Membership of tram project sub-committees, ensuring the Council is accurately briefed on the legal aspects of commercial engagement and provide both a support and challenge role with **tie**." [[CEC00692177](#), page 0001.]

- 18.86** Separately, Ms Lindsay was also to lead the legal advisory work stream of the Council's alternative business models project. Ms Lindsay remained employed by the Council in that post until her departure in August 2010.

- 18.87** Ms Lindsay gave evidence that Mr Maclean was responsible for providing legal advice to the Council on the project between December 2009 and August 2010. Although she continued to attend meetings of the IPG until May 2010 (with Mr Maclean attending such meetings from June 2010 onwards), Ms Lindsay did not consider that that was a good indication as to when the transition in responsibility for providing legal advice to the Council in relation to the project occurred. Instead, Ms Lindsay gave evidence that, at the meeting of the IPG in January 2010, it was agreed that weekly meetings would be scheduled with Mr McGougan, Mr David Anderson, Mr Jeffrey and relevant others [[CEC00470184](#), page 0001, item 2], which meetings Mr Maclean was to attend. Ms Lindsay considered that her role in the project was a more limited one, involving providing operational support to Mr Smith [[PHT00000027](#), pages 180–181]. From January 2010, her role was in the alternative business model project (together with another developing project), which were her priorities, and she retained only a "peripheral" role in the Tram project, involving interfacing with CEC's in-house legal team. She stated that she was last "fully engaged" in the Tram project in 2009 [[TRI00000160](#), pages 0014 and 0067]. Mr Inch and Mr Aitchison supported the view that Mr Maclean was responsible for providing legal advice to CEC on the Tram project, although Mr Inch anticipated that that would be done in consultation with Ms Lindsay [[PHT00000007](#), page 190; [TRI00000022_C](#), page 0068, paragraph 201]. Mr Anderson did not consider that Ms Lindsay was playing any active role in the project in the first half of 2010, and his recollection was that Mr Maclean began to be involved in the project in a significant way from the early autumn of 2010 [[TRI00000108_C](#), page 0094].

- 18.88** In contrast, Mr Maclean gave evidence that it was made clear to him, both from the letter from Mr Inch to Ms Lindsay mentioned in paragraph 18.85 above and from a conversation that he had had with Mr Inch before he started with the Council, that his responsibilities for the project "were nil" [[PHT00000008](#), page 12] and that

they had been passed over to Ms Lindsay until her retirement in August 2010. He described that as being awkward and frustrating. Before he joined the Council, he was expecting that he would become immersed in the project. Mr Maclean was quite clear that he was not given responsibility for providing legal advice to the Council in relation to the project during the period from December 2009 until August 2010.

- 18.89** Although that was the formal position, informally Mr Maclean tried to keep abreast of where things were with the project by getting information about it from people such as Mr Smith, so that he would be able to “hit the ground running” when he did become responsible for it following Ms Lindsay’s departure. Prior to August 2010 he responded to ad hoc requests for advice and emails and provided minor comments on reports to the Council [*ibid*, pages 12–22; [TR10000055_C](#), pages 0001–0003, paragraphs 3 and 15].
- 18.90** Mr Smith’s understanding was that Ms Lindsay was given responsibility for the project between Mr Maclean’s appointment in December 2009 and her departure in August 2010. He stated that, given the ongoing difficulties, he preferred to have a clear line of reporting to someone who would still be in post after the summer of 2010, and that he felt more certain that Mr Maclean would listen to, act upon or challenge his views or concerns [[TR10000071_C](#), page 0080]. He stated that the presence of both Mr Maclean and Ms Lindsay created certain difficulties for him, as he was, in essence, “briefing two masters” [[PHT00000006](#), pages 51–52]. Email correspondence in February, April and May suggests that Ms Lindsay expected Mr Smith to report to her about the project and to keep her advised of developments [[CEC00480029](#); [CEC00242287](#); [CEC00242406](#)]. It also appears that Mr Maclean recommended that CEC should instruct Dundas & Wilson (“D&W”), solicitors, to review the Infraco contract and to report to CEC on (1) the options for **tie** under the contract to exit it and **tie**’s exit liabilities; and (2) the ability to reduce the cost of the contract by instructing a change to downsize the project and consequent liabilities [[CEC00479797](#); [CEC00480029](#)]. Ms Lindsay was unaware of such instruction.
- 18.91** From the above evidence it appears that there was a lack of clarity about which official was responsible for giving legal advice to CEC on the project between December 2009 and August 2010, which was the official retirement date for Ms Lindsay. One might have expected the Head of Legal Services to fulfil that role but Mr Inch’s letter appeared to suggest otherwise and Mr Maclean was entitled to assume that Ms Lindsay retained that responsibility until she left or the transfer of responsibility was effected prior to that date, particularly as she was in a specially created post outside the Legal Services Department. Mr Smith, the solicitor principally concerned with the project on a day-to-day basis, considered that Ms Lindsay retained responsibility as CEC’s legal adviser in relation to the project despite his resistance to that situation. Moreover, Ms Lindsay continued to attend IPG meetings until May 2010 and Mr Maclean only attended them from June. On the other hand, Mr Aitchison, Mr David Anderson and Mr Inch thought that responsibility lay with Mr Maclean, although Mr Inch expected Mr Maclean to fulfil his duties in that regard in consultation with Ms Lindsay. Mr Maclean also gave ad hoc advice on some issues that arose: for example, he suggested the instruction of independent solicitors in February 2010 to advise on the limited issues mentioned in paragraph 18.90 above.
- 18.92** On the evidence, I have concluded that Mr Maclean genuinely believed that Ms Lindsay was still responsible for providing legal advice to CEC on the project until he commenced attending the IPG in place of Ms Lindsay in June. Mr David Anderson was the director responsible for the project and, from his views mentioned above, it

appears that during the relevant period nobody senior to Mr Smith was performing the role of legal adviser to the project. The fact that Mr Smith reported to Ms Lindsay and Mr Maclean does not resolve the issue of ultimate responsibility.

- 18.93** The confusion arose because of Mr Inch's letter of appointment to Ms Lindsay. Mr Inch was aware that the project was the largest project for which CEC bore ultimate responsibility as guarantor of **tie**'s obligations to BSC. He was also aware that the project would not be completed before Ms Lindsay's retirement date in August 2010. It did not make sense for her to remain part of the project team "ensuring that the Council was accurately briefed on the legal aspects of commercial engagement". The responsibility for briefing CEC on all legal issues, including those relating to the project, ought to have rested with Mr Maclean as Head of Legal Services. The terms of the letter suggested that his responsibilities in that regard did not extend to the Tram project. Mr Inch's explanation that he was anxious to ensure the transfer of Ms Lindsay's knowledge and experience of the project to the successful candidate for the new post certainly explains his desire to delay her departure for a sufficiently long period to achieve that objective. However, that objective did not require him to restrict Mr Maclean's responsibilities in the manner suggested by the letter. Mr Inch could have avoided any confusion by restricting Ms Lindsay's duties to the alternative business model and to such other projects as he considered appropriate. This would not have prevented him from appointing her to a specially created post outside the Legal Services Department until her retirement. He could also have achieved his objective of transferring her knowledge and experience about the project by ensuring that there was a proper handover of responsibilities for the project to Mr Maclean after December 2009.
- 18.94** It is difficult to assess the consequences for CEC of the confusion mentioned above. However, if Mr Maclean had clear responsibility for providing legal advice to the Council on the Tram project when he joined CEC in December 2009, his subsequent actions (which will be discussed below) might have been accelerated by several months – perhaps to March or April 2010. If that had occurred it is possible that the issues between BSC and **tie** would have been resolved sooner, resulting in some saving of expenditure on the project.

CEC's more proactive role

- 18.95** It is clear from previous chapters that the "B team" considered that CEC placed undue reliance upon the information that **tie** provided to it and that CEC ought to protect its own interests as **tie**'s guarantors by obtaining independent legal advice and independent project assurance. The responsible directors at that time rejected that suggestion. However, as noted in paragraph 18.13 above, senior officials in CEC began to have concerns in summer or autumn 2009 about the reliability of the information being provided to them by **tie**.
- 18.96** Subsequent events increased these concerns. Mr David Anderson considered that the Gogarburn bridge adjudication (in November 2009) and an opinion received by **tie** from Mr Keen QC in January 2010 called into question CEC's reliance upon **tie**'s optimism concerning the probable outcome of the disputes between it and BSC [TR100000108_C, pages 0075–0076 and 0078]. In an email dated 21 January 2010, Mr Coyle invited Mr Maclean to comment on draft responses to queries raised by Mr Jeffrey. While he had no comments about them, Mr Maclean replied to Mr Coyle that "it still feels as though we are being too reactive. I would like us to get much more proactive around this" [CEC00473835, page 0001]. Mr Coyle agreed and advised Mr Maclean that Mr McGougan and Mr Anderson had agreed with his

suggestion that an independent legal opinion should be sought concerning the options available to **tie** to terminate the contract. This was pursued and is mentioned in paragraph 18.90 above. His suggestion had followed his concerns at a meeting that he had had with Mr Jeffrey and Mr Fitchie at which they were unable to answer his questions regarding the termination provisions of the Infraco contract.

- 18.97** Mr Maclean gave evidence that he had an intuitive, rather than well-informed, sense (from how the organisation was being run and how the project was being dealt with) that it felt as though **tie** was in complete control of what was going on and that CEC was too removed. He felt that there was a rigidity in **tie**'s approach and a lack of inquisition from CEC. His impression was that CEC was fully relying on **tie** without an understanding of what was going on. He wanted CEC to have a better understanding of matters rather than taking at face value what was said by **tie**. He was also concerned by the "one family" approach adopted by senior officials in CEC, whereby **tie**'s and CEC's interests were considered to be fully aligned. That did not seem right to him [[PHT00000008](#), pages 32–37].
- 18.98** By letter dated 8 March 2010, BSC wrote to CEC expressing concerns in relation to **tie** and the lack of meaningful progress in resolving the outstanding disputes, including the fundamental dispute concerning the correct interpretation of the contract [[CEC00548728](#)]. The letter was addressed for the attention of senior officials in CEC (namely: Mr Aitchison, Mr McGougan and Mr David Anderson) and Councillor G Mackenzie. It expressed concern about the accuracy of reporting by **tie**, stating:
- "From the first day tie has publicly sought to insist that it has signed a lump sum, fully fixed price contract with the consortium. This is not the case, as evidenced by the extensive list of defined pricing assumptions which form an integral part of the contract, and also by the clear rulings of the independent adjudication process which fully support the consortium's legal and contractual interpretation." [libid](#), page 0002.]
- 18.99** The letter referred to significant delays in utility diversion works. BSC considered that the project was approximately two years late and that, taking a conservative approach, its additional costs were likely to be in excess of £100 million.
- 18.100** By the spring of 2010, it was becoming clear to Mr Aitchison that there was a huge gulf in the different interpretations of the contract by **tie** and BSC and that evidence was beginning to come through that it appeared as though BSC was more right in that regard than **tie** [[PHT00000041](#), page 167].
- 18.101** By letter dated 8 June 2010, the chairman of Transport Edinburgh Limited ("TEL") formally advised CEC's Tram Monitoring Officer, in terms of the operating agreement with CEC, that the TEL Board considered that it was reasonably expected that the full scope of line 1a could not be delivered within a budget of £545 million and by October 2012 [[TIE00084642](#)].
- 18.102** In paragraph 18.62 above, I have referred to the concerns of Mr David Anderson and Mr McGougan following Lord Dervaird's adjudication decision issued on 7 August 2010. In Mr McGougan's view the only option left to improve BSC's behaviour was the threat of termination, assuming there was a proper basis for that course of action [[TRl00000060_C](#), pages 0094–0095, paragraph 240]. As was discussed in Chapter 17 (Adjudications and Beyond), between 9 August and 12 October 2010, **tie** served on BSC ten RTNs and three underperformance warning notices without a proper evidential basis justifying such notices.

- 18.103** Mr Aitchison gave evidence that Mr David Anderson was not alone in being concerned following Lord Dervaird's decision. The universal view across the Council was one of deep concern. He considered that, over the coming weeks and months, a way had to be found whereby CEC officials could provide councillors with clear policy advice on how to handle the Tram project. Around this time, the balance started to shift from the CEC officials relying substantially on **tie** for information and analysis to wishing to get to a position in which officials had more direct control in respect of presenting information to councillors. Mr Maclean brought a fresh perspective on where things were, and CEC began to recognise that it had to do more of its own thinking, rather than overly rely on **tie**. Although there was still a recognition that it was important to work alongside **tie**, information from it required to be "stress tested" by CEC officials wherever possible [[TR100000022_C](#), pages 0074–0075, paragraphs 223–225; [PHT00000041](#), pages 169–170]. It seems to me that August 2010 was the stage at which CEC's senior officials began to subject the project to the careful scrutiny that the Council was entitled to expect from the outset. The Chief Executive and the responsible directors, including Mr Holmes, as Mr Anderson's predecessor, must bear responsibility for their failure to do so from the outset.
- 18.104** Mr Maclean gave evidence that, around August 2010, he began to develop a good understanding of the Tram project and the dispute, and that **tie**'s strategy was failing. By that time he had gleaned information from various sources in the Council, including Mr N Smith, and he could see that there were historical problems from the point at which the project was entered into. He could also see from the adjudication decisions that they were not going well on a number of fronts, the first adjudication decision that he read being Lord Dervaird's decision. Mr Maclean read SP4 to the Infraco contract for the first time around then, and he stated that it was "patently obvious" that there was a fundamental problem with that contract. He was particularly concerned by clause 3.2.1 of SP4, which stated that the contract was based on a set of pricing assumptions, some of which the parties accepted were wrong at the date of signing the contract, and which would result in an immediate claim or claims after the contract was signed. He considered that that clause was very clearly an open-ended, or certainly worrisome, provision, which meant that the Infraco contract was not for a fixed price. He was not an expert in construction law, but he considered that any lawyer reading that clause would have come to a similar view. I agree. If any support for his view was required, it is to be found in Mr C MacKenzie's evidence mentioned in paragraph 18.36 above.
- 18.105** Mr Maclean formed the view that the Infraco contract was "riddled with deficiencies", with the following problems having leapt out at him:
- clause 3.2.1 of SP4, which, as noted above, stated that the price was based on certain pricing assumptions that were known not to be correct when the contract was entered into;
 - awarding an allegedly fixed-price contract without a completed design being in place;
 - the design provider being novated to the consortium so that it was, effectively, on the same team (which created a conflict of interest, in that the party that could change the design was also able to benefit from an increase in price because of that change);
 - vagueness in the pricing, including, in particular, in relation to Pricing Assumption 1, whereby the definition of "normal design development" contained contradictory wording; and clause 80, whereby it appeared that the contractor could down tools

and **tie** could not force the contractor to carry on with the works unless it paid the contractor for the work on a demonstrable costs basis. [[PHT00000008](#), pages 20, 23–25, 40–43.]

- 18.106** In short, Mr Maclean considered that the biggest issue was the contract and that the die was cast at the time of signing it. Given the shape of the contract (ie the pricing assumptions and other unfavourable items), it was almost inevitable that difficulties would arise [[TRl00000055_C](#), page 0021, paragraph 61]. He considered that **tie** had adopted an intransigent and adversarial stance towards the consortium and that, with the benefit of hindsight, it was making things worse, not better [[libid](#), page 0023, paragraph 65].
- 18.107** By October 2010, Mr Maclean had concerns as to whether councillors, had been, or were being, kept fully informed in relation to the Tram project. They thought that the Infraco contract was a fixed-price contract when it clearly was not. He was also concerned that, at a briefing of councillors on 12 October 2010, they had been advised that termination was the only option left. In the course of that briefing Mr Jeffrey had, apparently, stated that **tie** had a "cast-iron" right, or guaranteed right, to terminate the contract, which was backed up by the opinion of Queen's Counsel. That rang a significant alarm bell for Mr Maclean, as he had never heard a QC say that there was a cast-iron right to terminate a contract [[PHT00000008](#), pages 24–25 and 84–86].
- 18.108** Mr Maclean had quite serious concerns in relation to what appeared to be **tie**'s preferred strategy of terminating the Infraco contract, as CEC did not have a good understanding of the factual basis for the RTNs. He also had serious concerns about their validity. Against the background of these concerns, the results of the adjudication decisions and concerns about **tie**, Mr Maclean recognised the need for CEC to obtain its own independent legal advice. Moreover, on 13 October 2010, when **tie** suggested the establishment of a special planning forum (referred to as the "war room") to discuss the option of terminating the Infraco contract, Mr Maclean sent an email in the following terms to Mr McGougan:
- "At the risk of being controversial my feeling is that the special planning forum is for CEC and not tie – tie should come along to help us where we need them but not take control!" [[CEC00012760](#), page 0001.]
- 18.109** Looking back, he considered that this period was a turning point in the control of the project slowly starting to move away from **tie** to CEC [[PHT00000008](#), pages 82–83; [TRl00000055_C](#), page 0017, paragraph 52].
- 18.110** External events also influenced future decisions about the project. On 13 October 2010, BSC wrote directly to councillors. The purpose of the letter was stated to be to set out BSC's perspective of the dispute in order that councillors had both sides of the story before making any decision in relation to the project [[CEC00012755](#)]. The letter appears to have been the first occasion on which councillors were made aware of SP4 to the Infraco contract and the fact that the price was based on various pricing assumptions and was, therefore, liable to change. It also stated that of the nine adjudication decisions that were available in relation to the correct interpretation of the Infraco contract, six were in favour of BSC, one was in favour of **tie** and there were two split decisions (in which the principle was in favour of BSC). That was clearly different to the information provided to councillors hitherto. BSC's letter stated that, in the interests of accuracy and transparency, BSC had no objection to the disclosure of the adjudication decisions to councillors, so they could make their own judgements. Mr Maclean asked each of the group political leaders to decline

that request, because his investigations were not complete and he wished to brief councillors at the appropriate time when he had better knowledge and information [PHT00000008, pages 56–57]. At that stage he intended to seek the views of Shepherd & Wedderburn and Mr Dennys QC of the English Bar about RTNs and the outcome of the adjudications respectively.

- 18.111** There was also increasing political pressure to resolve the dispute. On 7 October 2010, representatives from CEC met Mr Swinney. Mr McGougan was present at the meeting and gave evidence that its focus was about how a solution could be reached that protected the public purse, secured an asset and delivered a working tram system [TR100000060_C, page 0097, paragraph 245]. On 16 November 2010, Councillor Dawe and Mr Aitchison met Mr Swinney at his request. At the meeting, Mr Swinney expressed concern over the lack of progress with the project. He had met representatives of **tie** regularly over the preceding months, but was increasingly losing faith in the quality of advice that he was receiving from it and he wanted to hear direct from CEC. The representatives of CEC advised that they were considering proposing mediation. Councillor Dawe gave evidence that she had considered that mediation was the only way forward and that Mr Swinney “was very keen on the idea that formal mediation ... might be the best way forward”. He offered the assistance of Transport Scotland if it should be required [TR100000019_C, page 0183, paragraphs 690–693]. Mr Aitchison was of the view that mediation was worth pursuing, given that other options had not been successful [TR100000022_C, pages 0079–0080, paragraphs 236–237].
- 18.112** On 18 November 2010, the Council approved an emergency motion proposed by Councillor Dawe to instruct Mr Aitchison to continue to make preparations with **tie** and BSC for mediation or other DRPs [CEC00054300; CEC01891442, pages 0021–0022]. The motion noted that, on 17 November, the TPB had agreed to support an independent mediation process. Councillor Dawe explained in her evidence that Mr Jeffrey contacted her when he learned of her intention to table the emergency motion. He told her that he did not think that it was a good idea. She thought that he did not understand the way in which local authorities worked and he came round to the view that some intervention was necessary [TR100000019_C, pages 0184–0185, paragraphs 698–699].
- 18.113** On 23 November 2010, CEC obtained advice from Mr Dennys QC. The following day, Mr Maclean prepared a note on legal strategy based upon that advice [WED00000008]. The Inquiry also recovered a handwritten note by Mr Maclean, dated 24 November and headed “Summary for Tram IPG” [WED00000010]. By this time, Mr Maclean had lost confidence in **tie** and its strategies for seeking to resolve the dispute with BSC. He reported his concerns and the advice from Mr Dennys to the IPG. A meeting with Mr Jeffrey was convened on 24 November 2010 to discuss matters. Mr Jeffrey walked out of the meeting and, in an email later that day, apologised for the speed and nature of his departure from the meeting, explaining that he had been late for another meeting and he thought that their conversation was “becoming unproductive” [CEC00013441, page 0001]. In his evidence to the Inquiry, Mr Jeffrey accepted that he was a little irritated by the fact that CEC had gone off and taken its own legal advice without discussing or sharing that with **tie**, whereas **tie** had discussed and shared all its legal advice with CEC [PHT000000033, page 55].
- 18.114** Prior to this, CEC officials had always refused requests for meetings with representatives from BSC because the Infraco contract was between it and **tie**. Any discussions about the contract and its implementation ought to be confined to the contracting parties. However, by November their view changed and Mr Jeffrey also

agreed that CEC should meet BSC "to listen to their side of the story" [CEC00013441, page 0001]. On 3 December 2010, a meeting took place between Mr Maclean, Mr McGougan and representatives of BB and CAF [CEC02084346]. On 4 December 2010, Mr Maclean sent a note of the meeting, including his advice on the matters arising, to Mr Aitchison, Mr McGougan and Mr Inch [WED00000009]. Mr Maclean gave evidence that he found the views of Mr Walker of BB, as expressed at the meeting, to be entirely credible; that it was clear that BSC did not regard the Infraco contract to be a fixed-price contract; and that it was accepted that there was a dispute that required to be dealt with and could not be walked away from [TR100000055_C, page 0030, paragraph 77]. A further meeting took place on 13 December 2010 between CEC and representatives of BSC – [CEC02084349].

- 18.115** On 16 December 2010, Mr Aitchison provided the Council with a report updating councillors on the project and the proposed mediation [CEC01891570]. Mediation talks with BSC would be taken forward. Thereafter parties prepared for and proceeded to mediation at Mar Hall in March 2011, as will be discussed more fully in Chapter 19 (Mediation and Settlement). Although representatives of **tie** were in attendance at Mar Hall, the Chief Executive of CEC (Dame Sue Bruce) led the negotiations on behalf of the client and took the ultimate decision to settle the dispute on terms discussed in Chapter 19. One of the consequences of the settlement was the removal of **tie** from the project, completing the transfer of control of the project to CEC that had started in the autumn of 2010.

Conclusions

- 18.116** Concerns continued within CEC as to the reliability of the information and advice coming from **tie** but by mid-2009, for the first time, they were shared by senior officials including the Chief Executive underlining the past failures of CEC's strategy of largely relying upon information and assurances provided by **tie** in accordance with the "one family" approach advocated by the Chief Executive. That approach failed to recognise the need for anxious scrutiny of information from **tie** to ensure that CEC's separate interests as guarantor of **tie**'s financial obligations to BSC were adequately protected.
- 18.117** It appears from Mr N Smith's briefing note for Mr Maclean that he perceived there to be a culture within CEC of withholding information from councillors. Even if that perception did not reflect reality, he ought to have reported it to the monitoring officer, in case it did have some factual basis, to enable the monitoring officer to investigate whether the culture within CEC or the actions of any officials in that regard amounted to maladministration, but he failed to do so.
- 18.118** Reporting to councillors was misleading either by reason of omissions or by statements that were inaccurate.
- 18.119** The report submitted to councillors on 30 April 2009 by Mr McGougan and Mr David Anderson omitted to mention that entering into the PSSA gave rise to a real risk that the cost of the works on Princes Street would rise significantly.
- 18.120** It was erroneous, and misleading, for the reports to the Council in June and October 2010 to have advised councillors that the outcome of the DRP decisions, in terms of legal principles, was finely balanced. In fact, by the time of the meeting of the Council in June 2010, **tie** had lost the majority of DRP decisions determined by that date and, by the time of the meeting of the Council in October 2010, the decision of Lord Dervaird in August 2010 had put the matter of BSC's success in the DRPs beyond any doubt.

- 18.121** Although the signatories of the reports mentioned in paragraph 18.120 above must bear responsibility for those inaccuracies of which they were aware, Mr N Smith cannot avoid criticism as it appears that he drafted the statement about the outcome of the DRPs and included it in the draft reports when he knew that it was not accurate.
- 18.122** Mr N Smith's speculation that the reason for including the inaccurate statement in the October report was because **tie** had emphasised the importance of including information about the DRP decisions and his terminology was a middle course between what Mr Jeffrey had suggested and what CEC could accept does not bear scrutiny. It is another illustration of an official in CEC providing councillors with unreliable (and, on this occasion, false) information to accommodate the wishes of **tie** despite the official's overriding duty to provide accurate information to councillors to enable them to make properly informed decisions.
- 18.123** Despite the impression of some senior officials in CEC that Mr Maclean was responsible for representing CEC's interests in the Tram project and for providing CEC with all necessary legal advice relating to the project after his appointment, the terms of the letter dated 12 November 2009 from Mr Inch, as Director of Corporate Services, to Ms Lindsay outlining her working arrangements after Mr Maclean commenced employment as Head of Legal and Administrative Services conferred that responsibility upon Ms Lindsay who was located outside the Legal Services Department and who attended IPG meetings between December 2009 and June 2010 when Mr Maclean first attended the IPG.
- 18.124** The involvement of Ms Lindsay in the project to the exclusion of Mr Maclean, other than for providing ad hoc advice when it was sought or responding to emails, led to confusion illustrated by Mr N Smith having "two masters" and probably delayed CEC's exerting greater control over **tie** and the project by several months.

Chapter 19

Mediation and Settlement

Overview

- 19.1** Between 8 and 12 March 2011, the parties took part in a mediation at the Mar Hall hotel in Bishopston, outside Glasgow. By 10 March, they had reached agreement on key points of principle to resolve their dispute, and on 12 March they signed non-binding Heads of Terms setting out in more detail a basis for the permanent settlement of their differences [CECo2084685]. The City of Edinburgh Council ("CEC") had been represented at the mediation by its officials, and the negotiated agreement was subject to approval by its councillors.
- 19.2** The mediated agreement provided for the completion of a tram line between the Airport and Haymarket, the settlement of all claims accrued to date, and the transfer to CEC of all Siemens materials and equipment for the line between the Airport and Newhaven, in return for a price of £362.5 million. At mediation the parties were unable to agree a price for the on-street works between Haymarket and St Andrew Square, but agreed to negotiate further on a target price mechanism for them.
- 19.3** On 20 May 2011, **tie** Limited ("**tie**") entered into Minute of Variation 4 with BSC ("MoV4") [CECo1731817]. MoV4 was an interim and partial settlement of the parties' dispute. It provided for the recommencement of work on the tram infrastructure in specified priority areas and the payment of significant sums to Bilfinger Berger ("BB") and Siemens. Its purpose was to vary the Infrastructure contract ("Infraco contract") between **tie** and Bilfinger Berger, Siemens and CAF ("BSC"). For that reason **tie** had to sign MoV4, although it was the Chief Executive of CEC (Dame Sue Bruce) who led negotiations on behalf of the client and took the ultimate decision to recommend settlement of the dispute on the terms discussed below. **tie** claimed that MoV4 resulted in a breach of the expenditure limit imposed on **tie** by CEC in the Operating Agreement between them. Accordingly **tie** entered into MoV4 at the direction of CEC's senior officials. Although other CEC officials and third parties were at meetings resulting in the decision to implement MoV4, the CEC officials responsible for taking that decision were Dame Sue Bruce, as Chief Executive, and Mr David Anderson and Mr McGougan as the responsible directors. Mr Anderson was also the SRO and as Director of Finance Mr McGougan was also Chief Financial Officer of CEC. Other senior officials in CEC were aware of the decision. In particular, Mr Maclean, Head of Legal Services, attended the relevant meetings and was aware of the decision to authorise **tie** to enter into MoV4 despite its being contrary to legal advice from officials in CEC Legal, including Mr Maclean, that the decision was properly one for councillors where the decision resulted in **tie** and TEL exceeding financial limits imposed on them by decisions taken by the Council. CEC's councillors were not asked formally to approve MoV4 before it was signed, and did not do so. MoV4 left CEC with three strategic options for the future of the Edinburgh Tram project (the "project"):
- approval of a settlement based on the mediated agreement;
 - agreed termination of the infrastructure contract ("Infraco contract"); and
 - a return to the project under the pre-existing Infraco contract terms.

- 19.4** On 30 June 2011, on the recommendation of Mr David Anderson, CEC's Director of City Development, CEC resolved to pursue completion of a tram line between the Airport and St Andrew Square/York Place on the basis of the agreement reached at mediation. The total cost of that option was estimated at between £725 million and £773 million [[CEC02044271](#), page 0008, paragraph 3.42]. CEC instructed the Director of City Development to report on funding and on the risks associated with the works.
- 19.5** On 25 August 2011, the Director of City Development reported a revised budget estimate of £776 million. CEC therefore had to find an additional £231 million to fund the project, which the Director recommended it borrow under prudential borrowing rules via the prudential framework for local authority investment, the key principles of which were to ensure that capital programmes were affordable, prudent and sustainable [*ibid*; Mr Connarty [PHT00000048](#), page 34]. The Director also reported on risk. After several rounds of voting, with divisions along party lines, CEC rejected the Director's funding recommendation. It also resolved that construction of the on-street section between Haymarket and St Andrew Square/York Place had not been sufficiently de-risked, and it instructed the Chief Executive to negotiate a settlement for a line between the Airport and Haymarket only.
- 19.6** The Scottish Ministers considered CEC's decision to stop the line at Haymarket to be a fundamental change to the basis on which they had grant-funded the project, and were not therefore prepared to provide the balance of their funding. On 2 September 2011, having been informed of the Scottish Ministers' position, CEC reversed its decision of 25 August and agreed once again to pursue the option of a line to St Andrew Square/York Place. It instructed its Chief Executive to enter into a settlement agreement to that effect, and approved the funding proposals that it had rejected in August [[CEC02083154](#)].
- 19.7** On 15 September 2011, **tie**, CEC and BSC entered into a settlement agreement that fully and finally settled their disputes under the Infraco contract [[CEC02085585](#)]. CEC put in place a new governance structure for the project, and appointed Turner & Townsend as project manager. **tie** was wound down. The infrastructure works were completed, and the line opened for revenue service on 31 May 2014.
- 19.8** The total outturn cost of the works by BB and Siemens under the Infraco contract was £427,206,309.52 [[CEC02085668](#)] for a line between the Airport and York Place, compared with the original construction works price of £238,607,664 for a line between the Airport and Newhaven.

Background and preparations for mediation

Background

- 19.9** By late 2010, the project was in crisis. BSC's initial proposals to settle the Infraco contract disputes were given the name "Project Carlisle". The first Project Carlisle proposal ("Carlisle 1") was for a shortened line between the Airport and the east end of Princes Street, for an agreed maximum price. It therefore omitted the stretch of line between the east end of Princes Street and Newhaven. As noted below, a revised proposal involved the termination of the line from the Airport at Haymarket. The parties' attempts under Project Carlisle to negotiate a revised basis for the continuation of the project had borne no fruit [see, e.g., [CEC00133316](#)]. BSC had stopped work at a large number of sites, drawing support from Lord Dervaird's decision in the Murrayfield underpass adjudication that **tie** had no power under clause 80.13 of the Infraco contract to insist on work being done prior to agreement of an estimate for the work, if it was subject to a change claim [[TIE00409574](#)]. Lord

Dervaird's decision was discussed more fully in Chapter 17 (Adjudications and Beyond). **tie**'s policy of assertive enforcement of the contract (including the service of Remediable Termination Notices ("RTNs") and underperformance warning notices) had neither persuaded BSC to act as **tie** wished, nor established any basis for **tie** to compel it so to act [see, e.g., Mr Nolan [TRl00000114_C](#), page 0026, paragraph 67]. **tie** had failed to establish any momentum behind its preferred interpretation of the contract, and in many important respects the adjudicators had applied the contract in a manner more consistent with BSC's interpretation.

- 19.10** Project funding had become a pressing issue for both parties. CEC's approved funding was no longer enough to complete the project: by letter dated 8 June 2010, the Transport Edinburgh Limited ("TEL") Board formally notified CEC of its reasonable expectation that the full scope of phase 1a could not be delivered within the budget of £545 million and that it was:

"now certain that further Council approval will be required in due course, whether for staged delivery or for additional funding" [[TIE00084642](#)].

- 19.11** Nevertheless TEL did not seek any increase in its authorised limit of expenditure at that stage. On the consortium side, both BB and Siemens had, or were about to have, substantial negative cash flow positions on the project [[BFB00112204](#), page 0004, paragraph 1.2.5; Mr Foerder [PHT00000044](#), page 123; Mr Eickhorn [TRl00000171](#), page 0055, paragraph 120].

- 19.12** Until late 2010, CEC had respected the contractual and governance structure of the project and had left **tie**, as the contracting party to the Infraco contract, to be the project interface with BSC. CEC had rebuffed BSC's attempts to engage directly with it [see, eg, [CEC00356309](#) (24 March 2010); [CEC00242190](#) (19 April 2010); [CEC00236123](#) (21 April 2010)]. Over the course of 2010, however, CEC's senior officials progressively lost faith in **tie**. In August 2010, they became deeply concerned after **tie**'s failure, in the Murrayfield underpass adjudication, to establish a clear basis for compelling BSC to carry out work pending resolution of disputes over change without referring the matter to the dispute resolution procedure and committing to pay BSC's demonstrable costs. Mr Aitchison concluded that the Council officials

"had to try and find, over the coming weeks and months, a way in which we could definitively give the Council some clear policy advice on how to handle the tram project" [[TRl00000022_C](#), page 0074, paragraph 223].

- 19.13** From this point on, rather than rely on **tie** for information and strategic thinking about the project, CEC's senior officials became increasingly directly involved [*ibid.*, pages 0074–0075, paragraph 224]. In Mr David Anderson's view, it was the failure of the Project Carlisle negotiations that:

"effectively took **tie** out of play. The Council now had no option but to step in and take control" [[TRl00000108_C](#), page 0095, paragraph 123].

- 19.14** Around this time, following Ms Lindsay's departure from CEC in July or August 2010, Mr Maclean, CEC's Head of Legal and Administrative Services, became much more closely involved in advising CEC on the Tram project. For many months he had held the view that CEC needed to be more proactive in addressing the project's problems [[CEC00473835](#)]. Mr Maclean's legal abilities and strategic thinking in relation to the project were valued by CEC's senior officials. This appears to have marked a change from the previous position. In contrast to the view that he and other senior officials had of Mr Maclean, Mr David Anderson said that he was "never confident" in advice from Ms Lindsay. He considered that she relied too heavily on the opinion of DLA

and lacked the "authority or gravitas that I would have expected in a Chief Solicitor" [TR100000108_C, page 0062, paragraph 73(e)]. Mr Maclean's increased involvement coincided with the recognition by CEC's senior officials that they had to become more directly involved in finding a solution to the project's problems.

The last resorts: termination of the Infraco contract, or mediation

- 19.15** Having failed through its other initiatives to bring about a resolution of the project's problems, **tie** turned its attention to the possible termination of the Infraco contract. The possibility of termination had been under consideration for some time, but only as a last resort [see, e.g., CEC00575128, a presentation to the Tram Project Board ("TPB") in March 2010 at which termination was described as "the ultimate sanction" (page 0018)]. Between August and October 2010, **tie** served on BSC a series of formal notices under the contract, which, if valid, would be the first step towards **tie** establishing a contractual entitlement to terminate the contract [CEC02084518; CEC02084519; CEC02084520; CEC02084521; CEC02084522, Parts 1–2; CEC02084523; CEC02084524; CEC02084525; Parts 1–2; CEC02084526; CEC02084527; CEC02084628; CEC02084529].
- 19.16** **tie**'s purpose in serving the notices was, in the first instance, to strengthen its position for a negotiated resolution, with termination being an option only if that failed [WED00000641, Part 2, page 0046, paragraph 4.4; Mr Jeffrey TR100000097_C, page 0016, paragraph 290; Mr Bell TR100000109_C, page 0155, paragraph 130]. Prior to serving the notices, **tie** had been advised by senior counsel that, to justify termination of the Infraco contract, it would be necessary for it to produce evidence that BSC had breached it. It decided, apparently based on advice from senior counsel, to issue the notices without first compiling or testing a body of evidence in support of its right to terminate, recognising that this would need to be done before actually terminating the contract. It cited time pressure from CEC as the reason for proceeding in that way [WED00000641, Part 2, pages 0047–0048, paragraph 4.4.1]. In my view this was a serious error, regardless of any pressure from CEC. To serve RTNs without having compiled and tested a sound evidential basis for such notices exposed **tie** to the risk of being unable to act upon the notices, revealing to BSC the weakness of **tie**'s position. The consequence would be to strengthen BSC's hand in any negotiations to resolve the disputes between it and **tie**.
- 19.17** CEC's officials were concerned by the prospect of the Infraco contract being terminated. They continued to regard that as a last resort. Mr Aitchison, CEC's Chief Executive, had:
- "considerable reservations about any attempt to cancel the contractual arrangements with BBS as this could have landed the Council in years of litigation, substantial costs and an incomplete tramline" [TR100000022_C, page 0080, paragraph 237].
- 19.18** Mr David Anderson was concerned about the costs that had been sunk into the project, the likelihood of litigation following termination, the potential for damages claims and the need to make good construction sites even on a temporary basis until a fresh procurement exercise could be concluded [TR100000108_C, page 0092, paragraph 117]. Senior CEC officials could see only political grief and major problems for the city if sites were abandoned and there followed years of potential litigation [*ibid*, page 0095, paragraph 123]. Mr Swinney regarded termination of the Infraco contract as an "undeliverable" option and he would not have agreed to it [TR100000149_C, pages 0096–0097, paragraphs 286–287; TRS00011262].

Mr McGougan, CEC's Director of Finance, recalled a meeting with Mr Swinney on 7 October 2010, at which he remembered

"discussing the importance of securing an asset at the end of the project ... The focus of the meeting was really about how we could reach a solution that protected the public purse as far as possible, secured an asset and delivered a working tram." [TR10000060_C, page 0097, paragraph 245.]

- 19.19** These concerns prompted CEC's officials to seek their own legal advice, independent of **tie**, on terminating the contract [CEC00012498; CEC00012941]. At this stage, they did not have a clear understanding of the extent to which there was an evidential basis for each of the BSC defaults alleged in the formal contractual notices that **tie** had served [CEC00135311]. Nor, for that matter, did **tie**, not having gathered or tested the evidence for doing so.
- 19.20** Discussions between **tie** and BSC raised the possibility, distinct from a unilateral termination of the Infraco contract by **tie**, of achieving a so-called "mature divorce", which meant an agreed separation of the parties [WED00000641, Part 1, page 0042; Dr Keysberg TR10000050_C, pages 0026–0027, paragraph 29; PHT00000036, page 57; CEC00099403].
- 19.21** Despite the reservations about termination, CEC publicly identified it as an option. Having received a report that an acceptable commercial settlement with BSC was unlikely in the short term [CEC02083124, page 0007, paragraph 2.49], CEC noted that, in the absence of robust remediation plans from BSC and a change in its behaviour in relation to progressing the works, serious consideration would need to be given to termination of the contract and re-procuring the work [CEC02083123, page 0004, decision point 4].
- 19.22** Around this time, both Mr Swinney and CEC's officials agreed to engage directly with BSC for the first time. On 13 October 2010, BSC wrote direct to councillors [CEC00012755]. It did so again on 5 November 2010, following Mr Mackay's resignation as chairman of **tie** and TEL [CEC00013012]. BSC instigated a meeting with Mr Swinney, which took place on 8 November 2010 [TRS00011187; TRS00011272]. Dr Keysberg of BB considered this to be the "turning point in the whole contract", at which he was able to discuss BB's perspective on the contract with "a person who understands construction", namely Mr Mclaughlin of Transport Scotland [TR10000050_C, pages 0027–0028, paragraph 30(a)]. That is in contrast to Dr Keysberg's comments about **tie**, which he considered to lack people with experience of major projects, especially in inner city areas *ibid*, pages 0016–0017, paragraph 19(a)]. Following this meeting, Mr Swinney decided that he would tell CEC to mediate with BSC [TR100000149_C, pages 0092 and 0107, paragraphs 275 and 318]. On 15 November 2010, CEC's Chief Executive, Mr Aitchison, confirmed that CEC was now prepared to agree to two of its senior officials (Mr McGougan and Mr Maclean) meeting with BSC [CEC00054284].
- 19.23** On 16 November 2010, Mr Swinney met the Council Leader (Councillor Dawe), Mr Aitchison and Mr McGougan. Mr Swinney's evidence was that he told them to mediate with BSC; and that, although he could not compel them to do so, they agreed [PHT00000050, pages 133–136]; TR100000149_C, pages 0066, 0107 and 0109, paragraphs 191, 318 and 325]. He described Councillor Dawe and Mr Aitchison as "steadily becoming resigned" to the fact that mediation was inevitable *ibid*, page 0109, paragraph 325]. Councillor Dawe said that she was keen to move the project towards mediation as fast as possible: this was a last resort and something had to be done to "knock heads together and get things moving" [PHT00000001, page 186].

- 19.24** On 17 November 2010, the TPB authorised Mr Jeffrey to approach BSC with an offer to mediate [[TIE00896978](#), page 0007]. On 18 November 2010, CEC approved an emergency motion by the Council Leader to instruct CEC's Chief Executive to continue to make preparations with **tie** and BSC for mediation or other dispute resolution procedure [[CEC02083139](#), page 0021].
- 19.25** **tie**'s proposal to mediate came as a surprise to BSC, which expected **tie**, having served RTNs under the contract, to proceed to terminate it [Mr Foerder [TRl00000095_C](#), page 0084, paragraph 253].
- 19.26** The political impetus towards mediation, and its timing, caused some concern for those in operational and advisory roles on the project. For example, an email drafted by Mr Jeffrey to Mr Aitchison on 22 November 2010, described by the former as an "angry draft for discussion", referred to rapid developments the previous week
- "with the public call for mediation, then the mounting political pressure to enter mediation followed by our board meeting on Wednesday and the council meeting on Thursday" [[TIE00304261](#), page 0001].
- 19.27** He noted that he had always favoured an agreed way forward between **tie** and BSC, and that
- "any final agreement will be determined in part by the relative strengths of the parties on entering any process to reach that agreement" [[ibid](#)].
- 19.28** He continued:
- "I believe that one of the factors that created some of the issues we now face were [sic] caused by working to a political timetable, and I am concerned that we are in danger of making the same mistakes yet again." [[ibid](#), page 0002.]
- 19.29** As will be discussed in more detail below, Mr Jeffrey shortly afterwards came to the view that the timing was right for mediation, although Mr Maclean, based on advice from CEC's senior counsel, maintained that it was not.
- 19.30** A few days after CEC's commitment to mediation, **tie** and CEC each received advice, separately and from its own senior counsel, on termination of the Infraco contract. Both were advised that termination came with very considerable risks for **tie** and CEC. On 22 November, senior counsel for **tie**, Mr Keen QC (as he then was), advised that **tie** would be entitled to terminate the Infraco contract only if it could prove that BSC was in default, as that was defined in the contract. If BSC disputed that it was in default, challenged the validity of **tie**'s termination, and sought to insist on its right to complete the works, BSC would be likely to obtain an interim interdict precluding **tie** from entering upon the works until the challenge was resolved. That, he advised, would take at least a year (perhaps a number of years), and if successful BSC would have a claim for damages for loss and expense suffered by reason of **tie**'s wrongful termination notice [[TIE00080959](#), Part 2, page 0030 onwards; see also **tie**'s Project Resolution report, [WED00000641](#), Part 2, page 0058]. Accordingly, Mr Keen's advice was that:
- "unless **tie** is absolutely certain of being able to serve a valid termination notice such a course of action would carry considerable risk" [[TIE00080959](#), Part 2, page 0037, paragraph 14].
- 19.31** Not having gathered or analysed an evidential basis for termination, **tie** did not have the requisite certainty.

- 19.32** On the following day (23 November 2010), CEC consulted Mr Denny QC. His advice was that even **tie**'s strongest termination notice, which related to defects on Princes Street, did not yet give it firm grounds for termination, in light of BSC's response to it. **tie**'s other notices were not, in his view, sufficiently specific in their terms to form a sound basis for termination. He advised that the best strategy for **tie** was not to rely on the existing notices, but through continued operation of the contract to seek to establish clear grounds for termination [[CEC00013529](#)]. That was a process which would take time. There was recognition that **tie**'s credibility would potentially be damaged if, having served RTNs, it did not then follow through on them to terminate the contract [[libid](#), page 0004].
- 19.33** By 24 November 2010, and in light of the legal advice from both senior counsel, CEC's officials and Mr Jeffrey agreed that immediate unilateral termination of the Infraco contract by **tie** was not the preferred way forward [[CEC00013441](#)]. Having previously been concerned about the timing of mediation, Mr Jeffrey now considered that there were reasons to mediate sooner rather than later: the mediation proposal was gathering a momentum of its own; further delay was unlikely to bring advantages for **tie**/CEC; and the political pressure on **tie** and CEC was likely to increase the longer the delay, making a good result less likely [[PHT00000033](#), page 54; [CEC00013441](#)].
- 19.34** Mr Maclean, influenced by the advice of Mr Denny QC, disagreed [[CEC00013537](#); [CEC00014282](#); [WED00000008](#)]. He considered mediation at this stage to be premature, and thought it should be delayed to allow CEC to investigate the facts and develop a clearer and more incisive strategy. He recommended continued enforcement of the contract with a view to establishing fresh and more compelling grounds for termination.
- 19.35** In further advice on 1 December 2010, Mr Keen QC advised **tie** that its RTN concerning the Princes Street defects could, in some respects, be criticised for a lack of specification; and that, although no such criticism could validly be made of the notice concerning design, he questioned whether that notice properly identified an Infraco default. In light of those views, he concluded that, if **tie** gave notice of termination of the contract relying on these notices, there would be a material risk that it would be found to have wrongfully repudiated the contract [[TIE00683941](#)]. This, if anything, made it even clearer that it would be unwise for **tie** to terminate the Infraco contract based on the existing notices. However, in his evidence to the Inquiry Mr Jeffrey expressed his frustration that **tie**, having followed the legal and technical advice that it had received on the drafting of the notices before they were served, found themselves unable to rely on them. It did not appear that **tie** had a clear mechanism for resolving the issues between **tie** and BSC [[TRl00000097_C](#), page 0052, paragraph 317; [PHT00000033](#), pages 105–114].

Discussion

- 19.36** In my view it is clear that, by late 2010, **tie** and CEC had few options left to resolve the difficulties with the Infraco contract.
- 19.37** **tie**'s strategy of serving RTNs and underperformance warning notices under the Infraco contract, without having investigated the circumstances allegedly supporting them, was in my view misconceived. The failure to gather and analyse evidence to justify termination before the notices were drafted and served meant that there was a significant risk that the notices would not be capable of forming a valid, or reliable, basis for termination. That was exactly what transpired. This was damaging for **tie** and CEC. It meant that there was no proper basis for them to terminate the Infraco contract or, perhaps more importantly, persuasively to threaten termination. Even if

tie's primary objective was not to terminate the contract, the persuasive force of the notices was much reduced if they did not rest on solid grounds for termination. The consequence was that the notices gave **tie** and CEC little or no negotiating leverage over BSC. Indeed, in my view, serving them without a fully investigated basis undermined **tie**'s credibility. In its mediation statement sent to the mediator on 24 February 2011 BSC referred to **tie**'s failure to terminate the contract in reliance upon the matters specified in the RTNs as having "seriously compromised the credibility of its position" [CECo2084511, pages 0020–0021, paragraph 7.5]. I agree with that observation.

- 19.38** Further, the failure to carry out the detailed investigation into grounds for termination meant that **tie** and CEC simply did not know whether such grounds existed. Their decision-making was therefore based on assumptions, rather than clear evidence, about the true position.
- 19.39** The move to mediation was a political decision, rather than a strategic one. It was in practical terms taken by Mr Swinney, in response to overtures from BSC, and endorsed by Councillor Dawe as Council Leader and ultimately by CEC. In my view, it was taken out of frustration that **tie** had failed over the first two and a half years of the Infraco contract's implementation to resolve that contract's difficulties, and from the perspective that something had to be done. It is difficult to disagree with that sentiment. The fact that the impetus to act came from Mr Swinney rather than either **tie** or CEC does not reflect well on the latter two.
- 19.40** There is no evidence, however, that the decision was taken as part of a co-ordinated strategy for the employer side of the project (which in its broadest sense comprised **tie**, CEC and Transport Scotland) to achieve an outcome most beneficial to them. Indeed, the evidence rather suggests an absence of joined-up strategic thinking within that group. That is most apparent from the following facts: the commitment to mediation was made before: (i) **tie** and CEC had obtained their legal advice on termination; and (ii) **tie** and CEC had agreed on the best timing for the mediation, followed by the disagreements about that after the commitment had been made. At the time the commitment to mediation was made, Mr Maclean was attempting to formulate a strategy and disagreed with Mr Jeffrey about what it should be. In advance of any decision to seek resolution of a dispute by mediation it seems to me to be fundamental that each party should have considered the strengths and weaknesses of its position and formulated a strategy, based on professional advice, aimed at achieving the best outcome at mediation.
- 19.41** Apart from the failure of CEC and **tie** to agree a strategy before agreeing to mediate, the decision to mediate was taken at a time when Mr Mackay had resigned as chairman of **tie** and TEL and a recruitment process was to be commenced immediately to replace him. CEC's Chief Executive, Mr Aitchison, was also due to retire at the end of the year. When CEC and **tie** took the decision to mediate they must, or certainly should, have appreciated that any mediation would take place with newcomers in the leadership positions in all three organisations involved in the project, namely CEC, **tie** and TEL, none of whom was yet in post. Although those newcomers would not be associated with the acrimony and lack of trust which had built up between the parties on the project, they would on the other hand lack experience of the project, familiarity with its personnel and any detailed knowledge of its issues. This was obviously likely to be to their disadvantage in the negotiations to follow.

19.42 A decision to mediate does not of itself imply anything about the manner in which the mediation should be conducted, or the objectives to be achieved. Nonetheless, the mediation proposal, once made, introduced a momentum of its own and it ought to have been obvious that it would do so. To subject the employer side of the project to that momentum, without a strategy in place for the mediation and without leaders in position, was strategically naïve. In my view, this lack of joined-up thinking was at least in part attributable to the fact that there was no single point of responsibility for decision-making about the project.

CEC's formulation of its approach to mediation

- 19.43** On 3 December 2010, Mr Maclean and Mr McGougan met Mr Walker of BB and a representative of Construcciones y Auxiliar de Ferrocarriles SA ("CAF") [[CEC02084346](#)]. In his opening words at that meeting, Mr Walker said that BSC had "been kind of crying out to talk to somebody for quite a while". He went on to explain his view of the problems with the Infraco contract.
- 19.44** His wide-ranging explanation included the following points: that the Infraco contract price was not fixed, but rather subject to the pricing assumptions in Schedule Part 4 ("SP4") of that contract; that, contrary to the information provided to CEC at financial close that the contract price was 95 per cent fixed, the contract price was only around 45 per cent fixed at that time; that BSC had faced difficulty in assessing the programme implications of changes because of the parties' failure to agree the programme impact of prior changes; the difficulties BSC had faced in attempting to share work areas with the Multi-Utilities Diversion Framework Agreement ("MUDFA") contractor; that BSC had initially, on the basis of an understanding between Mr Walker and Mr Gallagher, carried on work generated by change notices prior to **tie** agreeing to these change notices, but that **tie** then refused to agree the change notices; that the contract change mechanism did not permit BSC to progress work in the absence of agreement about the cost of the change and, in the circumstances of this contract, was therefore inadequate; and that resolving all of the disputes via the dispute resolution procedure was time consuming and expensive.
- 19.45** Mr Walker presented three possibilities for resolving the project disputes. The first was for the parties to work to the letter of the contract and resolve their differences through dispute resolution procedures (which he did not favour because of the expense and delay it would involve). The second was for CEC to identify exactly what it now wanted from the project, and to fix a price for that as far as possible in light of the updated state of knowledge the parties now had. In this context, there remained risks that BSC was unwilling to take, including, in particular, those relating to delays in approving designs, contaminated ground and remaining utility conflicts. Mr Walker made clear that BSC had lost trust in **tie** and no longer wanted to work with it. The third option was for BB to walk away and for CEC to take on its sub-contractors.
- 19.46** Mr Maclean said that he "found the points made by Mr Walker entirely credible" [[TR100000055_C](#), page 0030, paragraph 77].
- 19.47** Following that meeting, Mr Maclean prepared a note summarising his view on matters [[WED00000009](#)], which he circulated on 4 December to Mr Aitchison, Mr McGougan and Mr Inch and on 10 December to Councillor Dawe [[WED00000003](#)]. In his note, he said:

"4.5 tie presently appear to be in a very weak position legally and tactically, as a result of the successive losses in adjudications, and service of remediable termination notices which do not set out valid and specific grounds of termination.

"4.6 It was also clear from the documentation produced at the meeting by [Richard Walker] that [Bilfinger Berger] was extremely well prepared. That may well place them at a tactical advantage ...

"4.9 Legally we (I and our QC) would prefer **tie** to enhance its tactical position first (as indicated in the last note) but I am mindful that a potential window of opportunity has now opened up since the resignation of David Mackay and that [Bilfinger Berger] seem to be welcoming that (and that CEC appears to be willing to enter into a dialogue) ...

"4.12 Grinding on, assessing the design and programme of works and enforcing performance of the contract as a whole with a view to future termination or enabling a tactically better backdrop for mediation to take place is the preferred option.

"4.13 However, there would appear to be a growing desire commercially and politically to move towards mediation notwithstanding **tie**'s (apparently) relatively weak tactical and legal position.

"4.14 Clearly the respective pros and cons will need to be weighed up but if the commercial preference is to seize the opportunity for an early mediation then that could be accommodated. That said, it is likely to have a financial implication with the party in the stronger position faring rather better out of it than might otherwise have been the case. Against that there are financial and other costs involved in allowing matters to continue." [[WED0000009](#), pages 0005–0006.]

19.48 CEC's officials took further legal advice from Shepherd & Wedderburn WS, again independent of **tie**, on the outcomes of the disputes that had been resolved under the Infraco contract [[CEC00013525](#)]. They did so because of their concerns that **tie** had not accurately reported the import of those outcomes. A report by CEC's in-house legal team summarising this advice noted that:

"the three negotiated settlements and three mediations all increased the overall base project cost, meaning that BSC "won". Seven of the adjudications went to BSC and two went to **tie**. Therefore an overall 13:2 BSC versus **tie** win/lose ratio is correct. However, it is also true to say that there has been a significant saving to the public purse through the application of the DRP process." [[CEC02082694](#)]

19.49 This paper is indicative of the view being formed among CEC's officials about the weakness of **tie**'s position under the Infraco contract. It confirmed their view that **tie** had put a positive gloss on the adjudication outcomes [Mr N Smith [PHT00000006](#), page 105]. It also, however, acknowledged savings **tie** had achieved from the estimates initially submitted by BSC.

19.50 On 6 December 2010, Mr Maclean wrote to Mr Jeffrey to confirm that, following a meeting that day with Mr Aitchison and Mr McGougan:

"CEC's preferred strategy (for commercial reasons) is to move to mediation on a short-form basis, ideally with a view to both sides 'walking away' from the Infraco contract. This could perhaps (at least initially) take place under the guise of a rebased route and a new contract with the consortium." [[TIE00668156](#)]

19.51 Thus, early in December 2010, it appears that CEC's preference, or at least that of its officials, was not for separation from BSC but rather for a new contract with BSC for a shortened route. This is, in outline form, the basis for the agreement reached at mediation in March 2011.

- 19.52** However, this strategy was contrary to Mr Maclean's own tactical instincts. In his evidence to the Inquiry, Mr Maclean said that a:
- "short form mediation was CEC going in without having all its ducks in a row hoping to do some sort of a deal. My clear view from a legal and financial perspective was that you only go into something when you're ready for it. I advised that mediation for a contractual dispute such as this would take a lot longer than two or three days but I can understand why that was undertaken. It was because there were huge political and reputational issues. The decision was not all just legal and financial. I think one of the questions here is whether I agreed with the strategy that came out of the meeting on 6 December 2010? Legally and tactically, no I did not. Politically and pragmatically I could understand why that decision was taken. Whilst it was a matter for others, I could see the tension between legal, financial and tactical against political and pragmatism." [TR10000055_C, pages 0031–0032, paragraph 80.]
- 19.53** The evidence of Mr McGougan, who had been directly involved in the Tram project for much longer than Mr Maclean, was that:
- "Alastair was suggesting that [the mediation] should be put off until they did more legal diligence. By that time a lot of people, including probably myself, felt that there had been enough legal diligence and that we needed to try another route." [TR10000060_C, page 0104, paragraph 264.]
- 19.54** Both CEC and BSC wanted a swift solution. For example, at the meeting on 3 December 2010, Mr Walker had said the key thing for the consortium was a "speedy resolution" [CEC02084346]; in his advice note of 24 November 2010, Mr Maclean had observed that, although the Internal Planning Group ("IPG") was yet to agree on what CEC should seek to achieve:
- "The working assumption is that CEC would like an operational tram from Edinburgh Airport to at least St Andrew Square for the best price possible **and as soon as possible.**" [WED0000008; emphasis added.]
- 19.55** That essentially ruled out the more considered, investigatory preparation advocated by Mr Dennys QC and Mr Maclean.
- 19.56** On 13 December 2010, Mr Aitchison, Mr McGougan and Councillor Dawe met Mr Darcy of BB and Dr Schnependahl of Siemens [CEC02084349]. Councillor Dawe restated CEC's desire to have trams operational in Edinburgh as quickly and as economically as possible. Mr Darcy indicated that BSC, too, remained committed to those objectives. He confirmed that BSC were aware that termination of the contract was not now to be discussed at CEC's meeting on 16 December. He said that BSC believed that it would cost between £100 million and £150 million more than the currently approved funding to build the line between the Airport and St Andrew Square (which would mean a total project cost of between £645 million and £695 million). The consortium representatives repeated its wish for **tie** to be replaced by a consultant with greater technical know-how and practical experience of contract administration than **tie** had; and insisted that CEC participate in the mediation. They expressed appreciation at having finally met the most senior people at the political and official level in CEC.
- 19.57** On 14 December 2010, McGrigors submitted a report to **tie** on certain issues relating to the project, including termination of the Infraco contract, drawing on the advice of Mr Keen QC [TIE00080959, Parts 1–2]. It advised that a detailed forensic analysis would be needed if **tie** wished to establish that an Infraco Default had occurred. It

noted that such an analysis was now under way, but that **tie** had issued the RTNs without having carried out such an analysis. In that regard, the report noted:

"5.8 It would appear that this forensic exercise has not been carried out in relation to the RTNs which have been issued by tie: the selection of issues which were to form the basis of the RTNs, and the subsequent production of the RTNs themselves, emanated from a series of discussions between various members of the **tie** team and external advisers.

"5.9 Following those discussions, the RTNs were drafted, and then subject to review by members of the **tie** team and some advisers. Whilst this process involved some element of testing and challenge, with external expert engineering views being sought, it was neither preceded, nor followed, by a rigorous forensic examination based on all relevant documentation and witness evidence. Isolated items of documentation were identified, but these were few in number, and largely consisted of correspondence exchanged between the parties after the events complained of, setting out their arguments. The documents did not consist of the underlying evidence that would support the assertions made by tie. Formal independent expert evidence of the type that would be required in the context of court or other proceedings was not obtained." [ibid.](#), Part 1, page 0012.]

19.58 McGrigors' report also noted a strategic option that had not been used:

"11.4 An alternative approach to termination on the basis of existing RTNs and litigation is for **tie** to seek a declarator from the courts on the existence of Infraco Defaults which provide the basis for existing RTNs as well as new ones. This approach should enable work to proceed in the interim, to the extent that the work relates to undisputed obligations on the part of Infraco, pending resolution of the issues by the courts. The actions referred to in paragraph 11.3 [viz., a detailed forensic investigation and a definitive expert opinion] above are equally necessary in relation to this approach.

"11.5 This alternative approach could potentially involve similar timescales to proceedings which take place after termination. However, the stakes would be considerably lower because work should continue and **tie** would be in a position to review its options in the lights [sic] of the court's decision." [ibid.](#), Part 2, page 0029.]

19.59 On 15 December 2010, the TPB approved Mr Jeffrey's recommendation for a "fast-track" mediation to commence as soon as possible, with the aim of completing a route from the Airport to St Andrew Square [[TIE00897052](#), page 0008]. The TPB increased the project budget to the full extent of the approved funding (£545 million) and agreed to ask the TEL Board to inform CEC's Chief Executive that the £545 million limit required to be extended. It was noted (consistently with the terms of TEL's operating agreement [[CEC00645838](#), page 0009, clause 2.22]) that an increase in the budget would require the approval of CEC [[ibid.](#), pages 0011–0012]. It was therefore clear that the TPB, **tie** and TEL had reached the limit of their authority to increase project costs. By this stage the only realistic outcome was a settlement at a higher cost than the limit of £545 million authorised by CEC. Any increase in that limit required the approval of CEC: in other words, the councillors.

19.60 In my view, that was a consideration of the utmost importance. Given the political divisions that had affected the project, a request for additional funding was likely to be a sensitive matter. There would have been considerable uncertainty about any such request being approved in the absence of some resolution to the project's

difficulties. To settle the political waters and obtain CEC approval for an increase in funding, it seems to me that there was a political imperative for the CEC negotiators to emerge from the mediation with a resolution of the project disputes.

- 19.61** At its meeting on 16 December 2010, CEC was given a brief update on arrangements for the mediation. The report gave no indication of the approach that CEC's officials would take, except to say that they would approach the mediation "constructively", while

"at the same time all strategic options [would] continue to be explored and developed by **tie** and the Council" [[CEC01891570](#), page 0003, paragraph 3.6].

- 19.62** In December, following concerns that had been expressed at CEC's meeting of 14 October 2010, councillors were given access to an unredacted version of the updated business case dated August 2010. The business case noted that the "main focus" of incremental delivery had been on a first phase between the Airport and St Andrew Square and that, in arriving at a recommendation for incremental delivery, consideration had been given to "the significant downsides of project cancellation" [[ibid](#), page 0008]. The business case stated that:

"Based on the work undertaken to date, ... a first incremental phase from the Airport to St Andrew Square is capable of being delivered within the current funding commitment." [[ibid](#), page 0010; page 0012, paragraph 2.6 and page 0032, paragraph 5.3.]

- 19.63** When councillors were given access to the updated business case that view was already cast into serious doubt, if not completely superseded: the papers for the November meeting of CEC's IPG indicated that current estimates for a line to St Andrew Square were between £545 million and £600 million [[CEC00010632](#), page 0004]. The papers for the December IPG meeting indicated that the cost was likely to be in the region of £600 million should the work be re-procured [[CEC00013539](#), page 0005]. As noted in paragraph 19.56 above, at the meeting on 13 December BSC's representatives had indicated that the cost for a revised deal with them for that line would be between £645 million and £695 million.

- 19.64** Mr McGougan's evidence was that:

"In December CEC wouldn't be confident that the line from the airport to St Andrew Square could be delivered within the funding commitment [of] £545m. At this stage we couldn't be very confident about any of the figures because there was no agreed programme, there was no agreed resolution to the commercial issues and there was no indication of changed behaviour from the contractor." [[TR100000060_C](#), page 0108, paragraph 271.]

- 19.65** Nevertheless he considered that extra borrowing to complete a line would be prudent since that would produce an asset capable of generating future revenue surpluses. The alternative, namely termination, would mean the loss of all expenditure to date in return for no completed asset, and the need to write off all of that expenditure in one year to CEC's revenue account [[ibid](#), page 0108, paragraph 272]. There was a conflict in the evidence about Mr McGougan's statement about the need to write off all expended capital in one year to the revenue account, and I will consider that later.

- 19.66** At the CEC meeting on 16 December 2010, an update was given to councillors about the refreshed Tram Business Case and progress on mediation between **tie** and BSC and other issues. The administration of CEC proposed a motion in the name of Councillors G Mackenzie and Wheeler, the first two parts of which were to note

the position in respect of the refreshed Tram Business Case and to note the steps taken to date to take forward a mediation proposal. In response, an amendment in the names of Councillor Parry on behalf of the Labour Group and Councillor Balfour on behalf of the Conservative Group was passed expressing regret that the updated business case provided detailed information only on the Airport to St Andrew Square phase, and failed to provide the information that CEC had sought following its June 2010 meeting on "the capital and revenue implications of all the options currently being investigated", including phased delivery from the Airport to each of the Foot of the Walk, Ocean Terminal and Newhaven [[CEC02083128](#), page 0021 onwards].

- 19.67** Following a meeting with BSC representatives on 20 December 2010, Mr Jeffrey reported that Mr Walker had suggested the parties mediate on the Project Carlisle proposal (which, in its most recent form, had been for a revised agreement for the delivery of a line between the Airport and Haymarket) and, if that failed, consider an agreed termination. He also reported that when Mr Walker was asked what had changed since the parties had failed to reach agreement on Project Carlisle, he had said that from his discussions with CEC it appeared that CEC, and in particular Mr Maclean, was now more sympathetic to BSC's arguments [[TIE00105840](#)].
- 19.68** **tie** produced a report for the TPB dated 22 December 2010, entitled 'Project Resolution (incorporating Carlisle and Notice)' [[WED00000641](#), Parts 1–2]. On the so-called "enforced adherence" option, under which **tie** would continue its robust enforcement of the Infraco contract, the report said that:
- "[I]t is unlikely that this will deliver a tram network with any degree of cost or programme certainty at all and current progress across nearly all the route has stalled indefinitely. Carrying on is unlikely to act as a catalyst for improved behaviours by the Consortium – infact [sic] we are likely to see more of the same. Additionally, the impact on **tie** and it's [sic] team becomes harder to manage and predict." [ibid](#), Part 1, page 0009, paragraph 1.6].
- "... [W]e have not resolved our principal commercial differences to any material extent." [ibid](#), Part 2, page 0062, paragraph. 8.1].
- "[I]t is simply not possible to provide a reliable estimate of outturn costs and completion time for any element of the project under the enforced adherence option. In this respect it fails completely to deliver on the requirement to deliver cost and programme certainty." [ibid](#), Part 2, page 0064.]
- 19.69** The other options were to revive Project Carlisle or terminate the Infraco contract (either unilaterally or by agreement), with sub-options of carrying on, postponing or cancelling the project [ibid](#), Part 1, page 0009, paragraph 1.6]. The report recommended that **tie** mediate with BSC, with a focus on the options of an amended scope of the project along the lines of Project Carlisle or an agreed termination of the Infraco contract [[ibid](#), Part 1, page 0010, paragraph 1.8].
- 19.70** The report noted that contingency planning had begun to identify the tasks required should the Infraco contract be terminated [[ibid](#), Part 2, chapter 9, from page 0070]. This envisaged certain work streams being initiated "immediately following any termination", including "reprocurement". In relation to these, the report noted that:

"In many cases these workstreams have already commenced ... "

"The totality of these workstreams is envisaged as being completed by September 2011 at which time the strategy for completion of the project would be presented for approval."

"These workstreams will require the commitment of additional funding for the project in advance of clarity and certainty with regard to outturn costs, phasing and funding and in advance of determination of either out of court settlement with BSC or litigation."

19.71 From page 74 of the report [[ibid](#)], there is a discussion of the "reprocurement" work stream. In it, **tie** envisaged, after termination of Infracore, reviewing arrangements with existing sub-contractors to assess **tie**'s ability to step in. This would involve consideration of whether those sub-contractors were willing to do the required work at a price and on terms acceptable to **tie**. Also following termination, **tie** would embark on an exercise to procure completion of an integrated and assured design prior to the re-procurement of any new works. This might involve novation of System Design Services ("SDS") back to **tie**, or the engagement of a new designer. Value engineering would be considered with a view to a significant reduction in anticipated cost before re-tendering the works. It was noted that initial workshops had taken place on the development of a re-procurement strategy, and **tie** had appointed Cyrill Sweet to assist. The report noted that:

"Following a mediated settlement or termination we would embark on full development of a strategy ...

"For planning purposes we have assumed that **tie** engages in a 9 month exercise to develop and refine a reprocurement strategy ... At the end of the 9 month period a gateway review will be undertaken to determine validity of reprocurement strategy and costs thereof alongside then extant funding and affordability constraints." [[ibid](#), Part 2, page 0076.]

19.72 From that summary, it is clear that, at least at 22 December 2010, although work was under way in planning for re-procurement of the project works, some considerable work remained to be done before the details of any re-procurement would be resolved. Indeed, many of those details would not be known until after the Infracore contract had been terminated. It is also clear that any re-procurement would have involved significant delay to the project.

Discussion

19.73 As a preliminary matter, I wish to address Mr McGougan's evidence, mentioned in paragraph 19.65 above, about the treatment of past capital expenditure in the event of termination resulting in no capital asset, referred to as "separation" in some parts of the evidence. The first point to note is that there would be no requirement to reconsider past capital expenditure if any part of the tram line was completed and became operational. In that situation there would be an asset in exchange for the capital expenditure. It would not matter that the capital expenditure was incurred in the expectation of the completion of a longer route. On the other hand, if there was no capital asset in exchange for past capital expenditure, it was clear from the evidence that some provision had to be made in CEC's accounts for that event. What provision should be made and its effect was, however, a matter of dispute. Mr McGougan considered that all of the past capital expenditure would need to be charged to the revenue account in the year in which separation occurred. In that event he envisaged a revenue charge of about £500 million in one financial year and CEC would not be able to meet that cost from its reserves.

19.74 The Inquiry heard evidence from Mr Fair of the Chartered Institute of Public Finance and Accountancy ("CIPFA"). CIPFA is the only chartered accountancy body in the world that specialises in public-sector accounting [[PHT0000057](#), page 128]. Mr

Fair carried out a review of some of CEC's decisions and management practices relating to the Tram project against standards of best practice that were in place at the relevant time. Mr Fair was critical of Mr McGougan's evidence mentioned in paragraph 19.73. Although Mr Fair agreed with Mr McGougan that CEC would have struggled to meet a cost of almost £500 million from its reserves, he did not agree that the accounting rules demanded such an approach. In terms of the Code of Practice on Local Authority Accounting Terms of Finance and International Accounting Standards an asset is capitalised when one means it to be capitalised [*ibid.*, page 194]. I understood that in practice assets shown as capital in accounts from previous years would not be transferred to revenue if the project failed to deliver an asset. Rather, it was his professional opinion that, on cancellation of the project, any expenditure treated as capital in previous years accounts would be impaired and would suffer an impairment loss, being the difference between the value of the asset in the capital accounts to date and its recoverable amount. That loss could be ameliorated through statutory mitigation and spread over future years [*ibid.*; [TR100000264](#), pages 0032–0033, paragraph 3.42].

- 19.75** I preferred the evidence of Mr Fair on this matter. He was an independent expert from a unique professional body specialising in public-sector accounting, who was an impressive witness. His evidence was supported by the Code of Practice on Local Authority Accounting in the United Kingdom 2010/11 [[WED00000643](#), Part 4, pages 0138–0139, paragraph 4.7.2]. I considered that Mr McGougan was in error when he thought that the entire capital expenditure would be treated as revenue expenditure in a single year. Nevertheless it is clear that there would have been an impact on CEC's funds available to provide public services in future years. I am unable to assess the extent of that impact because that would have depended upon the success of the mitigatory measures and the period over which the mitigated sum could be spread.
- 19.76** Mr McGougan also speculated that there was a possibility that the Scottish Ministers would seek repayment of its grant, resulting in a revenue payment from CEC to them of almost £500 million in a single financial year. At the stage of mediation grant payments were closer to £400 million but that is not material because the consequences of repaying that sum in a single year would also be devastating. Mr Fair had not seen any examples of a Government requiring repayment of a grant in a similar situation but he accepted that it was a possibility. However, even if a demand for repayment was made, he considered that a demand for repayment of the entire sum in a single financial year would be unlikely. He recognised that whether to demand repayment and, if so, on what terms would be a political decision for Ministers at the appropriate time. I have no doubt that in taking any decision Ministers would have regard to all relevant considerations, including the implications of their decision on the provision of services within the local authority area. In reaching that view I have taken into account the evidence of Mr Sharp to the effect that, in a situation where the cost overrun of the project was such that it had a severe impact on CEC's ability to provide services and forced it to consider such measures as school closures, Ministers would have had to reconsider their decision to cap the grant at £500 million. The reason for his view was that they would have found the impact on services without their intervention to be politically unsustainable [Mr Sharp [PHT00000015](#), pages 119–120]. Similar considerations would have applied when Ministers were considering demanding repayment of the grant. As for the implications of a demand for repayment in a single financial year of a sum of about £400 million I have had regard to the evidence of Councillor Dawe when she was considering the implications of a revenue liability of £161 million in a single

year. She had sought advice from the Director of Finance about the implications of such a liability for Council services. She described receiving "pages and pages of cuts to schools, libraries and other community services". Almost every service would suffer cuts [TR10000019_C, page 0211, paragraph 794]. Any demand for the repayment of the grant in a single financial year would have even greater adverse implications for service provision in Edinburgh because the sum to be repaid would significantly exceed £161 million. On that basis, I agree with Mr Fair's assessment that the likelihood of Ministers demanding repayment of the total sum in a single financial year was remote [PHT00000057, page 194].

- 19.77** It is clear, in my view, that the shift in project control from **tie** to CEC which was under way in the latter half of 2010 brought with it renewed confidence that a resolution might be achieved under which BSC would complete a tram line; and that this was based on BSC's perception that CEC would be more amenable to their arguments than **tie** had been.
- 19.78** It is also clear, however, that CEC went forward to mediation against the instincts of the head of its legal service, Mr Maclean. The reason for doing so was the desire on all sides to reach a resolution sooner rather than later, and the political momentum behind the mediation proposal.
- 19.79** Having met BSC's representatives, Mr Maclean's view that was that BSC was much better organised for a mediation than CEC was; that **tie** was in a much weaker position than BSC, given the adjudication outcomes and the absence of a basis for its termination notices; and that **tie**/CEC would be better advised to carry on enforcing the Infraco contract until **tie** got itself into a better position for negotiations.
- 19.80** Mr Maclean was well placed to assess his state of preparation, and CEC's, compared with BSC's. I therefore accept his view that BSC was much better organised than CEC was in December 2010. It is not at all surprising that was the case. BSC had been intimately involved in the project's difficulties since the outset, whereas CEC was one step removed. It was only in the latter part of 2010 that CEC started to take a more direct role in the project. CEC lacked a detailed knowledge of the facts and circumstances of the disputes and remained sceptical that **tie** had given it a full and accurate understanding of them. It also lacked in-house expertise on construction disputes, in contrast with BB and Siemens, which were very experienced construction contractors.
- 19.81** I also accept that **tie** (and thus CEC) was in a much weaker position than BSC as a consequence of the adjudication outcomes and the lack of a proper basis for the termination notices. That should not be taken too far, however: **tie** had achieved a measure of success in reducing the amounts initially claimed by BSC in its change estimates, and in undermining the approach BSC had taken in its extension of time claim in the MUDFA revision 8 adjudication [CEC00407650].
- 19.82** In the written closing submission on behalf of BB issue is taken with the claimed savings by **tie** as a result of the adjudication process [TR100000292, pages 0155–0163, paragraphs 266–281A]. In doing so BB refers to the statement in the Selected Ex-Tie Employees ["SETE"] submission that "[t]he savings through the DRP process were significant, the process reduced claims totalling £24m down to £11.2m" and suggests that this misquotes paragraph 44 of the Audit Scotland Report dated February 2011 [ADS00046, Part 1, page 0021], upon which it is claimed to be based. The justification for that criticism is that paragraph 44 "provides commentary on the settlement of Notified Departures, not the outcome of the adjudications" [TR100000292, page 0163, paragraph 281A]. This error is stated to be "a common

and repeated misunderstanding propagated by TIE" and I am invited to prefer BB's analysis of the adjudication outcomes. Having considered this criticism, I do not agree that the statement in the SETE submission is based upon a misinterpretation of the Audit Scotland Report.

- 19.83** It is correct that paragraph 44 of the Audit Scotland Report [ADS00046, Part 1, page 0021] is not confined to the adjudication process. It considers and analyses the outcome of the 816 notices of claim submitted by BBS and illustrates that analysis by a diagram. From that diagram, and the text in paragraph 44, it appears that 198 claims were settled by **tie** paying to BBS £23.8 million against the sum of £44 million claimed by BBS. Moreover, of the 198 claims settled, 178 were settled informally and 20 were settled through formal dispute resolution procedures. The formal procedures were resolved in the following manner: 7 by negotiation; 2 by external mediation; and 11 by adjudication. The settlement of these 20 claims resulted in a payment of £11.2 million against BBS's claim for £24 million. It is clear from that analysis that the statement on behalf of SETE quoted in paragraph 19.82 is correct. Having said that, I consider that it is over-simplistic to compare the sums originally claimed by BBS in respect of notified changes with those ultimately paid by **tie** for these changes. The reduction in the sums claimed may be explained in a variety of ways, such as, revision of the scope or nature of the change works by engagement and discussion following the initial change notice with a consequent reduction in the ultimate cost of the works occasioned by the change notice or for many other acceptable reasons. On the other hand, it is also possible that the original estimate was inflated but reduced when it was challenged. On the information available to me I am unable to explain the reasons for the reduction in cost of each of the 198 notices of claim, or even the 20 notices of claim that were referred to the dispute resolution procedure. However, I am able to conclude that it was appropriate for **tie** to scrutinise estimates by BBS in respect of the change notices as the reductions were indications that, if they did so, there was a good chance it would prove to be possible to do the work for less than BBS had initially estimated.
- 19.84** I have more difficulty in accepting the suggestion that **tie**/CEC would have been better served by continuing to enforce the contract with a view to improving their position for negotiations. At this distance of time, one can only speculate about whether doing so would have yielded an improvement in **tie**/CEC's negotiating position. It is possible that **tie** might have established a stronger foundation for terminating the Infracore contract. Since that would have given it a viable alternative to a revised deal with BSC, and one which did not require BSC's co-operation, it might have significantly improved their negotiating position. However, it would not have been a genuinely viable alternative unless **tie**/CEC could also be confident of securing another contractor to complete the work on a reasonable timescale and for a reasonable price. There was no basis in fact, at that point in time, for **tie**/CEC to be confident that either of these would be the case.
- 19.85** Furthermore, pressing on in the way in which Mr Maclean proposed certainly involved risks: it might have achieved nothing except to increase the number of disputes, cause further delay and deepen the antagonism between the parties. Indeed, that antagonism might as a consequence have extended to include CEC as well as **tie**. It might have resulted in the loss of the relative degree of goodwill that CEC enjoyed at that time, and of the opportunity to mediate.
- 19.86** There was, in my view, also a risk that an ongoing lack of progress with work, associated with the risk that CEC would ultimately bear the cost consequences of continued delay, would place considerable political pressure on CEC to the

detriment of their negotiating position. That was a consideration of importance, given that the TPB, TEL and **tie** had reached the limit of their approved funding: pressing on with the contract would almost certainly have brought about a need for an increase in the project budget. That would have required the approval of CEC; and given the political divisions which already existed, the prospects of obtaining such approval would have been uncertain, especially if it were sought before any resolution of the contractual disputes [Mr Coyle [PHT00000010](#), page 76 onwards].

- 19.87** Mr Maclean's advice is readily understandable, and may reflect a lawyer's instinct to understand all aspects of a dispute before deciding on the best way to resolve it. He was, however, a relatively new arrival to the project and was employed by CEC, which was itself one step removed from the details of the project. He was influenced by advice from Mr Dennys QC, who had himself only recently been instructed in the project and who also lacked a full understanding of the project's circumstances. One has to set against their views the equally instinctive, but perhaps better informed, judgement of those with longer experience of the project that it was better to mediate now rather than later. Their experience was of having tried, and failed, to gain the upper hand.
- 19.88** In all the circumstances, I am not prepared to find that it was unreasonable for CEC to proceed with the mediation against Mr Maclean's advice. I accept, however, that it did so from a position of considerable weakness and in a state of poor organisation when compared with BSC; and that this was likely to undermine the prospects of CEC negotiating a settlement which departed much from BSC's demands. I should emphasise, too, that I do not criticise Mr Maclean for his advice. His view was certainly defensible and, as I note above, I can understand why he held it. The circumstances in which he gave his advice were very challenging indeed and in such circumstances there is rarely only one single correct course to take.
- 19.89** Should CEC have become involved sooner? Some witnesses suggested that it should have. For example, Councillor Balfour, the Conservative group leader at the time, said that CEC's Chief Executive (Mr Aitchison) or leader (Councillor Dawe) ought to have been in contact with BSC nine months or a year earlier than the Mar Hall mediation [[TR100000016](#), page 0019, paragraph 58]. In my view, however, that would not have been appropriate, having regard to the project governance structure. **tie**, TEL and the TPB had been given the task of delivering the project. **tie** was the contracting party. Although I consider that the expertise in **tie** for managing a project of this scale was limited when compared with engineering consultancies who had been involved in similar transportation projects, it was greater than the equivalent expertise in CEC. Throughout 2009 and 2010, **tie** had strategies in place which aimed to address the project's problems. Although the suggested involvement of CEC a year earlier than the Mar Hall mediation might have resulted in savings of expenditure because of an earlier resolution of the disputes between **tie** and BBS, it was reasonable, in my view, for CEC to allow those strategies to be implemented and to intervene only once it became clear that **tie**'s strategies had failed.
- 19.90** In those circumstances, however, it was almost inevitable that CEC would find itself relatively unprepared. That was a consequence of the governance structure. Almost all the project governance and expertise (**tie**, TEL and the TPB) sat outside CEC. CEC had delegated much of the responsibility for delivering the project but, as the project funder of last resort, bore all the risk. The events in late 2010 are a reminder that, although the management of the project can be delegated, the responsibility for managing its risks cannot.

- 19.91** In the latter part of 2010 it was already becoming clear that the main alternative to a revised deal with BSC, a negotiated separation from them with re-procurement of the project works, would involve uncertainty about whether, and if so at what price, the works could be re-procured. Even if re-procurement could be achieved there would be further delay to allow the re-procurement to take place.
- 19.92** In its report mentioned in paragraphs 19.57 and 19.58 above, McGrigors discussed a possible alternative strategy of seeking a declarator from the courts that an Infraco Default existed, thereby confirming that there were grounds for **tie** to terminate the contract. Such an approach would have avoided the considerable risks associated with **tie** proceeding directly to termination and would allow work to proceed pending a judicial determination. It would have provided a forum in which **tie**'s allegations of BSC default could be properly and dispassionately assessed. It was not, however, a practicable option by the time McGrigors proposed it: it would have required the detailed forensic investigation to be carried out into the alleged default which had not been undertaken hitherto, and almost certainly would have led to relatively protracted litigation, although merely raising the litigation might have brought some improvement in CEC/**tie**'s negotiating position. Had this option been identified earlier, and assuming that the forensic investigation had been carried out and supported **tie**'s allegations of Infraco Default, it had the potential to place greater pressure on BSC and therefore increase **tie**/CEC's negotiating leverage over them. Whether **tie**/CEC would have benefitted if this proposed course of action had been undertaken earlier is now speculation but the failure to do it was, in my view, a missed opportunity.

Preparations for mediation

- 19.93** Dame Sue Bruce started work as CEC's new Chief Executive on 1 January 2011, and she immediately took a leadership role on the Tram project [[TR100000084](#), page 0004, paragraph 12]. She was not responsible for the decision to mediate, but was confronted with the task of implementing it. She had received briefings on the project prior to her arrival, but found these inadequate [[ibid](#), pages 0004–0005, 0007, paragraphs 13–15 and 22]. She did not have any preconceived strategy or preferred outcome, but acknowledged that there was "a general feeling that people wanted to finish what had been started" [[ibid](#), pages 0005, 0017–0018, paragraphs 18 and 54]. That is consistent with the evidence of Mr McGougan about his meeting with Mr Swinney in October, when the focus had been on how to secure a tram line for the investment made [see paragraph 19.18 above].
- 19.94** Shortly after her arrival, Dame Sue Bruce engaged a quantity surveyor called Mr C Smith as an adviser. In the period prior to mediation his role was to assist her in preparing for the mediation. Councillor Dawe, whom Dame Sue Bruce consulted prior to recruiting Mr Smith, said that Dame Sue Bruce had said the engagement of Mr Smith was essential because CEC lacked the engineering capacity to make informed comments on some aspects of the scheme [[PHT00000001](#), pages 193–194]. In her evidence to the Inquiry, Dame Sue Bruce was somewhat more frank, and said that she needed someone she knew to be competent and whom she could trust and, having worked previously with Mr Smith, considered him to meet those requirements [[PHT00000054](#), pages 15–18; [TR100000084](#), pages 0009–0010, paragraph 31]. I accept the evidence that, prior to Mr Smith's appointment, CEC lacked someone with his construction project expertise. The project structure assumed that such expertise in relation to the Tram project would have been found in **tie**. Given the mistrust that had built up between **tie** and CEC's officials, the appointment of a new adviser, independent of **tie**, made sense.

- 19.95** Mr Smith was an experienced chartered surveyor, with a background in quantity surveying and project management of large-scale projects. That background and his training meant he was capable of fully understanding the building costs of a civil engineering project [PHT00000053, page 2]. He described his role in the run-up to mediation as including ensuring that CEC would be “well prepared to go into mediation and to understand what could be a possible good outcome from that experience” [ibid, page 4]. The timing of his appointment meant that he was not able to review all of the project documentation, and his exposure to project cost information was mainly focused on the so-called “deck chair” spreadsheet prepared by **tie**, which will be discussed below. **tie**, through Mr Murray and Mr Jeffrey, was the main source of financial information about the project. Mr Smith described difficulties that he encountered in understanding the information on costs when he first became involved [ibid, pages 8–9], and in getting detailed information underlying **tie**'s estimates [ibid, pages 7–8, 18–24]. This is important to understand, because one of the most pertinent issues at mediation, if not the most pertinent, was the increase in project cost likely to be crystallised in any agreement reached there. As Mr Smith put it, there was a question mark over his ability to form a view about project costs. He had to take **tie**'s information as being presented in good faith. Nonetheless, he was instinctively sceptical of **tie**'s cost estimates, which he considered to be routinely too low. He said that other advisers shared that view, and that the basis for the difference appeared to be a different view on the correct interpretation of the contract.
- 19.96** To help to address its lack of detailed information about the commercial aspects of the project, CEC seconded Mr Coyle into **tie** from late 2010. He was an accountant in the Finance Department of CEC who had been allocated the City Development Department as one of his clients. He had worked on the project since 2007 and considered himself to have had “[q]uite a lot of understanding, certainly in terms of the make-up of the financials of the numbers” [PHT00000006, page 171], by which he meant the potential outturn costs of the project. His role on secondment was to observe **tie**'s production of cost estimates, but also to question how they were calculated. He said that it was difficult to come to a view on cost estimates. **tie**'s commercial team was calculating its potential liabilities under the Infraco contract. In his evidence to the Inquiry, Mr Coyle had no recollection of the way in which **tie**'s liabilities were calculated and, in general, had poor recollection about the calculations. My impression from his evidence was that he was entirely reliant on **tie** for information about project costs and had formed no meaningful views of his own about them. That would be entirely consistent with Mr Coyle's professional background as an accountant rather than as a specialist in construction project costs. Mr Coyle was, however, the CEC official with the greatest exposure to **tie**'s cost estimates. CEC officials had no particular understanding or perspective on the project costs distinct from that of **tie**. They took no advice independent of **tie** on the details of project costs and relied upon the assumptions **tie** had made in arriving at its cost estimates. In the context of calculating estimates for the likely cost of a new deal with Infraco Mr Coyle said:
- “The estimates would have been largely prepared by **tie** ... I can't recall that the Council had any particular view on numbers that were coming from – from BSC or in Project Phoenix. The numbers that we were looking at would have been primarily prepared by **tie**.” [ibid, page 186.]
- 19.97** He also considered that in the lead-up to mediation, CEC officials were “wholly reliant on **tie**” [ibid, page 188].

- 19.98** At the meeting of the TPB on 12 January 2011, it was agreed that certainty around price and delivery were key requirements of any mediated settlement. In my view, that reflected CEC's low tolerance for risk on the project. The TPB also discussed the governance arrangements for future decision-making about the mediation. These envisaged the **tie** Chief Executive presenting a recommendation to the TPB; the TPB considering that recommendation and making its own recommendation to the TEL Board; the TEL Board considering that recommendation and making its own recommendation to CEC; and the full council meeting to consider and, if necessary, ratify the TEL Board recommendation [[TIE00897058](#), pages 0006–0007]. In the event, those governance arrangements were not followed, and key decisions were taken by CEC's officials. **tie**, TEL and the TPB had little or no formal role in decision making about the mediation or the settlement agreed there. That reflected their lack of authority to agree to any increase in costs over the approved budget.
- 19.99** On 18 January 2011, Mr Cox, the interim chairman of TEL, wrote to CEC's Tram Monitoring Officer ("TMO") (Mr Poulton) to report that TEL and **tie** were unable to make any further financial commitments given the £545 million limit on their existing delegated authority [[TIE00109225](#)]. He requested authority to make financial commitments in excess of that limit. Mr Poulton's reply noted that:
- "Council officers are presently considering when would be the most appropriate time to seek further funding approval and this will be done as soon as practicable. However, clearly the forthcoming mediation and purdah will have a significant bearing on this." [[TIE00082534](#)]
- 19.100** The reference to "purdah" appears to relate to the period immediately prior to the Scottish Parliament election on 5 May 2011 when officials in local authorities and in the Scottish Government would have had to be circumspect in their actions to avoid any suggestion of influencing the outcome of that election. The note highlights both that project spending commitments had reached the limit of CEC's existing authority and that political considerations affected the timing of any request to increase the authorised spending level.
- 19.101** CEC's IPG met on 21 January 2011. This was the first meeting of the IPG following Dame Sue Bruce's appointment as Chief Executive. The Highlight Report to the IPG identified three potential outcomes from mediation: a revised Carlisle deal; a mature divorce; and grinding on with contract adherence. It set out a high-level summary of the pros and cons of each option [[CEC01715625](#), page 0005]. The table noted that "grinding on" had no benefits and would result in funding running out; and that although a "mature divorce" would offer an opportunity to re-tender the works, it would also cause delays that "would likely lead to a lack of political support". On a revised Carlisle deal, the table noted that it had the potential for works to progress quickly, but there remained a lack of trust in BSC and limited price certainty.
- 19.102** The Highlight Report also specified how close spending commitments were to the limit of funding approved by the Council:
- "The current estimated tram budget at the end of period 10 of 2010/11 is £541m, with the funding available totalling £545m. The remaining headroom of £3.8m will not allow all the sufficient project changes to be made without requiring a commitment to increase the budget above £545m. It is important to note that £541m includes all anticipated costs and that only £402.4m has actually been incurred to date." [[ibid](#), page 0004.]

19.103 This summary therefore makes clear that it was the total payments already made plus the anticipated costs, rather than actual spending, which were close to the limit of the approved budget. The report referred to a proposal which would increase the headroom to £5.5 million, expected to last until March 2011. An appendix noted CEC's internal legal advice to the effect that any increase in funding would require the approval of the Council, particularly given that the issue would be "politically contentious". The action note from the meeting includes the following:

"Potential to report to Council to seek consent to incur costs over £546m– need to consider TEL letter to TMO in relation to Operating Agreement and clarify reporting obligations to Council. Preferable for timing of next report to Council to follow mediation in March, otherwise a holding position may be necessary.

"Previous Council motions and minutes to be analysed in detail to determine what authorities we have and what has already been reported." [CEC01715621, page 0001.]

19.104 The Highlight Report noted that the mediation dates had been confirmed as 7–10 March, **tie** having taken the view that arranging dates at the start of February would have left it insufficient time to prepare. In the report and at the meeting Mr Maclean repeated his view, earlier expressed in his note of the meeting on 3 December, that **tie** was in a weak position, legally and tactically, relative to BSC and that the commercial and political desire to move towards mediation despite **tie**'s weak position was likely to have an adverse financial implication for **tie**. BSC was likely to fare better out of mediation than might otherwise have been the case [CEC01715625]. Mr Maclean explained in evidence to the Inquiry his concern at that time that CEC was going into mediation without a full understanding of the facts and without being fully prepared, and he had a strong view that it should not be doing so [PHT00000008, pages 103–111; TR100000055_C, pages 0031–0032, paragraph 80]. Even by the time of the mediation he was of the view that CEC did not have full knowledge of the facts of the project, and continued to depend on **tie** for that. If **tie** could establish grounds for termination, that would place **tie** in the strongest position for a negotiated settlement. To that end, McGrigors continued to investigate the facts to establish if any valid grounds for termination existed but this work was not expected to be completed until late February 2011 [CEC01715625, page 0007].

19.105 On costs, the Highlight Report noted a further upward shift in the anticipated cost of delivering the project to St Andrew Square and that this could still be done

"for £600m (£633.8m – £33.3m) if BSC are not paid the delta between the cost and value of work done, though this will be subject to the negotiations" *ibid.*, page 0009].

19.106 In relation to CEC's receipt of information from **tie**, the action note from the meeting recorded:

"View remains that the Council is still not receiving full information from **tie** Ltd despite pursuing 'one family' approach." [CEC01715621, page 0001.]

19.107 Dame Sue Bruce confirmed that there were difficulties in CEC getting information from **tie** when she started on the project because **tie** and CEC did not think that "they were in the same family at that point" [TR100000084, page 0017, paragraph 52].

19.108 On 29 January 2011, **tie** and CEC held a mediation preparatory workshop. The minutes record Dame Sue Bruce as having remarked: "£½ B in the ground: need to make

good this investment" [CEC02087133, page 0001]. This indicates that the focus was on completing the line and that there was no question, in Dame Sue Bruce's mind at least, of the project being cancelled [Mr C Smith PHT00000053, pages 12–13]. That reflects the discussion between Mr McGougan and Mr Swinney in October 2010 [paragraph 19.18 above]. The minutes also recorded that, for the project to progress, the alternatives were: Phoenix (a truncated line to Haymarket and then separate implementation to St Andrew Square) or Separation (a mature separation from Infraco with the current works being made good, a separation payment agreed, and the contract re-specified to complete the line to St Andrew Square) [CEC02087133, pages 0004–0005].

19.109 On these options, CEC officials seemed to prefer a solution that resulted in Infraco resuming work. In that regard Mr C Smith said in his evidence to the Inquiry:

"I continually felt in that period, from January through to March, that objective number 1 was to see if Bilfinger, Siemens and CAF were willing or able to come back to the table, to come back to complete works, and once that was established, if it could be established, what the cost of that might be. I do not think – certainly my thinking didn't go beyond those two targets. All the while considering, you know, what would happen if separation or attrition was going to be the position that the consortium were going to take ..." [PHT00000053, page 15.]

19.110 Similar evidence came from Mr Coyle:

"As I understood it, I thought that the Council wanted to make a successful go of the project with the [existing] contractor." [PHT00000006, page 178.]

In referring to "the Council" it should be borne in mind that at this time the councillors as a body had not been consulted on the preferred outcome from the mediation and accordingly he must have meant the Chief Executive and the Director of Finance informed by the views of the Leader of the Administration (Councillor Dawe) and the Cabinet Secretary for Finance and Sustainable Growth (Mr Swinney) respectively.

19.111 Ultimately, **tie** did not share that view. **tie**'s preference was for termination of the Infraco contract and re-procurement. That was the impression gained by Mr Coyle, who stated:

"I don't know for sure. But it seemed that, I think – well, I think that the preferred outcome **tie** had was to terminate the contract" [ibid].

19.112 This was not the original preference that Mr Jeffrey expressed. Initially he also considered that mediation should aim to secure the resumption of work based upon Project Carlisle with the completion of the line from the Airport stopping at Haymarket. If that could not be achieved consideration should be given to termination on mutually agreed terms. However, by 21 December 2010 his view changed, as he considered that it was unlikely that agreement would be reached on Project Carlisle because the difference between the parties on the price of that option was too great [TIE00105840; TR100000097_C, pages 0056–0057, paragraph 346]. On 21 December 2010, following a meeting with representatives of the consortium, he had said:

"I think we will not be able to accept their revised offer, so the mediation will actually end up being about 'mutual termination' even though that is not where we are now" [TIE00105840, page 0002].

19.113 Even if mutual termination could not be achieved, Mr Jeffrey considered that such an option should be canvassed seriously at mediation. In his evidence to the Inquiry, in relation to separating from BSC and re-procuring the works he said:

“Emotionally that was my preferred option, but practically I think that option should have at least been on the table so that there was something to compare the deal to.” [PHT00000033, page 76.]

19.114 Mr C Smith prepared a note dated 31 January 2011 following the 29 January workshop [CEC02083835]. According to this, **tie** was still working on the cost estimates both for completing the project under Phoenix and for Separation. Mr Rush was noted as having said that there was not enough time to prepare both, and that the focus should therefore be on Phoenix. Mr Smith noted his agreement with that decision, adding the qualification that “[s]eparation should be developed to some degree as a negotiating lever”. The majority of the quantity surveying resources available to CEC and **tie** were, however, concentrated on Phoenix [Mr C Smith PHT00000053, page 26]. Mr Smith’s file note recorded that CEC’s opening position should be for BSC to build a line between the Airport and St Andrew Square. In other words, it should seek to persuade BSC to go beyond its second Project Carlisle proposal to build only on the off-street section between the Airport and Haymarket by including a section of on-street works east of Haymarket.

19.115 It is apparent from this note, and Mr Smith accepted in his evidence to the Inquiry, that Phoenix was preferred over Separation even before detailed cost estimates were available. Two reasons were, first, the concern that new contractors would generally be unwilling to take on the Tram project; and, second, the risk that a different contractor’s systems would be incompatible with those BSC had installed [PHT00000053, pages 27–28; see also Mr Coyle PHT00000010, page 75]. Separation therefore involved significant risk and uncertainty. It may be added that Separation would also involve delay pending a re-procurement exercise, which would have conflicted with the desire for a tram line to be completed as early as possible.

19.116 Mr Smith’s note also records that the best alternative to a negotiated settlement had not yet been fully defined [CEC02083835, page 0006]. The “best alternative” is often considered an important benchmark against which to compare the merits of a proposal under negotiation, as it is the best that can be hoped for without the other side’s co-operation. When asked at the Inquiry’s oral hearing what **tie**/CEC’s best alternative was to a negotiated settlement with BSC, Mr Smith said it would have been a period of attrition leading to discussions between the parties about separation [PHT00000053, pages 30–31. Since such discussions imply work towards a negotiated settlement after the period of attrition, they are not themselves an alternative to a negotiated settlement. In my view, it is plain that the alternative to a negotiated settlement was for the parties to continue with the status quo under the scenario vividly called “grinding on” or “attrition”. As **tie** later put it in its mediation statement:

“[a]bsent an agreed solution the Parties fall back to the current position, where the project is effectively at a standstill and a number of fundamental differences will remain to be determined through judicial proceedings” [BFB00053300, page 0004].

19.117 That option was by this stage regarded by all parties involved in the project as intolerable [see, e.g., Mr Coyle PHT00000010, page 33; TIE00897064, page 0006; WED00000641, Part 2, pages 0062–0064; Mr Nolan PHT00000046, page 199; Mr Foerderer TRI00000095_C, pages 0081, 0084–0085, paragraphs 242–245, 254–255]. In my view, CEC and **tie** having by this stage also rejected unilateral termination of

the contract by **tie**, it is clear that there was not in fact any practicable or realistic alternative but for CEC/**tie**'s representatives to emerge from the mediation with a negotiated resolution in some form. That involved the necessity to reach agreement with BSC in circumstances where BSC would be aware that unilateral termination was no longer being considered by **tie**/CEC. It follows that Separation would have little force as a negotiating lever, since it also depended on BSC's co-operation in circumstances where **tie**/CEC went into mediation with some understanding but no "clear idea" of the cost of separation and re-procurement [Mr C Smith [PHT00000053](#), page 38]. The uncertainty surrounding that cost was not confined to the amount of the premium that BSC would require for a negotiated settlement; another contributing factor was the lack of detailed information, with which Mr Smith would have been comfortable going into mediation, about the cost of the works to be undertaken by any new contractor [Mr C Smith [ibid](#), pages 32–38].

19.118 By late February, Dame Sue Bruce's preference for a revised deal with the BSC Consortium had become fixed. In an email dated 24 February 2011, Mr C Smith noted:

"Sue is clear.

"Sequential preference is phoenix with separation only there with attrition as fall back. The mediation spirit is to make phoenix work though we will revert if we need to, to the other two options. Therefore my advice is not to give equal billing or weight to separation or attrition albeit they are still open to us." [[CEC02087154](#)]

19.119 In her witness statement, Dame Sue Bruce commented on her "forthright and determinedly positive" opening statement at the mediation and said "we were trying to resolve a conflict situation to deliver the will of the Council, to have a tram" [[TR100000084](#), page 0014, paragraph 43].

19.120 This view implies that it continued to be correct, at this time, to construe the policy position of CEC as being that a tram line should be completed. I am not satisfied that CEC's policy position is reflected in such an unequivocal statement. Dame Sue Bruce is correct that the will of CEC, as expressed in its decisions, was to construct a tram line, but that should be seen in context. The tram line was to be constructed within an approved budget of £545 million and any increase in that budget required the approval of CEC. It was clear that additional funding beyond the £545 million limit would be needed even for the completion of the truncated tram line envisaged in Project Phoenix. Although the Leader of the Council and other individual councillors may well have appreciated that any mediation settlement resulting in the resumption of construction work would have entailed an increase in expenditure beyond CEC's limit, that is different from representing the will of the Council. The will of any local authority is determined by the decisions of its councillors and the councillors had not by this stage approved any increase to the funding limit. Their policy position in these circumstances was not known: it could only be known once they were presented with new options in the context of a decision to approve additional funding. This is not a theoretical or fanciful point. The political history of the Tram project within CEC indicated that there were differing views about it. In addition, events subsequent to the mediation agreement to build the tram line from the Airport to St Andrew Square illustrated that, on a vote, councillors supported a less expensive option of stopping construction at Haymarket, with incremental extensions eastwards at a later date. As will be noted in paragraph 19.560 below) the will of CEC in that regard was reversed following the intervention of the Scottish Ministers threatening to withhold any further grant payments, causing CEC to review its decision and support the construction of the route agreed at mediation.

19.121 On 3 February 2011, Mr Emery became the chairman of **tie** and TEL. At the TPB meeting on 9 February, he noted that continuing under the existing terms of the Infraco contract with a view to unilateral termination of the contract was not a realistic option having regard to the litigation risks [[TIE00897064](#), page 0006]. His recollection was that:

"in all of my discussions with the CEC officers, there was an overwhelming desire to try and finish this tram project. So going into the mediation, there was a desire to continue with the work and that by going to an alternative supplier, or trying to redo this, would simply cost more, take a long time, and subject the citizens of Edinburgh to what they'd already been suffering over the previous years." [[PHT00000052](#), page 23.]

19.122 By the time of the mediation:

"[t]he main focus was to mediate and get to a solution so that the project could continue with the contractors that we currently had ... I think going into that meeting, I think it had already been pretty much decided – that's the impression that I got – that we needed to find a solution with the existing players." [libid](#), page 39.]

19.123 In my view, that is an accurate summary that reflects the other evidence. In clarification he explained that he gained the above impression from particular CEC officials, whom he specified as Dame Sue Bruce, Mr Maclean and Mr McLaughlin, although the latter was an official in Transport Scotland. Mr Emery's inclusion of Mr McLaughlin in this list might tend to indicate that the latter played a more significant role in the mediation than he (Mr McLaughlin) was prepared to admit.

Discussion

19.124 Decision-making on the strategy for mediation lay with CEC's officials. **tie**, TEL and the TPB lacked the authority that they would need to negotiate any resolution of the disputes. There was therefore a departure from the project's existing governance structures. No attempt was made to increase the authority of **tie**, TEL and the TPB, ostensibly to respect the "purdah" period for the forthcoming Parliament election, but also reflecting the widespread loss of faith by CEC officials in **tie**'s ability to resolve the project's difficulties.

19.125 Dame Sue Bruce led CEC's preparations for the mediation from early 2011. She was newly appointed, as was Mr C Smith, her technical adviser appointed on her recommendation. **tie** and TEL were also under new leadership, with Mr Emery as chairman. Although Mr Smith was an experienced quantity surveyor, he had insufficient time to familiarise himself with the details of the project costs. Although responsibility for decision making and strategy in the mediation rested with CEC's officials, they remained entirely dependent on **tie** for information on the project and its costs. Notwithstanding his lack of familiarity with their details, Mr Smith was instinctively sceptical about the accuracy of **tie**'s cost estimates.

19.126 Under the leadership of Dame Sue Bruce, the objective of CEC's negotiating team was to explore and achieve a revised deal with BSC for a tram line to be built as soon as possible. That objective took precedence over the main alternative solution of a negotiated separation from BSC and re-procurement of the project from another contractor. The decision to follow that strategy was taken before detailed cost estimates were available for both options and meant that the limited resources of the CEC/**tie** team were focused on preparing for a revised deal with BSC.

19.127 CEC realistically had no alternative but to negotiate a resolution with BSC at mediation, and had to do so from a position of weakness. The resolution sought by CEC was an agreement on the Project Phoenix proposal which would result in the construction of a truncated line for a price that had a considerable degree of certainty, failing which an agreement to separate from BSC and to re-procure the contract. Although Mr Smith described the alternative of a negotiated separation from BSC as a negotiating lever, the leverage to be derived from it, if any, was severely limited in practical terms because it also depended upon agreement with BSC at a time when parties would have failed to agree on terms to continue with the project. The absence of a mediated resolution would have resulted in a return to the contractual attrition which had hitherto blighted the project. This would have necessitated obtaining additional funding from CEC without any resolution of the disputes and without any reliable estimate of likely project costs or timescales. In the context of a project which had disrupted the life of the city for so long and had generated public criticism of CEC, I consider that the future of the project in those circumstances would have been highly uncertain.

BSC's Project Phoenix Proposal

19.128 BSC supplied its price proposal for Project Phoenix by letter dated 24 February 2011 [[BFB00053258](#)]. This formed the basis for the negotiations at mediation and the agreement reached there. It evolved from BSC's Project Carlisle proposals that the parties had discussed in 2010. Its proposed scope was a line between the Airport and Haymarket, and it excluded the on-street section beyond Haymarket except in relation to limited enabling works in section 1A and work already done in sections 1B to 1D; see Table 8.1 in Chapter 8 (Utilities). It acknowledged, however, the possibility that the parties might reach agreement separately for BSC to carry out work on the on-street section.

19.129 The total price BSC proposed for the Phoenix scope was £449,166,366, comprising £231,837,822 to BB, £136,881,719 to Siemens, £65,306,030 to CAF and £15,140,795 to SDS. Excluding the CAF element, which is necessary for the purposes of comparison with **tie**'s calculations and the prices agreed at mediation, the price proposal for the work of BB, Siemens and its sub-contractor SDS was £383.9 million. The offer was a fixed price for those items that BSC felt able to price, but was subject to extensive exclusions and qualifications. BSC's approach was to propose a new price for the revised project scope, rather than to attempt to calculate, and persuade **tie**/CEC to agree, the price that would have emerged through an application of the Infraco contract's terms.

Infraco Entitlement paper

19.130 Around 24 February 2011, **tie**'s commercial team, under the direction of Mr Murray, produced a paper reporting on the price to which it considered BSC would be entitled under the Infraco contract to complete the off-street works between the Airport and Haymarket [[TIE00106500](#)]. The team had been tasked with preparing this on 10 January 2011 [Mr Nolan [TR100000114_C](#), pages 0026–0029, paragraphs 68 and 71].

19.131 As far as the Inquiry is aware, this was the most up-to-date assessment of BSC's contractual entitlements available to **tie**, and thus to CEC, at the time of the mediation. It formed the basis for entries in the so-called "deck chair" spreadsheet used by the **tie** and CEC teams in preparing for mediation [[libid](#), page 0032, paragraph 78]. It was also used by Mr Murray as the basis for any discussions about cost that

he was involved in during the mediation. There is no indication that BSC saw this document at the time. Nor is there any indication that BSC accepted its conclusions or the calculations on which they were based. Given the parties' differences, I am confident it would not have done. Indeed, it was heavily criticised by Siemens in its closing submissions [TR100000290_C, page 0122, paragraph 351 onwards]. I do not therefore treat this document as an objectively accurate assessment of BSC's entitlements. It is, however, an important reference point in assessing decision-making within the CEC team at the mediation.

- 19.132** **tie's** Infraco Entitlement paper and the BSC Project Phoenix Price proposal were prepared on different bases and cannot therefore be directly compared. Whereas the Project Phoenix proposal was a new price to complete a redefined scope of work on revised terms, **tie's** assessment sought to apply the existing contract terms to the facts and circumstances of the project. **tie's** Infraco Entitlement Paper was described by Mr Murray as having started from the construction works price stated in the contract, with changes and other contractual entitlements being added, and adhering to the mechanisms in the Infraco contract to arrive at an estimated final price [TR100000249, pages 0011–0013, 0015–0017, paragraphs 23 and 25; PHT00000055, pages 65–68].
- 19.133** It is apparent from the opening text of the Infraco Entitlement paper that it had been intended to include two parts: one relating to Project Phoenix, and another relating to Project Separation. From the text it appears that the Project Separation calculations would have assessed BSC's entitlement to complete the works to a suitable point and then demobilise. The document available to the Inquiry only addressed the former, and the Inquiry has not identified any document bearing to be the intended assessment relating to Project Separation. Mr Murray's recollection was that no separate paper was prepared for that assessment, but that the work done for the extant paper would have informed it [*libid*, page 66]. For the Separation paper not to have been prepared is consistent with **tie** having had insufficient time to investigate it fully and having focused its resources on Project Phoenix, as Mr C Smith had recorded to be the case in his note dated 31 January 2011. That approach, in turn, reflects Dame Sue Bruce's decision, recorded by Mr C Smith in his email of 24 February 2011 that separation was a fall-back option to be used only if Phoenix failed. There is evidence that members of the **tie**/CEC team, even a few days before the mediation, lacked critical elements of the likely cost of separating and re-procuring [see, e.g., CEC02084603; Mr C Smith PHT00000053, pages 33–38]. Mr Coyle accepted that the separation option was left undeveloped by the time of the mediation [PHT00000010, pages 72–73].
- 19.134** The assumptions described by Mr Murray as having been made by **tie** in its Infraco Entitlement calculations are, on one view, pessimistic in relation to **tie's** liability for change. Firstly, **tie** assumed that it was liable to pay for all changes that BSC had intimated and which were yet to be resolved. That was in contrast to the position that **tie** had taken when those changes were intimated, which in relation to many was to dispute BSC's entitlement to increased time and cost. Secondly, **tie** assumed that it would be liable to pay for further changes yet to be intimated by BSC. Thirdly, **tie** valued those changes on two distinct bases. The first was based on **tie's** estimate of the value of the change and was the more optimistic. The second was based on BSC's estimate and can be described as pessimistic when compared with the success **tie** claimed to have achieved in reducing the price for changes below the level initially claimed by BSC. The extent of that claimed success was discussed in paragraphs 17.58 and 19.81–19.83. In Mr Murray's words, which I quote here as describing his view, and not as an undisputed statement of fact: "BSC's

estimates were usually excessive and not proven either by subsequent agreement or determination by adjudication to be realistic" [TR10000063_C, page 0055, postscript]. These calculations were based on a design that Mr Murray described as "to all intents and purposes complete" [TR100000155, page 0002], so could be taken to have been relatively well informed.

- 19.135** **tie**'s calculations on the cost of change related largely to BB's scope of work, and assumed no further change relating to Siemens' scope of work [see, eg, [TIE00106500](#), page 0015].
- 19.136** In addition to estimating the cost of work including taking account of change, **tie** calculated preliminaries taking into account the two extension of time claims that had been settled, and applying the data and principles from those settled claims to a third extension of time claim that remained in dispute [TR100000155]. The two settled claims were of relatively low financial value: £3.524 million and £1.167 million respectively [TIE00106500, page 0004]. The still-disputed claim was Infraco Notice of **tie** Change ("INTC") 536, which was based on known delays in utility diversions up to 31 July 2010 [CEC02084514]. **tie**'s calculations in respect of that claim assumed a liability for an extension of time of between 38 and 66 weeks, valued by **tie** at between £15.553 million and £30.159 million. When that estimate was added to the known cost of the settled extension of time claims, the total estimate for the cost of extended time ranged between £20.244 million and £34.85 million.
- 19.137** The upper estimate of **tie**'s liability for INTC 536 was based on an assumed extension of time of 66 weeks. That appears to have been the full extension claimed by BSC in relation to that INTC, which refers to a claim for 461 days, being 65.9 weeks [*ibid*]. However, the values placed on it by **tie** appear to be considerably below BSC's estimate: BSC's change register of 26 March 2011 records a value of £42.8 million for INTC 536 [BFB00003290, Part 3, page 0380]. The reason for **tie**'s estimate, even its pessimistic estimate, being so far below that figure is not clear. It may be noted that **tie** had advice from Acutus, construction contracts consultants, that there were substantial grounds for defending that extension of time claim [WED00000533, *passim*]. If that is the reason for the lower estimate, it is not stated in **tie**'s paper. It cannot, however, be said that in this respect **tie**'s estimate was particularly pessimistic, given the amount by which it is below the amount claimed by BSC.
- 19.138** The Infraco Entitlement report acknowledged that "Infraco may view their entitlement as greater than this when they submit all of their notified delays" [TIE00106500, page 0005]. In fact, shortly before the mediation, on 4 March 2011, BSC intimated an estimate of extensions of time arising from a series of INTCs. The extensions of time sought in the estimate were:
- section A, 285 days;
 - section B, 302 days;
 - section C, 105 days; and
 - section D, 154 days.
- 19.139** These extensions were in addition to those sought in the estimate for INTC 536 and assessed the cost of these delays at £16,020,323 in respect of BB and Siemens and €4,532,035 in respect of CAF, the Spanish manufacturer and supplier of the tram vehicles. The Infraco Entitlement paper was completed prior to receipt of that estimate, so did not take these figures into account.

- 19.140** It is readily apparent, therefore, that the estimates of delay costs in **tie**'s Infraco Entitlement paper fell far below what BSC considered to be its entitlement.
- 19.141** In addition to calculating liability for change and extended preliminaries, **tie** also calculated certain "Further Entitlements" [**ibid.**, pages 0005–0006]. The report cited as examples that:
- "it is expected that Siemens will have incurred cost in the delivery or part delivery of certain items not included in the measured value of Off Street works or elsewhere. These items are only to be considered if the deliverables associated are satisfactory to tie, warranted and appropriate for tie to use in the remaining works.
- "In addition Infraco will pursue disruption and other claims some or all of which may have to be given credence."
- 19.142** This category of "Further Entitlements" was valued by **tie** in the Infraco Entitlement report at £18.967 million.
- 19.143** The Infraco Entitlement paper also reported on work **tie** had commissioned from Cyrill Sweet as its quantity surveyors. The work undertaken by Cyrill Sweet involved preparing a Bill of Quantities based upon the Issued for Construction drawings for the section of the route from the Airport to Haymarket. **tie**'s quantity surveyors priced the Bills of Quantity based upon SP4 rates and prices or prices derived from them. The result was compared with the outcome of the exercise undertaken by **tie** in the Infraco Entitlement paper mentioned above. The outcome of that comparison was that the figures in the Infraco Entitlement paper were marginally higher than the priced Bills of Quantities, which reassured **tie** [**ibid.**, page 0006].
- 19.144** As a result of its calculations, **tie** estimated BSC's entitlement for completing the line to Haymarket, including the costs for CAF and SDS, at £324.395 million, using **tie**'s own estimate of the cost of change and £357.651 million, using BSC's estimates [**ibid.**, pages 0019–0020; cf. the slightly lower estimates at pages 0015–0016]. Removing the CAF element of these estimates, which is necessary to allow a comparison with the sums agreed at mediation, the totals were £265.185 million and £298.541 million respectively. Those figures may be compared with BSC's Phoenix price proposal for the work of BB, Siemens and SDS, which was £383.9 million. In other words, the price sought by BBS in its price proposal exceeded **tie**'s most pessimistic estimate of BSC's likely entitlement under the Infraco contract by about £85 million. It exceeded **tie**'s more optimistic estimate by more than £118 million. These are, obviously, very significant differences.
- 19.145** Not surprisingly, given the magnitude of the difference between his estimates and BSC's Phoenix price proposal, Mr Murray felt unable to assent to BSC's price proposal [**TR10000063_C**, page 0048]. Mr Jeffrey believed the cost increase that it represented to be unjustified [**TR10000097_C**, page 0057, paragraph 349; **TIE00685894**].

BSC's claims by the time of the mediation

- 19.146** The cumulative changes claimed by BSC by the time of the mediation were as follows. Taking account of changes that had been superseded, withdrawn or had a delay impact only, 588 changes required estimates. BSC had submitted 543 estimates, with an estimated value of £165,797,161. Of these, 213 had been accepted through the issue of a **tie** Change Order, with an aggregate value of £25,829,137 [**BFB00003290**, Part 1, pages 0003–0004]. The estimates that remained under

consideration by **tie** were for a combined value of £119.8 million. A further 63 estimates were yet to come [**ibid**, Part 3, page 0362]. There was therefore over £120 million in change claims that remained but were not agreed. Eighty-seven changes had a delay-only impact, and that impact was shown in the entitlement programmes that BSC had submitted to **tie** [**ibid**, Part 1, page 0063, paragraph 7.2.1].

19.147 The same report noted BSC's view of the change procedure:

"The complexity, nature and amount of changes have overloaded the change mechanism included in the Infraco Contract, because the Estimates cannot be submitted within the time frame requested in the Infraco Contract and also due to the fact that the overall impact to the Programme from a given change cannot be assessed on an individual basis. It has been agreed between **tie** and Infraco that the estimates submitted by Infraco will only deal with direct related effects (costs) of each Change. Time related effect will be assessed separately." [**ibid**, Part 1, page 0064.]

19.148 As for the extent of delay, in an internal report of 2 February 2011 Siemens noted that:

"The progressed [programme] Revision 03A, that only include [sic] changes known until December 2009, presents a 35 month delay for the entire project to the current contractual programme. The latest submitted estimate MUDFA 2 [INTC 536] requests for 15 month EoT [Extension of Time]. Further estimates are under preparation." [**SIE00000301**, page 0001.]

19.149 BSC's Period Report to 26 March 2011 also referred to a 35-month delay to the sectional completion date for section D (being the period between the original completion date of 6 September 2011 and the forecast date of 31 August 2014 in the Updated Programme) [**BFB00003290**, Part 1, page 0003]. The report does not specify the total delay for which BSC considered **tie** to carry contractual responsibility, or the cost consequences, but again noted that the impact of the 87 changes that had a delay-only impact was reflected in the various entitlement programmes submitted to **tie** [**ibid**, page 0063, paragraph 7.2.1].

19.150 It has not proved possible for the Inquiry to reconcile BSC's change register, **tie**'s Infraco Entitlement paper and BSC's Project Phoenix price proposal. Nor is it possible to resolve the differences between them. What can be said, however, is as follows. By the time of the mediation:

- more than £120 million of change claimed by BSC remained to be agreed;
- a significant number of changes were not yet the subject of estimates, from which it is reasonable to assume that the price claimed in respect of change was likely to increase;
- **tie**'s estimates did not take full account of the claims made by BSC in respect of delay;
- the revised price sought by BSC was considerably in excess of **tie**'s calculation of BSC's entitlement under the Infraco contract;
- the change mechanism, as operated by the parties, had proved unable to cope with the volume of change.

Siemens' criticism of tie's Infraco Entitlement paper

- 19.151** tie's methodology in its Infraco Entitlement paper was subject to sustained criticism by Siemens in its closing submissions. Essentially, Siemens considered that tie had failed to take into account the distinction between civil engineering works, on the one hand, where the cost of a truncated line could be estimated from measuring the line to be built against that originally proposed and applying pro rata calculations, and the provision of systems and track work, on the other hand, where the cost of system-wide elements would be incurred in full irrespective of the length of track that was laid. In its closing submissions Siemens cited three examples [TR10000290_C, pages 0128–0132, paragraphs 369–383] to illustrate the error in tie's apportionment of system-wide costs between off-street and on-street works. The first example relates to the provision and installation of on-board signalling equipment to each of the 28 vehicles (27 trams plus the maintenance vehicle). I accept that this expenditure would be necessarily incurred whatever the length of the route otherwise some of the trams could not be used. The second example cited by Siemens is the Supervisory Control and Communications System provided in the control room at Gogar. In my opinion, this element of Siemens' work was required for the safe operation of the trams, whatever the length of the network, and is properly categorised as system wide. Accordingly, the cost of this system should not have been subject to reduction to reflect the truncated route. The third example related to the Testing and Commissioning of the system which was required irrespective of the length of the track. The cost of these three elements was £1,058,275, £3,492,980 and £2,361,870 respectively, totalling £6,913,125. That total should be compared with the total sum apportioned by tie to the off-street system-wide price of £4,919,086. In their view, tie's calculations understated Siemens' entitlements, and were "at best ... an ill-informed 'pro-rata' calculation" and "in Siemens' view ... nothing more than a crude and arbitrary 'raid' on Siemens' Construction Works Price, which fails properly to ascertain, and accurately to report to stakeholders, the extent of Siemens' true entitlement" *ibid*, page 0146, paragraph 429]. I accept Siemens' submission to the extent that it criticises tie's apportionment of their system-wide costs as ill-informed.
- 19.152** Siemens also submitted that tie had understated the value of change costs, both those agreed and those still to be agreed, in relation to Siemens' work *ibid*, pages 0132–0137, paragraphs 384–394]. It is clear that by far the greatest part of the change costs to be agreed related to delay, and in particular BSC's claim under INTC 536 *ibid*, pages 0135–0136, paragraph 391]. In its Infraco Entitlement paper tie took this into account, although not at the full value claimed by BSC [TIE00106500, pages 0004–0005]. When purporting to use the BSC figure, tie stated the value of the claim to be £30.159 million in their reference to "EoT3" *ibid*, page 0005]. However, the total value claimed by BSC was £42,759,847 [BFB00003290, Part 3, page 0380, entry 536] or even £44.279 million [BFB00003289, Part 13, page 0318, entry 536].
- 19.153** A further criticism of the Infraco entitlement paper was that tie had failed to take proper account of Siemens' accrued entitlement to preliminaries, again through an inappropriate apportionment and had made a "grossly inadequate" [TR10000290_C, page 0143, paragraph 414] provision for prolongation. This criticism was apparently based on the assumption that tie was liable for the entirety of the project delay *ibid*, page 0143, paragraph 416]; and had failed to respect an agreement on the calculation of prolongation *ibid*, pages 0137–0145, paragraphs 395–426].
- 19.154** Although I have accepted Siemens' criticism of tie's methodology in apportioning system-wide costs, I do not consider that the evidence before the Inquiry allows me to resolve the differences between tie and BSC on the sums properly due under

the Infraco contract. Further, it would have been impossible to do so. It would have required a full investigation into the facts of every dispute between the parties and a determination of their respective entitlements. That was something that proved impossible to achieve during the project, when those with intimate knowledge of the disputes were fully engaged on them and had the relevant evidence close at hand. The evidence now available could not, in my view, realistically have been reassembled by reference to each claim, nor would it have been practicable for the Inquiry to obtain the engagement that would be needed from relevant witnesses to fact and expert witnesses in relation to each dispute. Even had it been possible, it would have required an entirely disproportionate use of resources.

19.155 It is plain, however, that Siemens continued to maintain that **tie** had grossly underestimated its entitlement under the contract, especially in relation to the cost of delay.

Final preparations for mediation

19.156 The initial reaction of CEC's senior officials to the Project Phoenix price proposal was that it was too high, given the number of items which BSC sought to exclude from it [Mr McGougan [TR100000060_C](#), page 0111, paragraph 278] and seemed excessive when compared with both the industry benchmark of £13 million per kilometre and the original contract price [Mr David Anderson [TR100000108_C](#), page 0103, paragraph 136]. Mr Jeffrey shared these views as he considered that it did not provide cost certainty and that the costs were too high [[TR100000097_C](#), page 0057, paragraph 349]. Indeed, he never changed his view about the costs being too high [*ibid*].

19.157 On 2 March 2011, Lord Dervaird issued his decision in an adjudication relating to the payment of preliminaries under the Infraco contract [[BFB00053489](#)]. The adjudication concerned preliminaries claimed by BSC for each of the months between March and July 2010, but which **tie** had not paid. Lord Dervaird determined that preliminaries were a time-based cost. As a consequence of that decision BSC had a claim for payment of £14 million in outstanding preliminaries [[SIE00000304](#), page 0003].

19.158 There was debate within **tie**/CEC, prior to mediation, about the cost of the alternative to the Phoenix deal; that is, of separating from BSC and re-procuring the work from another contractor. In an email dated 27 February 2011, Mr Rush expressed the view that the cost of separation and re-procurement would be "substantially more than forecast by **tie** in their 'Deck-chair' presentation" and that "[a] prudent estimate" would be "between £765 million and £800 million" [[CEC02084651](#), page 0001]. Mr Rush acknowledged the significance of the cost of separation and re-procurement in observing that it was:

"a critical threshold on which we may decide to ditch Phoenix or conversely decide to agree on a price for Phoenix which is higher than we needed to. But ditching Phoenix is an irrevocable action with an uncertain end." [[CEC02084603](#), 2 March 2011.]

19.159 In my view, this remark accurately focused a consideration of importance to CEC's decision making at mediation: in assessing what it was reasonable to pay for a Phoenix-based settlement, it was of the utmost importance for CEC to know what the most realistic alternative would cost. If that alternative was less expensive than the Phoenix proposal, CEC would have to consider rejecting the Phoenix proposal, although there were considerable uncertainties to be confronted in doing so. If the alternative was more expensive than Phoenix, CEC could use that as a justification for paying more for Phoenix. Although that latter approach would certainly not

be an ideal means of setting a price in a normal procurement process, it was a commercially realistic one in the circumstances in which CEC now found itself.

19.160 On 2 March 2011, Mr Jeffrey circulated an email in which he said:

"I have seen a copy of a report prepared by GHP (I'm not sure who commissioned it) which gives figures for separation and phoenix [sic] which give a markedly different perspective to tie's figures" [\[CEC02084602\]](#).

19.161 "GHP" was the Gordon Harris Partnership, a firm of quantity surveyors. Mr Jeffrey attached a reconciliation between GHP's estimates and tie's figures, which demonstrated that GHP's estimate of the cost of Phoenix, at £661 million, was £99 million lower than tie's; and that GHP's estimate of the cost of separation, at £769 million, was £145.6 million higher than tie's assessment [\[TIE00109274\]](#). In short, although tie considered that separation and re-procurement would be less expensive than Phoenix, GHP disagreed.

19.162 The figures in the reconciliation circulated by Mr Jeffrey appear to derive from a GHP report dated 25 February 2011, marked "Draft" [\[CEC02084612\]](#). In that draft, GHP noted that it had been asked to give

"a quick opinion on the Project Separation costs as prepared in the 'deck chair' PowerPoint presentation by tie, to identify, in headline terms, any costs or 'premiums' not included, together with any other assessment/overview/comment on the credibility of the figures." [\[ibid\]](#), page 0002.]

19.163 It also commented:

"We set out indicative figures and stress that we cannot say that these can be taken as definitive without further work." [\[ibid\]](#)

19.164 GHP's views were, therefore, heavily qualified.

19.165 The GHP report refers to discussions with Mr Rush, indicating that it might have been he who commissioned it. That view tends to be confirmed by Mr Rush's email of 27 February [\[CEC02084651\]](#), which both refers to his discussions with Mr Molyneux of GHP and provides an estimate of the cost of separation (£765 million to £800 million) which was consistent with the figure in the GHP report (£769 million). These figures are of interest because, as will be discussed more fully below, on the day before the mediation an adjustment was made to tie's estimates of the cost of separation to increase them to £800 million or more [\[WED00000134\]](#), Part 3, page 0235, paragraph 7.6]. That figure is at least consistent with the figures discussed by Mr Rush in his email.

19.166 A major concern for those in the tie/CEC negotiating team prior to mediation was the extent to which matters were excluded from BSC's price proposal; or, to put it another way, the extent to which BSC was still unwilling to accept certain risks relating to the construction work. Mr Robson was an independent consultant instructed to advise tie initially and latterly CEC on the process, procedures, strategy and tactics of mediation. On 25 February 2011, he noted that the proposal contained:

"significant exclusions ... and 36 "Clarifications" which are effectively pricing assumptions. These are carefully written and in some cases widely drawn in terms of potential financial/programme impact." [\[TIE00685852\]](#)

19.167 The initial thought of Gregor Roberts, **tie**'s finance director, was that:

"this is a very high price to have so many exclusions ... I honestly think that the £20m allowance that we have made for 'further risk' in our assessment would be insufficient taking into account the proposed exclusions" [[TIE00109264](#)].

19.168 Mr McGougan "agreed completely" with that assessment [[TR100000060_C](#), page 0111, paragraph 278]. Mr Rush noted that:

"[i]n normal circumstances it would require at least 4 weeks intensive work to review and report on the risks to the Client"

and that:

"[t]he price is capable of being reduced but it is the conditions and qualifications which are more so of the essence to an agreement." [[CEC02084651](#), page 0001, points 5 and 12.]

19.169 When Mr Rush sent that email on 27 February, the mediation was nine days away. Mr Jeffrey, Mr Richards and Mr Bell also expressed concerns about BSC's proposals.

19.170 On 4 March 2011, Mr Bell circulated his assessment of the risks associated with the Project Phoenix proposal [[TIE00355073](#); [TIE00355074](#)]. His document included estimated provisions for the items that the Phoenix proposal excluded from the price. For each item, Mr Bell estimated a "high" and a "low" provision. The high provisions totalled £106.6 million and the low provisions totalled £39.6 million. The range between these figures, £39.6 million to £106.6 million, was, therefore, **tie**'s estimate of the potential additional cost, over and above BSC's proposed Phoenix price, for the Infracore works between the Airport and St Andrew Square, were **tie** to accept BSC's Phoenix proposal subject to the conditions it then contained. There was a considerable amount of uncertainty about these figures. That is demonstrated by the range between the higher and lower estimates. It is also confirmed by the terms of Mr Bell's covering email, which noted that the day previously he had spoken of a range of £30 million to £60 million, but that following his attempt to price what could be priced, he had amended that to £40 million to £107 million. He added:

"There is inevitable judgement calls [sic] which are exactly that, but it feels sensible where we can range a cost.

"Please remember that there are some items I do not think are capable of sensible pricing." [[TIE00355073](#)]

19.171 For those items not capable of being priced, no allowance was included. I infer from this that Mr Bell would have considered the estimated cost of risk to be higher than the figures quoted in this paragraph, but to an unknown extent.

19.172 One feature of Mr Bell's figures should be noted, because it correlates with a specific point made in one of the written accounts of decision making at the mediation. Mr Bell's calculations included an estimate of the cost of the work between Haymarket and St Andrew Square, of £18 million to £20 million [[TIE00355074](#), cells I10 and J10]. That is not the pricing of a risk; rather, it is the cost of additional works which **tie** wanted but which were outside the scope of the Phoenix proposal. Deducting those costs, Mr Bell's estimated provision for the cost of the risks and exclusions associated with Project Phoenix ranged from £21.6 million to £86.6 million. That is relevant because, as will be discussed below, CEC's negotiations at mediation proceeded on the basis that the "cost" of the Project Phoenix exclusions was about £80 million [see paragraph 19.242 below]. As was noted by Mr C Smith and Mr Coyle

in their 2012 summary of negotiations at the mediation:

"there were still a significant number of exclusions that sat outside the off-street price which were estimated at £80m. This price did not include for the remainder of the on-street works, which were thought to have been in the region of £20m" [[WED00000134](#), Part 3, page 0235].

- 19.173** I infer that it was Mr Bell's figures in this document which formed the basis for that comment. It is therefore apparent that the £80 million value attached to the Project Phoenix exclusions was a top-end estimate, and that the estimate at the lower end of the range was about £21 million.
- 19.174** On 5 March 2011, Mr Coyle circulated the final version of **tie**'s "deck chair" spreadsheet, the document prepared prior to the mediation and used to report **tie**'s assessment of costs under the different scenarios for the project [[TIE00355077](#); [TIE00355078](#)]. The most salient feature of this spreadsheet is its indication that, on **tie**'s estimates, separation from BSC and re-procurement would be less expensive than a Phoenix-based deal with BSC. For a line between the Airport and St Andrew Square, **tie**'s range of estimates for separation and re-procurement was from £645 million to £698 million compared with a range between £682 million and £749 million to conclude a Phoenix-based deal with BSC [[TIE00355078](#), row 84]. As was discussed at paragraph 19.158 above, Mr Rush's view was that this estimate of the cost of termination and re-procurement was substantially too low [[CEC02084651](#)].
- 19.175** The spreadsheet took into account Mr Bell's estimate of the cost of the items excluded from the Project Phoenix price [Mr Murray [PHT00000055](#), pages 101–103; Mr Coyle [PHT00000010](#), page 38; [TIE00355078](#), cells U66 and V66]. It may be noted in passing that its estimates of the cost of a Phoenix-based deal appear to double count the cost of building the on-street section between Haymarket and St Andrew Square: provision for it appears both in cells U39 and V39, as a cost item in its own right, and in cells U66 and V66, as an element of Mr Bell's estimate of the cost of the items excluded from the Phoenix proposal. The effect of that would have been to overstate **tie**'s estimate of the cost of a Phoenix-based deal to St Andrew Square by £18 million to £20 million.
- 19.176** The most expensive estimate on **tie**'s "deck chair" spreadsheet for a line to St Andrew Square was £774.9 million, which assumed that **tie** terminated the Infraco contract, re-procured the work from another contractor, and then lost a litigation with BSC [[libid](#), cell P84].
- 19.177** There was recognition that the Infraco contract placed **tie**/CEC at risk if there were any delay in reaching a settlement. In an email of 27 February 2011 Mr Rush noted that although there was a view that BB's Project Phoenix price proposal exceeded both the current market price and its entitlement under the Infraco contract – a view that reflected the conclusions of **tie**'s Infraco Entitlement paper:
- "[t]he risk for the Clients is that by rejecting their offer increased costs of delay will accrue which may outweigh the difference between entitlement and what could be negotiated through Phoenix – this is a key consideration for the Clients" [[CEC02084651](#), page 0002, point 13].
- 19.178** This indicates a view held by one of **tie**'s advisers that, even if BSC's strict contractual entitlement was lower in amount than the Project Phoenix price proposal, it might still not be worth it for **tie**/CEC to hold out for a settlement reflecting the former, given their exposure to the cost of ongoing delay.

Discussion

- 19.179** In the run-up to mediation, **tie** formed the view that the true cost of a Phoenix deal on BSC's terms might be as much as £80 million above the price proposed by BSC in its Phoenix proposal. BSC's proposed Phoenix price was itself well above the estimates that **tie** had prepared. In those circumstances, CEC had to decide what price it would be prepared to pay BSC for a Phoenix deal. The only meaningful comparator available to CEC was the estimated cost of separating from BSC and re-procuring the work from another contractor. There were conflicting views within the **tie**/CEC team about the cost of that option, and even about whether it would be less or more expensive than the Phoenix proposal. There was much uncertainty about costs. There was, therefore, little objective guidance to those negotiating on behalf of CEC about what would be an appropriate price to pay. **tie**/CEC were facing the risk, however, that continued delay would simply increase their costs regardless of which option was taken.
- 19.180** Those circumstances were, in my view, likely to leave CEC's negotiators at mediation with little negotiating leverage against the prices sought by BSC.

Mediation

- 19.181** The mediation began on 8 March 2011, and on 10 March 2011 the parties agreed 13 key points of principle [[CECo2084685](#)]. These included:
- a price of £362.5 million for the work of BB, Siemens and SDS in completing a line between the Airport and Haymarket;
 - that that price be "absolutely certain";
 - the re-commencement of certain priority works by 1 May 2011; and
 - a price proposal of £39 million from BBS for the line between Haymarket and St Andrew Square, subject to adjustment under a target price mechanism.
- 19.182** The agreement was not legally binding at this stage, being subject to approval by CEC and to funding being available to pay for it.
- 19.183** By 12 March 2011, the parties' agreement had been developed into more detailed Heads of Terms. These reflected the key points of principle and were also non-binding. They established timescales for CEC to obtain funding and for the parties to implement their settlement by formal agreements. BSC were to commence the prioritised works on or before 1 May, subject, among other things, to the parties having entered into a minute of agreement relating to those works. The parties were to enter into a further minute of agreement relating to the remainder of the off-street works, and the on-street works, by 1 July 2011, failing which they were to discuss a mutually agreed separation. If CEC was unable to secure funding for the works beyond the prioritised works, the Infraco contract would terminate automatically on 1 September 2011.

The off-street works price of £362.5 million

- 19.184** By far the largest financial element agreed at mediation was the off-street works price of £362.5 million. Although it was agreed on a non-binding basis, and was subject to approval by CEC, there was no change in that price between its agreement at mediation on 10 March 2011, and its incorporation into the formal settlement agreement of 15 September 2011 [[CECo2085642](#), page 0003].

- 19.185** Senior **tie** management who were present at the mediation did not agree with the price [Mr Jeffrey [TR10000097_C](#), pages 0058, 0061, paragraphs 354, 375–376; Mr Coyle [PHT00000010](#), pages 88 and 139; Mr Bell [TR100000109_C](#), pages 0180–0182, paragraph 155(3); [PHT00000025](#), pages 53–55; Mr Murray [TR100000249](#), pages 0015–0017, paragraph 25].
- 19.186** An important focus of the Inquiry's work was, therefore, to understand the basis on which that figure was agreed at the mediation. The Inquiry was unable to identify any document which provided a full and clear explanation. It therefore sought an explanation from CEC. As will be discussed in the section below, CEC was unable to advance matters.

CEC's lack of knowledge

- 19.187** On 28 August 2017, the Inquiry served a notice on CEC under section 21 of the Inquiries Act 2005 [[TR100000136](#)]. It required CEC to provide: a written statement explaining the basis of calculation for, or derivation of, the off-street works price of £362.5 million; and any documents in its custody or control that were relevant to that explanation.
- 19.188** In response, CEC claimed that it was unable to comply with the notice, or that it was not reasonable in all the circumstances to require it to do so. The basis for this claim was that:

"the Council is unable to speak for the individuals concerned in agreeing the price of £362.5m and/or the target sum of £39m. For the Council's part, none of the relevant individuals are still employed by the Council. However, we note that a number of witnesses have addressed these matters in their statements and appear on the list of witnesses who will give evidence at the oral hearings" [[CEC02087289](#)].

- 19.189** I rejected that claim on 11 September 2017. My decision said the following about CEC's claim.

"This seems to me to fail to recognise that CEC is a local authority accountable to the public for its actions. It cannot be the case that individuals, as opposed to the Council, can spend in excess of £400 m of public funds without the approval of the Council. That is a decision of CEC and where such approval is given the public is entitled to know the basis of calculation or derivation of settlement figures of that amount. For that purpose proper records are required. CEC cannot evade its obligations in this regard by seeking to pass them on to former employees. The Notice was seeking the evidence of CEC, as opposed to its current or former employees, about the expenditure totalling in excess of £400 m. If CEC cannot explain that expenditure, it should say so in a certified and authenticated statement." [[TR100000312](#)]

- 19.190** By letter dated 25 September 2017, Mr Clarke, senior solicitor at CEC, responded as follows:

"Following further consideration and investigation of the request, the Council considers that it is unable to certify and authenticate the basis of derivation of the figures referred to in paragraphs (a) and (b) of numbered paragraph (1) of the Notice or that the figures were supported by calculations carried out or checked on its behalf. This is because the officers who were involved in the matter are no longer with the Council.

"However, in an effort to assist the Inquiry, we enclose a statement which has been prepared on the basis of contemporaneous historical records." [CEC02087288]

19.191 The statement mentioned in the letter is [CEC02087284](#).

19.192 CEC produced the letter and statement mentioned in paragraph 19.191 on 25 September 2017, three days after Mr Coyle concluded his oral evidence. From a comparison of the statement with the Transcript of Mr Coyle's evidence [PHT00000010] from page 39 to the end it is apparent that the statement in large part reflects the line of questioning pursued by counsel to the Inquiry with Mr Coyle, and in particular the documents put to Mr Coyle. I conclude that, to produce its statement, CEC was dependent upon the information made available through counsel to the Inquiry's questions and Mr Coyle's answers.

19.193 CEC as an institution was unable to explain on what basis the price agreed by its own Chief Executive at mediation had been calculated, or how it had been derived. Further, CEC was unable to say whether that price had been supported by calculations either carried out, or checked, on its behalf. CEC was apparently dependent on the work of this Inquiry to provide any information in relation to that price.

19.194 It is not possible to say whether CEC was unable to explain these matters, because either no such records were kept at the time or any such records were not filed in such a way that they are able now to be retrieved. Either way, it is a remarkable failure of CEC to maintain basic standards of administration.

19.195 In June 2011, Deloitte & Touche Limited ("Deloitte") produced a draft report for **tie** entitled "Internal Audit Project: Review of the Commercial Strategy – March 2010 to March 2011" [CEC02086351]. This followed a request to supplement an earlier report to include:

"a high level review of the processes applied by **tie** for the period from the issue of the Project Pitchfork report in March 2010 to the issue of the Project Resolution report during December 2010, and further, to include the key events leading up to the commencement of mediation in March 2011" [ibid, page 0005].

19.196 The report continues:

"Due to the confidentiality of the March 2011 mediation discussions, we have been provided with limited access to information produced and all documentation and discussions from the mediation is excluded from the scope of this report." [ibid]

19.197 Nonetheless, the report records the following:

"During our discussions with **tie** senior management on 28 April 2011, concern was expressed over the unrecorded nature of the mediation process and how the decision making process during the mediation could be reviewed, should it be required in future." [ibid, page 0044.]

19.198 I share that concern. Mediations are typically conducted under strict obligations of confidentiality. There are good reasons for that. However, that does not, in my view, excuse a public authority from keeping a proper record of the basis for any decisions that it might reach there.

19.199 Dame Sue Bruce said in evidence before the Inquiry that she expected that there would be a typed record of proceedings at the mediation to explain how agreement was reached on the price of £362.5 million [PHT00000054, pages 50–52]. The Inquiry has been unable to find any documentary record that does so, beyond those discussed below.

Evidence before the Inquiry

- 19.200** In the absence of a clear contemporary record, or an explanation from CEC, I have found it necessary to consider at some length the evidence about the basis of agreement at mediation on the price of £362.5 million.
- 19.201** The witnesses involved in the mediation were generally content to accept the description of the agreement on the figure of £362.5 million as a 'horse trade' [Dame Sue Bruce [ibid](#), pages 47–48; Mr Emery [PHT00000052](#), pages 63–66; Mr C Smith [PHT00000053](#), page 56; Mr Coyle [PHT00000010](#), page 106]. By "horse trade", I take them to mean that the figure was a compromise reached by the parties to resolve their dispute, without the necessity of any shared rationale for the particular figure at which they compromised. It is not uncommon for disputes to be resolved in that way. It is pragmatic and avoids the need to specify a precise solution to every element of a dispute. That does not, however, obviate the need for a public body to explain the basis on which it has decided that the settlement price is acceptable.
- 19.202** It is clear that the ultimate decision-maker for the employer team at the mediation was Dame Sue Bruce. She was CEC's Chief Executive and therefore its most senior official. She signed both the key points of principle document on 10 March and the Heads of Terms document on 12 March. Although Mr Emery, the chairman of **tie** and TEL, also signed both of those documents, and together with Dame Sue Bruce formed part of the core negotiating team, he was clearly in a subordinate role by virtue of the fact that **tie** and TEL were CEC subsidiaries. Although it was **tie**, and not CEC, which was the counterparty to BSC under the Infraco contract, it was clear that **tie** had reached the limit of its funding authority and that the approval of any settlement had to come from CEC [Mr Emery [PHT00000052](#), pages 10–13]. It was CEC that would have to pay for any price increase agreed at mediation. There would have been no point in Mr Emery approving the agreements at mediation unless Dame Sue Bruce did too, because she had taken charge of, and was the "deciding person" for, the employers' side at mediation [Mr Rush [PHT00000033](#), page 184; [TR100000141_C](#), page 0033, Addendum to Answers, question 87]. There is no question, therefore, that responsibility for agreement to the price of £362.5 million at mediation rested with Dame Sue Bruce.
- 19.203** In reaching this conclusion, I keep in mind that it was ultimately for CEC's councillors to approve or reject the final settlement and that the terms agreed by Dame Sue Bruce did not bind them [cf. Dame Sue Bruce [TR100000084](#), pages 0028–0029, paragraphs 90–91]. I also keep in mind that Dame Sue Bruce was not herself an expert in construction projects and was heavily reliant on information from **tie** and advice from others. Further, although Mr Emery was in a subordinate role as chairman of CEC's subsidiaries, he took full responsibility for his own decision to overrule the views of **tie**'s senior management and accept the deal [[PHT00000052](#), page 51 onwards]. Given his considerably greater experience with large-value commercial contracts, I am in no doubt that his views were influential in decision-making at the mediation. These considerations do not detract from the fact that it was, and could only have been, Dame Sue Bruce who decided that £362.5 million was a price that could be agreed in principle and later put to the Council for approval.
- 19.204** I also keep in mind that, despite his attempts to distance himself from his role as one of the negotiators, Mr McLaughlin of Transport Scotland was the third member of the core negotiating team at Mar Hall. I do not consider, however, that he was instrumental in the deal agreed. Having said that, Mr Emery described Mr McLaughlin

as a member of the "decision making collective" [\[ibid\]](#), page 10], as well as a "main player" [\[ibid\]](#), page 50]. More significantly, although Mr Emery did not consider that Mr McLaughlin had a veto over any proposed settlement, he commented: "clearly he [McLaughlin] was consulted and we needed his agreement to go forward with that number" [\[ibid\]](#), page 63]. I accept that evidence. In addition, as will be discussed more fully in paragraphs 19.260–19.263 below, Mr McLaughlin accepted that in the course of the mediation he left to report by telephone to the Cabinet Secretary [Mr Swinney] on the progress of the mediation, including the likely settlement figure [\[PHT00000011\]](#), pages 185–188]. That evidence tends to suggest that Mr McLaughlin had more influence in the settlement process than he led the inquiry to believe, although I accept that this does not detract from the ultimate responsibility of Dame Sue Bruce mentioned above.

- 19.205** All the information available to the CEC team at mediation about project costs came from **tie**. CEC did not engage its own independent advisers in relation to project costs. Although several members of **tie**'s senior management team were present at the mediation (Mr Jeffrey, Mr Bell and Mr Murray), and were involved to the extent of providing information, being consulted and making comment, they were not involved in any decision-making capacity [Mr Jeffrey [TR100000097_C](#), page 0058, paragraph 353; Dame Sue Bruce [PHT00000054](#), page 62; Mr Emery [PHT00000052](#), pages 14–16; [WED00000582](#)].
- 19.206** Dame Sue Bruce did not herself have any clear recollection of the basis on which the price of £362.5 million was agreed [[PHT00000054](#), page 46 onwards]. That is not particularly surprising, given the passage of time and her own lack of technical expertise in relation to project costs. It does, however, demonstrate the importance of written records documenting the basis on which such decisions are taken. She accepted as accurate the summary of offers and counter-offers [[WED00000134](#), Parts 1–5; Dame Sue Bruce [PHT00000054](#), page 35 onwards and page 64 onwards], which will be discussed further below.
- 19.207** Mr Emery's evidence was that the price agreed at mediation was around half what BSC had originally sought [[PHT00000052](#), pages 48 and 60–61]. That is plainly incorrect, and Mr Emery was mistaken about it. I attribute that to the dimming of Mr Emery's memory in the seven years since the mediation. The reality was that the price agreed at mediation was reduced only to a very limited extent from BSC's proposal.
- 19.208** The most detailed written account of decision-making at the mediation is a report by Mr C Smith and Mr Coyle [[WED00000134](#), Part 3, page 0233 onwards]. In the discussion that follows, I refer to it as the "Smith and Coyle report". They wrote it in 2012 as a briefing for CEC's incoming Transport, Infrastructure and Environment convener on the evolution of the capital cost of the project from the period leading up to mediation. Since it was written by two representatives of CEC who were actually present at the mediation, I am prepared to treat it as in general an accurate summary of what occurred. However, since it was apparently not written until more than a year after the mediation, I must remain open to the possibility that in certain respects it may not be completely accurate. I would also observe that it is surprising that no similar exercise was undertaken immediately after the conclusion of the mediation to avoid any inaccuracies due to the passage of time and also as part of the public record of events.

- 19.209** I must also keep in mind that neither Mr Smith nor Mr Coyle was part of the triumvirate that formed the core negotiating team and may not in all respects have known what that team did or why.
- 19.210** The report is not, unfortunately, an especially clear or full account of the thinking which underlay agreement on the price. It is, however, a guide.
- 19.211** An important feature of the report is its account of a discussion which it describes as having taken place “[d]uring the initial stages of mediation” [libid](#), Part 3, page 0235, paragraph 7.6]. Other evidence confirms that this discussion in fact took place on the day prior to the mediation, being 7 March 2011, and took up most of that day [[WED00000582](#), page 0002].
- 19.212** The discussion concerned **tie**'s preferred option, of separating from BSC and re-procuring the work from another contractor. **tie**'s cost estimates indicated that this would be less expensive than a Phoenix-based settlement with BSC. The estimates discussed were those from **tie**'s “deck chair” spreadsheet, being a range of £646 million to £698 million to separate and re-procure, and a higher range of £682 million to £749 million for a Phoenix-based settlement with BSC. As was noted at paragraph 19.175 above, it appears that the latter figures were overstated by c. £20 million due to double counting of the cost of the section between Haymarket and St Andrew Square. Adjusting for that, **tie**'s figures still forecast the option to separate and re-procure as less expensive than BSC's Phoenix proposal.
- 19.213** The Smith and Coyle report notes that **tie**'s preference for separating and re-procuring “went against all the advice that was given by independent advisors at this time” [[WED00000134](#), Part 3, page 0235, paragraph 7.6]. It does not identify these advisers, but those involved in the preparations for mediation included Mr C Smith, one of the authors of the report, Mr Robson, Mr Rush, Gordon Harris Partnership and McGrigors [Mr Coyle [PHT00000010](#), page 48 onwards].
- 19.214** The report then describes a number of “fatal flaws” in the assumptions that **tie** had made in estimating the cost of separating and re-procuring. These included a failure to take account of BSC's entitlement to payment for delay, or for disputed design change for work already done [[WED00000134](#), Part 3, page 0234, paragraph 7.4]. This criticism appears to have been well founded: the cost estimates in **tie**'s “deck chair” spreadsheet for the “settle and re-procure” option do not appear to make provision for the cost of delay or disputed design changes [[TIE00355078](#), columns P to S]. I have considered why that should be so. The “deck chair” spreadsheet columns addressing the cost of a deal with BSC, in contrast, did make provision for the cost of delay and disputed design change: they derived from **tie**'s Infraco Entitlement paper, which had made pessimistic assumptions about **tie**'s liability for such costs [libid](#), columns U–V, rows 24–25, when compared with [TIE00106500](#), pages 0016–0017 and the evidence of Mr Murray [PHT00000055](#), pages 101–102]. Further, in assessing the “continue as is” option, the spreadsheet included significant figures for change and delay, both to date and projected (columns B and C). One possible explanation lies in the fact that, due to a shortage of time, **tie** had focused its preparation on BSC's Phoenix proposal to the exclusion of the separation option. That explains the absence of the “separation” part of the Infraco Entitlement paper; and that might in turn explain why the separation figures in the “deck chair” spreadsheet take no account of **tie**'s liability for delay and design costs. The alternative explanation is that **tie** assumed a settlement could be negotiated with BSC which did not include any additional payment for change and delay – an assumption that I have no hesitation in rejecting as unrealistic.

19.215 The fact that the Smith and Coyle report describes the absence of such costs from **tie**'s estimates as a "fatal flaw" indicates that the **tie**/CEC team proceeded at mediation on the basis that it was indeed to be assumed that **tie**/CEC bore substantial liability for the cost of design change and delay. The precise basis for this judgement is not clear. Mr C Smith accepted that he made this judgement. At the time of the mediation, his judgement was based on discussions with others, as opposed to his own detailed knowledge of the project because at that time he lacked such knowledge [**PHT00000053**, pages 42–46]. When asked to explain the basis, he said:

"I think it was reading the papers that were presented to me and observing the behaviours, and primarily the behaviours of **tie** ... it would have been watching the debate between – I think it was Jim Molyneux [a quantity surveyor with Gordon Harris Partnership] and Tony Rush, versus Steven Bell, Richard Jeffrey and to a lesser degree Dennis Murray." [**ibid**, page 46.]

19.216 This indicates a preference for the views of Mr Rush and Mr Molyneux over those of **tie**'s senior management. It does not appear, from this description at least, to have been a preference based on a detailed consideration of the relevant facts and issues.

19.217 The Smith and Coyle report noted that it had:

"become clear that the dominant cause of delay to the works was the delayed MUDFA utility diversions" [**WED00000134**, Part 3, page 0233, paragraph 7.2].

19.218 Apart from utility diversions to be carried out by Infraco as part of the expenditure on provisional sums in Appendix B of SP4 of the contract **tie** had the responsibility for completion of the diversion of all utilities in accordance with the construction programme and delay in that programme due to utility diversions was a risk that **tie** bore under the Infraco contract [**USB00000032**, page 0008, clause 3.4, Pricing Assumption 24]. The assumption that MUDFA was the dominant cause of delay was confirmed to be an important one underlying the agreement reached at mediation [Mr C Smith **PHT00000053**, pages 83 and 85; Dame Sue Bruce **TR100000084**, page 0054, paragraph 170]. The view that MUDFA delays were the critical delaying factor throughout the project is supported by BB [**TR100000292**, pages 0133–0140, paragraphs 225–235A]. The basis on which CEC's representatives made that judgement at the time of the mediation is, however, unclear. It was contrary to the position being taken by **tie** in the then still-unresolved dispute over BSC's claim for extension of time and related costs arising out of utility diversion delays up to 31 July 2010 (INTC 536). In that dispute **tie** maintained that it was not liable for an extension of time due to utility delays because something else – perhaps delays relating to design, or delays attributable to the contract change process – was in fact the dominant cause of delay [**WED00000587**]. As far as the Inquiry is aware, there is no documentary evidence to demonstrate any consideration being given by the CEC negotiators at mediation to the arguments that **tie**, with Acutus, had developed. It is unclear whether they were used in any way to negotiate a discount in the price to be paid. Nor is it clear that the arguments were consciously discarded, or, if they were, on what basis. There is simply no record at all.

19.219 The report identified a second category of "fatal flaws" [**WED00000134**, Part 3, page 0234, paragraph 7.4], relating to the likely cost of re-procuring the work from another contractor. These flaws were:

- an assumption that a new contractor would take over the project without a risk allowance or a "bad project" premium being included;

- a failure to take into account the effect of inflation on the cost of materials;
- a failure to account in the price for the significant risks remaining in the on-street section; and
- a failure to allow for extension to the programme as a result of having to re-procure the work.

- 19.220** I am prepared to accept that **tie** had not included these costs in its "deck chair" spreadsheet: there is certainly no entry that obviously includes them. Although there is a line entry for "Further Risk allowance on new procurement" no figures are included [**TIE00355078**, row 42].
- 19.221** I also accept that the factors listed in the report as the second category of fatal flaws would be likely to increase the risk and cost of the project, were the works to be re-procured.
- 19.222** The Smith and Coyle report records that the difference of views over the likely cost of separating and re-procuring led to:
- "a significant amount of discussion between **tie** and CEC (including CEC advisors) on the assumptions **tie** had made in the forecasts for separation. It soon became clear that **tie** had not considered a number of cost headings at this time which would have had a significant impact on the final cost. In very broad terms, these items were in the order of £150m for settlement, professional costs, bad project premium risk, systems re-procurement risk, and inflation, which would have potentially resulted in a final outturn cost of at least £800m." [**WED00000134**, Part 3, page 0235, paragraph 7.6.]
- 19.223** What the report does not make explicit is that the addition of £150 million of costs to **tie**'s estimate of the separate/re-procure option had the effect of making it more expensive than a Phoenix-based deal with BSC. That reversed the position as it had appeared on **tie**'s estimates up until then. Only as a consequence of this discussion, the day before the mediation, was it possible for CEC's negotiators to justify their already established preference for a Phoenix-based deal on cost grounds.
- 19.224** It is, to say the least, very surprising that there is an absence of any detailed calculation for such a significant sum. Even more surprising is that the decision whether to include such cost elements in **tie**'s estimates was not resolved until the day before the mediation. They are costs and risks that seem relatively obvious, even to a lay person, when one thinks about a re-procurement exercise in a project such as this. That their absence was only addressed the day before the mediation is a significant indicator that **tie** and CEC's preparations were inadequate by the time of the mediation.
- 19.225** Even accepting, as I do, that some adjustment was necessary for these missing cost elements, it is difficult not to be sceptical about the magnitude of the adjustment.
- 19.226** Firstly, it had the benefit for the CEC team that it rendered their preferred option – a Phoenix-based deal with BSC – the more cost-effective of the two main options.
- 19.227** Secondly, since separate and re-procure was the only practicable alternative to a Phoenix deal, the extent to which it was more expensive was important: its likely cost was an important consideration in deciding what CEC could justifiably pay for Phoenix. As Mr Rush had put it on 2 March 2011:

"the potential cost of Separation is a critical threshold on which we may decide to ditch Phoenix or conversely decide to agree on a price for Phoenix which is higher than we needed to [sic]" [**CEC02084603**].

- 19.228** In his evidence to the Inquiry Mr Emery agreed that, to make a good decision about Phoenix, one needed a good view on what separation would cost. From his evidence it is also clear that the main focus of the negotiating team for CEC was to achieve a solution that would enable the project to continue with the same contractors [PHT00000052, pages 36–39]. I gained the impression from Mr Emery's evidence that he did not give any serious consideration to any alternative to the main focus of the mediation, the consequence of which was the possibility envisaged by Mr Rush that agreement would be reached on a higher price than was necessary for Infracore to continue with the project. Mr C Smith accepted that the negotiating team lacked a clear idea of the cost of separation and re-procurement, and that this would have had a bearing on their ability to make a rational judgement on an appropriate price to pay for Phoenix [PHT00000053, pages 38 and 51].
- 19.229** Increasing the estimated cost for separation and re-procurement, as CEC's negotiators did the day before the mediation, raised the price that those negotiators could justify agreeing for Phoenix, which in turn increased the prospect of a deal being agreed at mediation. A last-minute adjustment of £150 million to the cost estimate substantially improved the prospects of CEC's negotiators leaving the mediation with a deal. The circumstances in which it was done, however, do not inspire confidence that the £150 million increase was grounded in any particularly strong evidence or analysis.
- 19.230** From paragraphs 19.222 to 19.229 above it appears that there is no record of the detailed breakdown of the £150 million adjustment. Mr Coyle, one of the authors of the Smith and Coyle report, could not recall how that figure was calculated [PHT00000010, pages 60–64; WED00000134, Part 3, page 0249]. I do not consider that that report provides any clear explanation of the adjustment.
- 19.231** Before considering the circumstances in which the £150 million adjustment was made it is important to bear in mind that Mr C Smith was wary about estimates provided by **tie**. He had a "gut instinct" scepticism about **tie**'s cost estimates in general, on the basis that they were routinely lower than others' and he was sceptical that separation and re-procurement would be less expensive than the Phoenix option [PHT00000053, pages 21 and 39 onwards]. His evidence was that there was no 'feel' for what the cost implications of separation might be; and that no one knew if a new contractor would be willing to take on the project, or what premium they might charge [TRI00000143_C, page 0011, question 26 and page 0013, question 34]. He said his scepticism was shared by Mr Rush and Mr Robson. I accept that Mr Rush shared that scepticism [Mr Rush TRI00000141_C, pages 0035–0036, answer to questions 93 and 94]. However, I have reached a different view about the support that he seeks for his scepticism from Mr Robson. In email correspondence with the Inquiry Mr Robson told the Inquiry that he had no background or experience in project costs [WED00000653]. I consider it unlikely that if he had any views about costs they would have had any meaningful influence compared with the views of Mr Smith and Mr Rush, who, given their professional backgrounds, had more relevant experience in the matter.
- 19.232** Mr C Smith gave evidence to the Inquiry about the circumstances surrounding the £150 million adjustment [PHT00000053, pages 46–55]. From that evidence I have concluded that he was instrumental in that adjustment, which emerged following a meeting with Mr Coyle and possibly Mr McGougan. Of those three, only Mr Smith was a quantity surveyor, and by his own admission he had a very limited knowledge of the facts and circumstances of the project [*ibid*, pages 18–20, 36]. Mr Coyle and Mr McGougan were accountants with no particular expertise in project costs; and, as will be noted below, Mr McGougan explicitly gave evidence that he did not know

how to quantify the risks. Mr Smith described making "round number" provisions for the exclusions in SP4 of the Infraco contract. The £150 million adjustment was, at least in part, a high-level, "gut instinct" adjustment. Mr Smith did not discuss this with **tie**'s quantity surveyors and he confirmed that he did not go through the calculations "line by line" with them, although his adjustment would have been added to the "deck chair" spreadsheet that would be available to the remainder of the team. The decision to accept the adjustment rested with Dame Sue Bruce and Mr Emery.

19.233 Since Mr C Smith had been engaged at the instigation of Dame Sue Bruce to advise her, based on a relationship of trust which had developed between them, and was also an experienced quantity surveyor, it seems to me likely that Mr Smith's views on the risk associated with separating and re-procuring would have had a significant influence on Dame Sue Bruce.

19.234 Mr McGougan provided a different perspective on this adjustment. When asked whether he thought that the settlement figure was reasonable, he said that he was prepared to support the settlement as being affordable but demurred from confirming that he thought it was reasonable. He said it was very clear to him that the risks associated with termination and re-procurement were not fully built into **tie**'s figures. He did not recall a figure of £150 million, and did not himself know how to value the various risks, but said:

"The key thing for me was ... to go for ... the option with least delay and least risk which was – to my mind, was [sic] clearly settlement, and if we paid more for that through these prices than going out and reprocuring, then that could still be better value for money ... because of all the delays and all the risks attached to that second option" [[PHT00000043](#), pages 92–93];

"I was clearly seeking to get to an agreement on settlement because the risk of not having an asset at the end of this process, after all the city had been through, and all the costs that had been incurred, was to my mind much greater under termination and reprocurement than reaching an agreement on settlement" [[ibid.](#), pages 89–90].

19.235 He noted that **tie** agreed that there were a lot of risks that were difficult to quantify. Mr McGougan's evidence in this respect supports the concerns expressed by Mr Jeffrey to Dame Sue Bruce that the proposed settlement price was unjustifiable to which he received the reply: "[t]his is about more than money" [[TR100000097_C](#), page 0058, paragraph 354], suggesting that the preference for an option which might be more expensive than the alternative possibility was not dependent on cost alone. I refer to this in paragraph 19.256 below.

19.236 Mr Murray of **tie** accepted that it was always going to be difficult to assess the cost of the separate and re-procure option, because of the variables and unknown factors associated with it. He also did not recall a figure of £150 million, but considered that it was likely to be made up of:

"significant risk allowances added to the calculated figures when CEC advisors were considering and overviewing the final figures. The final allowances were hugely subjective and I don't think that I concurred with them at that time" [[TR100000249](#), page 0014, paragraph 24].

19.237 Later in the same answer he described the risk allowances as "speculative and highly subjective" and confirmed that he did not concur with their magnitude and would have said so at the time [[ibid.](#)].

19.238 Mr Smith said that one reason why preparations focused on the Phoenix option was the time that it would take to complete a thorough exercise on separation. Moreover, it proved very difficult to place a value on the separation option [PHT00000053, page 25]. He accepted that the preference for Phoenix over separation was established before completed cost estimates were available. Indeed, the Phoenix option was preferred over separation for reasons other than cost, being the risk of integrating a new contractor's system with what had already been built, and the risk that other contractors might not be willing to step in to the Edinburgh project given its troubled past [ibid, page 27]. Mr Rush considered that, if the works had been re-tendered, the prices obtained "would have had large premiums above market because of the toxic reputation the project had" [TR100000141_C, page 0037].

19.239 As is noted in the Smith and Coyle report the effect of the £150 million adjustment was to take the estimated cost of separating and re-procuring to "at least £800m" [WED00000134, Part 3, page 0235, paragraph 7.6]. This was the figure at the top end of the range that Mr Rush had proposed as a "prudent estimate" for separation as early as 27 February 2011 [CEC02084651]. Although the basis for the figures in the range between £765 million and £800 million is not clear, it may be linked to the GHP report of 24 February. That report, as noted above, expressed views that were heavily qualified.

Conclusions: preparations for mediation

19.240 Taking all this evidence together, I reach the following conclusions.

- **tie's** estimates of the cost of separating and re-procuring were incomplete by the time of mediation.
- That was at least in part a consequence of resources being limited, and priority in allocating them having been given to the Project Phoenix proposal, which had been identified as the preferred option before detailed cost estimates were available. That preference had been established among CEC's senior officials as the quickest and least risky means of having a tram line completed, although not necessarily at the cheapest price.
- By the time of the mediation, the "external" advisers, including in particular Mr C Smith and Mr Rush, had come to the view that separating and re-procuring was risky and, as a consequence, likely to be expensive. The extent of that expense was not known or assessed with any precision.
- Due to the lack of time for **tie** and CEC to prepare, adjustments to reflect these considerations were made only on the day before the mediation.
- Insofar as those adjustments related to the risks of separating and re-procuring, they were highly subjective and open to debate. They were of a magnitude that was unacceptable to Mr Murray, the quantity surveyor with the most detailed understanding of the project costs of all those who were at mediation.
- The effect of the adjustment was to increase significantly the amount that CEC's negotiators could justify paying for a Phoenix-based deal with BSC, and therefore the prospects of a settlement price being agreed at the mediation.
- The adjustment also meant the option preferred by CEC's officials went from being more expensive than the alternative to being less expensive.

19.241 This is, in my view, an unsatisfactory feature of CEC's preparation for mediation. The fact that an adjustment of such magnitude and importance was made at such a late stage casts doubt on the quality of that preparation overall. It is a matter of

considerable concern that a highly subjective adjustment, about which there was a lack of consensus and an absence of objective calculation, should be introduced on the eve of the mediation, particularly as its impact resulted in the preferred option of CEC's officials becoming the least expensive one. It created the impression that their preferred option had been subjected to greater financial scrutiny than in reality and affected the settlement price that CEC's negotiators could justify agreeing.

Negotiations at mediation

- 19.242** The Smith and Coyle report describes the exchange of offers and counter-offers at the mediation. BSC's Project Phoenix proposal from 24 February was the opening offer. For the work of BB, Siemens and SDS, the Phoenix proposal was a price of £384 million. According to the report, CEC's first offer for these works was £304 million. The rationale for this figure was that "there were still a significant number of exclusions that sat outside the off-street price which were estimated at £80m" [[WED00000134](#), Part 3, page 0235, paragraph 7.7]. £80 million was the upper figure derived from Mr Bell's calculations of 4 March (see paragraphs 19.172 and 19.173] above). The basis for CEC's opening offer therefore appears to have been to deduct from BBS's proposed price the most pessimistic estimate of the costs that **tie** considered the Phoenix proposal still left it with. This was logical because of CEC's objective of negotiating a guaranteed maximum price. It indicates, however, that the negotiating ground was BSC's Project Phoenix proposal rather than **tie**'s calculation of BSC's entitlement under the Infraco contract.
- 19.243** CEC's offer of £304 million was rejected, as was a counter-offer from BSC. According to the report:
- "CEC then replied with a final offer of £362.5m for the off-street section, with no exclusions and Infraco taking all the risk with the exception of minor utilities." [[libid](#)]
- 19.244** On the face of it, that represents significant progress by CEC at the mediation, at least when BSC's Project Phoenix proposal is taken as the benchmark. It indicates that, as well as negotiating a reduction of £21.5 million in the price sought by BBS for its works (from £384 million in the Project Phoenix proposal, to £362.5 million), CEC also successfully negotiated for the removal of most of the exclusions and risks which **tie** had valued at £80 million, albeit on a pessimistic basis. This was described by Mr Nolan as a "massive point", which took a further day to resolve after the price had been agreed [[PHT00000046](#), pages 204–206].
- 19.245** Based on the agreed off-street works price of £362.5 million, the report gives an estimate of £743.5 million for the total project cost of building a line to St Andrew Square. That, however, assumed a cost for the on-street works of £22.5 million, as opposed to the £39 million proposed by BBS at the mediation for those works. In estimating the total cost of the project to St Andrew Square it would seem more appropriate to use that latter figure. Doing so gives an estimated overall cost of £760 million, based on what was known at the mediation. Indeed £39 million was itself below the £47.3 million target price ultimately agreed for on-street works (paragraph 19.602 below).
- 19.246** Another explanation of the basis on which CEC's negotiators agreed at mediation to the price of £362.5 million is offered by Mr Rush. An email he sent to Mr Nolan of McGrigors on 14 March 2011 is the only other written record known to the Inquiry summarising decision making by CEC's negotiators at the mediation, and it is the only one that is almost contemporary to the mediation [[WED00000582](#)].

- 19.247** It also refers to the meeting of the CEC and **tie** teams, and their advisers, on the day before the mediation (7 March). It notes that:
- “The discussions were inconclusive other than there was an understanding that the ‘trigger point’ for rejecting a Project Phoenix Offer was in the region of £740 million for all costs.” [\[ibid\]](#)
- 19.248** It describes the agreed price as producing an estimated total project cost inside that trigger point.
- 19.249** This email therefore indicates that, the day before the mediation, the CEC team identified £740 million as an upper limit on what would be an acceptable price to pay for the entire project. If a deal based on Project Phoenix would lead to an overall price higher than that, the email indicates that those negotiating for CEC were inclined to reject it.
- 19.250** Since this email is closely contemporary with the mediation, it carries weight. I accept that it accurately reflects Mr Rush’s understanding of events at the time. Dame Sue Bruce recalled having:
- “a line in the sand which we had set for ourselves to draw back and reflect ... 740 was deemed to be the point at which we would have to give serious consideration to the advice we would then give back to Council about the options” [\[PHT00000054\]](#), pages 39–40].
- 19.251** The email does not explain how the £740 million figure was fixed. Dame Sue Bruce could not explain it [\[ibid\]](#), page 40], nor could Mr Coyle [\[PHT00000010\]](#), page 95]. Mr Emery had no recollection of a trigger point, or the relevance of the figure of £740 million, but did not dispute it [\[PHT00000052\]](#), pages 54–55]. Mr C Smith did not recall a figure of £740 million, but did recall an upper limit being established and accepted it was, in fact, the most important figure before going into mediation [\[PHT00000053\]](#), pages 63–64]. He referred to the frustration of the senior negotiators that it was established so late, and said:
- “it would have been a more well managed process immediately prior to mediation if that figure had been fully embraced by all parties” [\[ibid\]](#), page 64].
- 19.252** That is apparently a reference to the refusal of **tie**’s senior management to agree the figures.
- 19.253** Mr Rush’s email about the £740 million “trigger point” can be reconciled with the Smith and Coyle report. In my view, on the balance of probabilities, the CEC negotiators considered that they would have to give serious consideration to separating from BSC and re-procuring the project if the Phoenix price then under discussion would result in overall project costs of £740 million or more. A trigger point at that level indicates that they did not take full advantage of the £150 million adjustment that had been discussed the day before: had they done so, the “trigger point” would have been £796 million to £848 million. In the event, the price that they agreed gave rise to an overall estimate of £760 million, which was £20 million above the trigger point and between £62 million and £114 million higher than **tie**’s estimate of the cost of separating and re-procuring [\[TIE00355078\]](#); [\[WED00000134\]](#), Part 3, page 0234, paragraph 7.3].

- 19.254** It is relevant at this point to consider the remainder of Mr Rush's email [[WED00000582](#)]. In that email, Mr Rush says that, after BSC made its revised proposal at mediation:
- "It emerged that CEC were in need of making progress which avoided political damage at this time. A response was discussed which gave CEC absolute price certainty and being subject to funding did not commit them to the deal."
- 19.255** This indicates that those negotiating for CEC were under pressure to leave mediation with a deal. I consider that undoubtedly to have been the case. When this passage was put to Dame Sue Bruce, she explained that:
- "The Council also had to consider the wider implications for Edinburgh. So all the focus was on the technical to-ing and fro-ing of this contract, but surrounding that was the reputational damage to the city, the damage to traders, to householders, the fact that the city was busy, there were festivals. So there were other risks that the Council was carrying which added to its consideration." [[PHT00000054](#), page 42; see also Mr C Smith [PHT00000053](#), page 67.]
- 19.256** These were factors beyond the direct cost of the project, but nonetheless pertinent to decision making about it. That perspective was reflected in Mr Jeffrey's evidence about what Dame Sue Bruce had said to him during the mediation, in response to him having strongly expressed the view that the price under discussion was unacceptable:
- "This is about more than money." [[TR100000097_C](#), page 0058, paragraph 354.]
- 19.257** In his statement to the Inquiry, Mr Rush said:
- "Early in the (I think 4th) morning it appeared that the mediation was about to break down. I drafted a skeleton of what I thought would break the dead-lock and Sue Bruce was enthusiastic about it. It had the majority backing of those involved, including Vic Emery, Andrew [sic: Alastair] Maclean and the representative from Transport for Scotland [sic]. At that point, I had no further input. Sue Bruce, Vic Emery and I think Nigel Robson met the three executives from Infracore's partner companies. An agreement was reached." [[TR100000141_C](#), page 0033, paragraph 6; see also [PHT00000033](#), pages 174-179.]
- 19.258** Dame Sue Bruce did not demur from Mr Rush's recollection.
- 19.259** This indicates that it was Mr Rush who proposed the £362.5 million figure and that he proposed it because he thought it would break the deadlock. In other words, it was a pragmatic proposal, reflecting his instinct for the level at which a deal might be done. I consider that his proposal will have been influenced, at least in part, by the £740 million "upper limit" discussed the day before the mediation. As I have noted above, the agreed price in fact led to an estimated cost of £760 million. The justification for exceeding the upper limit was, in my judgement, the political imperative that CEC's negotiators leave the mediation with a deal that could be put to the councillors.
- 19.260** The political imperative was not, in my opinion, confined to the local authority; it included Scottish Ministers. Mr Swinney confirmed that he was interested in a deal being reached at mediation. That is understandable because Scottish Ministers had offered a grant of £500 million towards the project and had paid a substantial proportion of that to CEC. However, it appears that immediately before going to discuss Mr Rush's proposal with the principals of the companies in BSC Dame Sue Bruce confirmed that she "could go for that" proposal and Mr McLaughlin telephoned

"John Swinney and got his approval" [Mr Rush [PHT00000033](#), page 179]. In his evidence Mr Swinney stated that Mr McLaughlin did not require his approval but Mr McLaughlin had telephoned to let him know how it was going and commented:

"What I was interested in was a deal being arrived at that would lead to the completion of the project, and my approval for the terms of that were not required and I did not give them." [[PHT00000050](#), page 139.]

- 19.261** I have difficulty in accepting Mr Swinney's evidence on this matter. There is no doubt that he was interested in securing the completion of the project. He had had meetings with Councillor Dawe, the Leader of the Administration at CEC, designed to ensure that progress was made. However, In the course of any negotiations one might expect there to be several proposals and counter proposals and it is not possible to provide reassurance of the type sought by Mr Swinney until agreement has been reached, The negotiations at mediation were no different in respect that various proposals and counter proposals had been made and rejected and towards the end of the mediation there was a prospect that negotiations had broken down. Mr Rush drafted a compromise memorandum of understanding that he thought might break the deadlock and Dame Sue Bruce confirmed that its terms were acceptable to her. Mr Rush thought that it was at that point that Mr McLaughlin telephoned Mr Swinney after which the principals from each negotiating team met and reached agreement. If the genuine purpose of the call was to provide Mr Swinney with the reassurance sought by him, it was premature. Mr McLaughlin could not reassure Mr Swinney that the project would be completed until an agreement had been reached that would have that result. I have concluded that the telephone call was made before the latest proposal was made to BSC and in circumstances where various proposals had previously been rejected. I have also accepted Mr Rush's impression that the purpose of the telephone call was to obtain Mr Swinney's approval of the proposal [[PHT00000033](#), page 179]. Although I am unable to determine what was discussed between Mr Swinney and Mr McLaughlin on the telephone, I have rejected Mr Swinney's evidence about the reason for the telephone call. My assessment of the evidence of Mr McLaughlin is also relevant in this regard.
- 19.262** Mr McLaughlin confirmed telephoning Mr Swinney and gave similar evidence to the Minister to the effect that the purpose of the call was not to seek Mr Swinney's approval for the deal that was about to be offered but to provide him with an update on the progress of the mediation and to give him an indication of the sum likely to be paid [[PHT00000011](#), page 185]. His explanation for providing an update at that particular point and for giving him an indication of the likely settlement figure does not bear scrutiny. Mr McLaughlin's original justification in his evidence for Mr Swinney's interest in the settlement figure was that the grant from Scottish Ministers was £500 million and the Minister wanted to make it clear that any excess over £545 million had to be borne by CEC [[ibid](#), page 186]. That was clearly untrue. Mr McLaughlin agreed that it was self-evident before going to mediation that the figure for the project would exceed £545 million. He also accepted in his evidence that for almost four years before mediation the Minister's position about CEC's sole liability for any excess over £545 million had been made plain [[ibid](#), page 187]. He then sought to justify telling the Minister about the proposed settlement figure by saying that "there was a natural interest in what the final cost of the project was going to be and what the implications of that would be for the Council" [[ibid](#), pages 187–188]. The "natural interest" in the final cost of the project and the implications for CEC may well have been of political interest to Scottish Ministers ultimately but in the first instance they were the practical concerns

of CEC. Moreover, I do not understand why it was felt necessary to satisfy the "natural interest" of the Cabinet Secretary before the settlement proposal had been made, far less accepted, unless it was to seek his approval for the proposed offer in the sense mentioned in paragraph 19.261. The timing of the telephone call was clearly significant. In all the circumstances I have rejected Mr McLaughlin's explanation for the telephone call as not credible.

- 19.263** I do not understand why Mr Swinney and Mr McLaughlin felt obliged to obscure what transpired in their telephone conversation or its true purpose. The timing of the telephone call immediately before Dame Sue Bruce made the final offer to the contractors tends to support Mr Rush's impression that it was to seek the Minister's approval before the offer was made. The lack of candour on this matter by Mr Swinney and Mr McLaughlin and Mr McLaughlin's attempted justification for making the telephone call simply gives rise to suspicion as to the true purpose of the telephone conversation. As with all witnesses who gave evidence in person, they testified on oath and their lack of candour calls into question their integrity.
- 19.264** Mr Rush referred in his oral evidence to having written a "rough" calculation down, and to his belief that Mr C Smith would have kept it [**PHT00000033**, pages 175–176]. The Inquiry has not been able to identify any such calculation, and the Smith and Coyle report [**WED00000134**, Parts 1–5] does not contain one. Mr Rush was asked if his figures were based on an assessment of BSC's entitlement and said:
- "No, they would be judgement figures at that time ... I would judge, from what I was told, and what I'd seen happening at the mediation, what figure should settle it."
[**PHT00000033**, page 180.]
- 19.265** Dame Sue Bruce said:
- "I cannot imagine for a minute that Tony Rush would have recommended a figure to me based on his technical knowledge of construction that he didn't think was just. And the backdrop to that would have been the finance figures probably with the finance team and the background figures with the **tie** team." [**PHT00000054**, page 52.]
- 19.266** In my view, that is over-optimistic: the price was not fixed by considerations of what was "just". It was simply the lowest sum that, in Mr Rush's judgement at the mediation, BSC could be persuaded to accept. It was the price CEC had to agree to pay to get a deal. Dame Sue Bruce, under questioning from senior counsel to the Inquiry, came to accept that **libid**, pages 55–60].
- 19.267** Mr Smith said that he was never asked to agree or to "interject or reject" the figure and that Dame Sue Bruce and Mr Emery received advice about the price from Mr Robson, Mr Rush and Mr Coyle [Mr C Smith **PHT00000053**, pages 75–76]. From October 2010, Mr Robson was engaged by **tie**, and then CEC, to advise upon the mediation, but in an email to the Inquiry said that he had "no background or expertise in engineering costs/costings, and thus had no input into these figures" [**WED00000653**].
- 19.268** I do not consider that Mr Robson would have been in a position to provide meaningful advice on what would be a reasonable price to pay. Nor do I think that Mr Coyle would have been able to provide such meaningful advice, based on my assessment of his evidence and his lack of recollection about the project costs noted above. Mr Rush's input on the price was focused on what would achieve a settlement, rather than what was reasonable or due. It is interesting in this regard that

Mr Rush thought that Mr C Smith verified the cost estimates for the mediation team [TR100000141_C, page 0035]. This conflicts with the position adopted by Mr Smith. His various responses to questions about the price of £362.5 million for off-street works were that he could not comment on the figures, he could not explain them or that he did not know the answer to the questions [TR100000143_C, page 0037 onwards]. As noted in paragraph 19.269, there is no doubt that he was aware of the proposed settlement figure as he was in the room when it was discussed before Dame Sue Bruce, Mr Emery and Mr McLaughlin met the principals of BSC when the figure was advanced. I have difficulty in accepting his evidence that he could not comment on it. He was a quantity surveyor who would, or should, have been interested in the derivation of figures that his client was being asked to agree and use as a basis for settlement of the mediation. He had been engaged to advise the Chief Executive of CEC (Dame Sue Bruce) based upon a relationship of trust that had developed between them. It is inconceivable that his advice on Mr Rush's settlement figure was not sought. Whether or not he was asked to comment on it, it seems to me that he should have inquired about the derivation of the figure and thereafter considered its justification to enable him to advise Dame Sue Bruce about it, particularly in view of his position as her special adviser. I consider that it is probable that he was aware that the proposed settlement figure, like the addition of £150 million to tie's calculations for termination and re-procurement on the eve of the mediation, was a high-level "gut instinct" figure incapable of objective verification which it was hoped would settle the mediation. As a professional adviser present at the meeting to consider the proposed settlement figure, he ought to have taken a proactive role in the scrutiny of the figure and in providing advice to Dame Sue Bruce. It does not appear that he did so. It is disappointing that in his evidence he sought to distance himself from any omission to provide such advice which might have influenced the ultimate decision to propose the settlement figure.

19.269 Dame Sue Bruce and Mr C Smith were keen to characterise the agreement on price as a collective decision of all those present at the mediation. Mr Rush also referred to an "almost unanimous decision" [PHT00000033, page 184]. When it was put to Dame Sue Bruce that there was no report available at the mediation to support a price of £362.5 million she said:

"But we had the information in the room. We had the combined knowledge that was in the room, all of the advisers, everybody's opinion coming together to state that this was a reasonable sum for what we had to do ... I think it was an exercise of collective judgment." [PHT00000054, pages 48 and 52.]

19.270 Mr C Smith said that:

"no one in the room prior to those numbers being passed through to the consortium's meeting room, no one in the room said: stop, don't go there, don't take those numbers out ... Everyone understood that's what was happening and, as I say, no one stepped in front of the door to stop that process." [PHT00000053, page 57.]

19.271 By the same token, however, his recollection was that no one openly declared agreement and he referred to comments from Mr Jeffrey and Mr Bell that the sum mentioned was "generous" [ibid, page 77].

19.272 I accept that the price proposals were discussed within the CEC/tie mediation team, and that this will have included input from those with a detailed understanding of the project and its costs. I reject, however, the suggestion that agreement on the price

was an exercise of collective judgement of the entire team that this was a reasonable sum to pay. It is clear that at least two members of **tie**'s senior management who were present at the mediation (Mr Jeffrey and Mr Murray), and possibly a third (Mr Bell) did not agree with it [Mr Emery [TR100000035](#), page 0033, question 113; cf. Mr Bell [PHT00000025](#), pages 53–55; Mr Jeffrey [PHT00000033](#), pages 72–76; Mr Murray [PHT00000055](#), pages 103–106; Mr Coyle [PHT00000010](#), pages 87–88]. Mr Emery accepted that he, as **tie** Chairman, had to override their views to agree the price [[PHT00000052](#), page 51]. Indeed, the £150 million adjustment to **tie**'s cost estimates the day before mediation made plain that their views were being overridden. The price must have had Mr Rush's support, as he had suggested it, but, as noted above, in my view he did so not because he considered it a reasonable price but rather because he thought it might achieve a settlement. Although Mr McGougan did not consider the proposed settlement to be reasonable, he thought it was a price worth paying because settlement was strategically better than other options and resulted in a better chance of providing an asset for CEC [[PHT00000043](#), pages 88–91]. On the other hand, Mr David Anderson did not consider that the settlement price could be justified when reference was made to Mr Rush's analysis of Project Carlisle and his estimate about nine months previously for the provision of a line to St Andrew Square at a cost considerably less than £776 million. In his view the settlement price was excessive to the extent of between £50 million and £75 million. He stated that the cost of £13 per kilometre was a benchmark figure for tramways in the United Kingdom but the settlement figure made the Edinburgh tramway the most expensive in the world, when measured by cost per kilometre [*ibid.*, pages 186–189]. The original estimated cost at contract close for the works to be undertaken by BBS was £246 million for the entire route from the Airport to Newhaven – a distance of 18.5 km, representing the industry benchmark of £13 million per kilometre. That does not take into account the distinction made by Mr Foerder that the price of £246 million was subject to the pricing assumptions in SP4. The route from the Airport to St Andrew Square is approximately 14 kilometres. The settlement included the price of £362.5 million agreed at mediation for the off-street works to Haymarket plus the cost of the on-street works from Haymarket to St Andrew Square. BBS had proposed £39 million as an estimated cost of these on-street works although ultimately agreement was reached on a target price of £47.3 million for them. Even if one takes the lower figure of £39 million, the average cost per kilometre exceeded £28 million and was more than double the industry benchmark mentioned above. While one cannot compare the two prices without making an adjustment for the pricing assumptions in the original contract, I consider that the average of more than £28 million per kilometre provides support for the views expressed by Mr David Anderson mentioned above. Mr C Smith's position was that he was neither consulted on the price, nor held any view about whether an offer of £362.5 million was appropriate [[PHT00000053](#), pages 74–75]; although Mr Coyle contradicted that [[PHT00000010](#), page 89]. For the reasons given in paragraph 19.268 above, I prefer the evidence of Mr Coyle and reject Mr Smith's attempts to distance himself from the settlement figure. In summary, there was clearly not unanimity about the proposed settlement figure. I am not prepared to infer that those who did not declare opposition thereby endorsed that figure. No one had authority to stop Dame Sue Bruce and Mr Emery making the offer that they had decided to make; and, given the debate which had preceded it, and the political pressure to emerge from mediation with a settlement, it is unrealistic to imagine that the representatives of **tie** would have done so when their views about the excessive nature of other figures used in the mediation had been rejected. As a special adviser, Mr Smith was in a different position and it is possible that Dame Sue Bruce took some comfort in the proposed settlement figure from his silence.

19.273 Furthermore, even those who agreed the figure did not all accept that it was a good deal. Mr Emery described it as a "pig deal", "where you have to carry on, if that is what you want to do" [PHT00000052, page 52]. In other words, it was the price that had to be agreed to get a resolution [ibid, page 49 onwards]. That is consistent with the view I have reached about Mr Rush's evidence. Mr Emery recalled that no one in the **tie**/CEC team thought the deal was good value. Thus purely in financial terms the deal could not be justified objectively and it is probable that the settlement price was excessive. It seems to me that the justification for the offer in such circumstances depended upon other factors based upon political considerations relating to past delays and their effect on businesses and residents in Edinburgh as well as the damage to the reputation of the city.

19.274 Dame Sue Bruce came to agree:

"there had to be a pragmatic approach taken to reaching an outcome that was deliverable, and something that was justifiable in financial terms, but we all recognised that we didn't think it was the best value for money." [PHT00000054, page 61.]

19.275 In that regard it seems to me that there may be a tension between a settlement that "was justifiable in financial terms" and a pragmatic approach to reach an outcome that was deliverable. The latter involved taking into account political and other considerations, such as those mentioned in paragraph 19.274 whereas justification in financial terms would require an analysis of the proposed figure to show how it was reached and that it was prudent from a financial perspective. I am not satisfied that the evidence allows me to conclude that this settlement was justified in financial terms.

19.276 Mr C Smith did not accept that no one thought the price was good value. He spoke of a feeling of relief in the room when the offer was passed to the consortium and observed that nobody in the **tie**/CEC team voiced an objection or tried to stop the offer being passed to BSC. He thought it *was* good value, in the sense that it:

"was the only value that was going to deliver something that was worthwhile, but it was good value" [PHT00000053, page 57].

19.277 The deal was acceptable in price terms, in his view, because it was less expensive than the alternative, of separating and re-procuring [ibid, pages 67–69]. That is, of course, far from a view that the price was an objectively reasonable one for the work; and is, rather, simply an assertion that the alternative would be worse.

Negotiations at mediation: summary

19.278 In summary, an assessment of decision-making at the mediation is very considerably hampered by the lack of documentary evidence about it. The decision at mediation to agree a price of £362.5 million was taken by Dame Sue Bruce, as the head of the CEC/**tie** negotiating team, with advice and assistance from other members of that team. That decision was taken over the objections of **tie**'s senior management. The price was selected, and proposed to her on the pragmatic grounds that it was a price which BSC might be persuaded to accept, and not because it represented a fair or reasonable assessment of **tie**'s liability to BSC under the existing contract terms. Indeed, there is no evidence recording how the CEC negotiators at mediation handled any of the arguments that **tie** had developed; or to what extent they were used, if at all, to negotiate a reduced price. Nor, in my view, was there any indication available to the CEC negotiators at the mediation that the price represented an objectively reasonable price for the work. The estimated total costs of the project

based on the agreed price were lower than the estimated total costs of separating from BSC and re-procuring the works, once Mr Smith's adjustment of £150 million was included in the estimate. That adjusted estimate came very late in the day, was highly subjective, and was regarded as excessive by those with the most intimate knowledge of the project. The impression that I formed was that this last-minute adjustment of that scale was made to enable the negotiators to justify concentrating on a Project Phoenix solution on the basis of cost as well as political pragmatism, which was the domain of councillors.

19.279 The deal being done in this way reflected the following factors:

- CEC's need to emerge from the mediation with a deal;
- the relative lack of knowledge within the CEC negotiating team about the detailed facts and circumstances of the project;
- the instinctive aversion of CEC and its advisers to the risks and uncertainties inherent in seeking to re-procure the project;
- the consequent lack of any realistic alternative to a revised deal with BSC; and
- the relative lack of time that the CEC negotiating team had to prepare for the mediation.

Assessment of the increased price agreed at mediation

Comparison with contract price

19.280 It is important to recognise the magnitude of the price increase crystallised at the mediation. The CEC negotiators had agreed in principle to pay £362.5 million for the off-street works, Siemens' materials and equipment, and the settlement of all claims. BSC had proposed a price of £39 million for the on-street works. The total price for the Infraco works, as it then stood was, therefore, £401.5 million. That was an increase of £155.5 million over the price originally specified in the Infraco contract.

19.281 However, the price specified in the Infraco contract was for a line to Newhaven. The mediation agreement was for a line that stopped at St Andrew Square. As well as the increase in price for the Infraco works, the cost to CEC of resolving the Infraco contract disputes therefore also included giving up BSC's obligation to build the line between St Andrew Square and Newhaven that had been part of the original contract scope. An indication of the value of that loss is that the capital cost for building the extension to Newhaven was estimated at £165.2 million in the Updated Outline Business Case of 2017 [[CECo2086792](#), Part 1].²⁴

19.282 Taking that into account, the cost to CEC of the Infraco contract civil engineering and systems works to build a tram line between the Airport and Newhaven increased from £246 million to something more like £567 million, or 230 per cent of the original contract price. That does not take into account any of the other cost increases outside of the Infraco contract, such as increased project management costs or the borrowing costs which had to be incurred to fund the new, higher price.

²⁴ The £165.2 million was made up of £114.1 million in construction costs, £32.8 million for risk and £18.3 million for inflation [[CECo2086792](#), Part 1, page 0012]. The Final Business Case for the extension, dated February 2019, estimates the project cost at £207.3 million, of which £156.7 million was capital cost to completion. The other elements were development costs, support for business, risk and optimism bias [[CECo2087287](#), page 0059].

19.283 That 230 per cent figure may be contrasted with the assurances given to the Council in the report by the Chief Executive (Mr Aitchison) dated 23 April 2008. That report was prepared for the CEC meeting on 1 May 2008. It advised councillors of the imminent award of the contracts for the Edinburgh Tram Network ("ETN") with a final price of £508 million and requested them to refresh the delegated powers already given to the Chief Executive to authorise him to instruct **tie** to enter into the contracts with BBS for the civil engineering and systems work and CAF for the manufacture and delivery of the tram vehicles. The report assured councillors that:

"95% of the combined Tramco and Infraco costs [had been] fixed with the remainder being provisional sums which **tie Ltd** [had] confirmed as being adequate" [[CECo2083359](#), page 0001, paragraph 2.3].

19.284 In view of the terms of the report it is unsurprising that CEC granted the authority sought [[CECo2083356](#), Part 1, page 0012].

Comparison with **tie**'s Infraco Entitlement calculations

19.285 The off-street works price agreed at mediation exceeded **tie**'s Infraco Entitlement calculations by a substantial margin: it was £64 million over the more pessimistic assessment made by **tie** in its Infraco Entitlement paper (£298,541 million) and £97.3 million over its more optimistic assessment (£265.185 million) [[TIE00106500](#)].

19.286 Dame Sue Bruce could not recall on what basis a price had been agreed that was so much higher than **tie** had calculated, except to say:

"We were in a mediation here, and trying to get a result.

"I can't from memory tell you how we got to the exact figure, but it was a build-up of the previous information which is shown here, plus the elements that were brought to the table at mediation, plus the advice of our team of advisers. That's how we reached the figure." [[PHT00000054](#), page 75.]

19.287 Mr C Smith could not explain how Dame Sue Bruce and Mr Emery justified offering a price that exceeded **tie**'s calculations. He could not recollect having seen Mr Murray's Infraco Entitlement paper [[TIE00106500](#); [PHT00000053](#), page 79]. Having regard to the significance of that document in representing **tie**'s assessment of the range of BBS's entitlement, I consider that it is unlikely that Mr Smith would forget if he had seen it. On the assumption that he did not see it, it is a matter of concern that he did not see this document and take it into account in considering the proposed settlement figure at mediation. The alternative explanation for his failure to recollect seeing the document is that he had, in fact, seen it but rejected it without giving any reasoned explanation for doing so. That would equally be a matter of concern.

19.288 The Inquiry has, therefore, been unable to identify any reasoned connection between the price agreed at mediation and **tie**'s calculations of BSC's entitlement under the Infraco contract.

Comparison with BSC's Project Phoenix proposal price

19.289 The off-street works price of £362.5 million agreed at mediation was £21.4 million lower than BSC's Project Phoenix price proposal. That discount was split among the consortium members as follows:

- £10 million off BB's share;
- £11 million off Siemens' share; and
- £360,336 off SDS's share [[SIE00000184](#)].

Comparison with BSC's claims by the time of the mediation

- 19.290** The mediation settlement can also be compared with the total value of claims that BSC had intimated by the time of the mediation. Deducting the £7 million relating to CAF, the total value of those claims was £166 million, of which almost £120 million was yet to be agreed, with a significant number of estimates yet to come [BFB00003290, Part 1, pages 0003–0004, 0062–0063, 0084 onwards].
- 19.291** It is therefore apparent, first of all, that the mediation settlement resolved a dispute over claims totalling more than £120 million in respect of changes.
- 19.292** It is also apparent that the uplift agreed at mediation in the cost of BBS's work (£156 million, *plus* the loss of the line between York Place and Newhaven) was far in excess of the total value placed by BSC on all claims relating to the full scope (Airport to Newhaven) that had been intimated by the date of the mediation.
- 19.293** The value placed by BSC on claims made by the date of mediation is not directly comparable to the settlement price, firstly because it related to the full scheme and not the curtailed one agreed at mediation, and secondly because it was made up only of those claims already submitted, whereas the price agreed at mediation (at least in relation to the off-street works) was intended to cover all costs to completion.
- 19.294** Nonetheless, it is clear that the price agreed at mediation could not readily be reconciled to the claims that BSC had intimated to date. Furthermore, the Inquiry is not aware of any such reconciliation being carried out.
- 19.295** More significantly, despite the absence of accurate records of the approach taken by CEC/**tie** in the negotiations I have concluded that it is probable that no significant attempt was made to reduce the settlement price to reflect the fact that BSC's claims were probably capable of significant reduction by negotiation as occurred with previous claims. Mr Maclean understood that agreement on the off-street works price was to settle all claims for Notified Departures, but did not know at what value [PHT00000008, page 125]. Mr Eickhorn was not aware of any analysis which would indicate at what value the off-street works price settled BSC's claims [TR100000171, page 0070, paragraph 167]. Mr Emery explained that the CEC/**tie** negotiators wanted a settlement that resulted in starting with a "clean slate" with no outstanding claims. In that situation one might have thought that the outstanding claims would have been scrutinised and attempts made to reduce the overall price to reflect reductions in the claims but it seems that no agreed value was placed on BSC's accrued claims and in any event the CEC/**tie** negotiators considered that it was difficult, if not impossible, to value them [Mr Emery PHT00000052, page 69]. Mr C Smith accepted that:
- "by reaching a settlement deal which settled all of the existing claims and which increased the price paid, in substance the Council were accepting that the claims made by the consortium were well-founded" [PHT00000053, page 81].

CAF

- 19.296** The original contract price for the supply of the tram vehicles was £55,781,634, with £2,275,806 for tram maintenance mobilisation [USB00000032, page 0003, clause 2.5].
- 19.297** The Project Phoenix price proposal included cumulative claims on behalf of CAF for all delays to date totalling €9.24 million (or £6.84 million at the assumed exchange rate of €0.7402 per pound). Other changes and provision for depot equipment took the total proposed cost to £65.3 million being the total of the two columns in the table entitled 'TSA & TMA payments' [BFB00053258, pages 0031–0032].

SDS

- 19.298** The original SDS price under the Infraco contract was £4,983,815, including £1.675 million of provisional sums [USB00000032, page 0003, clause 2.5]. The tables in Appendix 1.4 of the Project Phoenix Proposal contain a breakdown of the SDS price totalling £15,140,795 [BFB00053258, page 0033 onwards]. It included £10,156,980 for changes and new submissions, of which totals of £4,234,948, £500,000 and £1,157,593 were estimated costs of changes, disruption and prolongation claims respectively *libid*, page 0034]. It was noted that SDS's claim against **tie** under the Novation Agreement for an incentivisation payment of £973,214, was not included in the Phoenix price *libid*, page 0035].
- 19.299** Of the off-street works price of £362.5 million, £14,780,459 was allocated to SDS [SIE00000184]. As was noted in paragraph 19.289 above, that was a reduction of £360,336 from their proposal.

Siemens' explanation of its price increase

- 19.300** In detailed evidence to the Inquiry, submitted as a second supplemental witness statement on 18 March 2018, Mr Eickhorn explained how Siemens' price evolved between the original contract in 2008 and the settlement agreed at Mar Hall [TR100000276]. The discussion that follows is based on his evidence.
- 19.301** As was noted in paragraph 19.9, Carlisle 1 was for a shortened line between the Airport and the east end of Princes Street. Despite the shortened scope of work Siemens' proposed price of £126,901,620 was about £25 million higher than its original contract price of £101,679,003. Part of the increase was attributable to Change Orders (£5.3 million), many of which gave finalised prices for items that had originally been provisionally priced. The reduction in work scope allowed savings of £3.7 million to be made, but these were more than cancelled out by additional costs of £26 million [CEC00183919, Part 1, page 0029 onwards]. Siemens attributed the great majority of these additional costs to delay: namely, increased preliminaries incurred through prolongation of the works and the resultant extended site presence by Siemens [TR100000276, page 0005, paragraph 15.2]. The Project Carlisle 1 proposal was based on a service commencement date of 19 November 2012, which was nearly 16 months later than had been provided for in the original Infraco contract programme. It is therefore plain, and was plain from Siemens' Carlisle 1 proposal, that any savings to be made from shortening the line were modest; and were more than offset by very considerable cost increases attributable to delay.
- 19.302** The second Project Carlisle proposal ("Carlisle 2") was for a line from the Airport to Haymarket. Siemens' pricing for Carlisle 2 used the same methodology for its calculations as for Carlisle 1 *libid*, page 0007, paragraph 23]. It included £20.6 million in extension of time costs, based on the projected delay in project completion to 18 December 2012 *libid*, pages 0005, 0015, 0017, paragraph 19, exhibits AE1 and AE3]. At £118.6 million the overall cost of this proposal was lower than Carlisle 1. That was because it proposed a line which stopped at Haymarket, entirely removing the on-street works.
- 19.303** Siemens' price included an element for "system-wide" costs. Despite the curtailed scope of the Carlisle proposals, these barely changed: £41 million in the original contract price; £40.5 million in Carlisle 1; and £40.4 million in Carlisle 2 *libid*, page 0027, exhibit AE3]. In paragraph 19.151 above, I have accepted the distinction between civil engineering works and work on systems in calculating apportionment of costs arising from changes in the scope of work. In his evidence Mr Eickhorn explained that

by the time of the Carlisle proposals in 2010 Siemens had either already incurred, or committed to, many of the system-wide costs, which mostly related to design and project management. For that reason, neither proposed shortened line resulted in a proportionate saving in these costs.

19.304 Siemens' Project Phoenix price was calculated differently from the Carlisle proposals. It was a re-pricing for the revised scope of work, rather than a series of additions and deductions from the original price. Nonetheless, the foregoing background is helpful in understanding it.

19.305 The Project Phoenix scope of work was similar to that of Carlisle 2: a line between the Airport and Haymarket. Siemens' Phoenix price proposal was £136.8 million, which was around £18.2 million higher than it had proposed for Carlisle 2.

19.306 Mr Eickhorn attributed that increase to three things:

- A longer period of delay. The Project Phoenix proposal assumed a completion date of 22 September 2013, nine months later than under Carlisle 2. That programme extension led to considerably increased costs. The nine-month extension arose because, firstly, the Phoenix proposal came five months later than Carlisle 2; and, secondly, in the interim, in October 2010, BSC had stopped work on any areas which were the subject of disputed Change Orders. The programme therefore had to take account of the time and cost involved in remobilising, which had not been the case at the time of the Carlisle 2 proposal.
- The Project Phoenix proposal was based on a reduced number of pricing assumptions, when compared with the Carlisle proposals. Siemens accordingly included higher risk provisions in its price to compensate for that.
- Siemens included finance costs in its Project Phoenix proposal to cover the cost of its cash-flow deficit attributable to the delay in payments by **tie** as well as costs incurred in hedging against adverse currency fluctuations during that delay.

(Siemens' Project Phoenix price proposal includes £3.6 million for risk and £3.1 million for finance costs [[BFB00053258](#), page 0027].)

19.307 Notwithstanding the reduction in scope, Siemens' price included the cost of the completion of the design for the line from York Place to Newhaven as well as the cost of its materials and equipment for that section of the line. It had sought payment for these items in its Project Carlisle proposals, and in an even earlier proposal that it made in May 2010 [[CEC01927619](#)].

19.308 Mr Eickhorn explained that Siemens had already paid for these materials and equipment, and had either used them in construction or held them in storage. However, it had not received payment for them because the Infracore contract payment milestones relating to them had not been reached due to the project delays.

19.309 Siemens submitted that payment for the equipment and materials was wholly warranted because they had been manufactured and procured in accordance with the programme and then stored at cost to Siemens because of the project delays. I accept that submission.

19.310 The unfortunate consequence of any settlement including payment for the design to Newhaven and the equipment and materials mentioned in paragraph 19.309 was that CEC would have paid for materials and equipment and a design, which would not be needed for the curtailed scheme. It appears, however, that the wasted cost

of this was not substantial. Mr Eickhorn estimated that 90 per cent of the materials and equipment bought by CEC in this respect were ultimately installed in the line that was built and Siemens managed to agree beneficial terms for the cancellation of materials that were no longer required because of the restricted route [[TR100000276](#), pages 0012, 0029, paragraph 52 and exhibit AE4; Mr C Smith [PHT00000053](#), page 86]. In its closing submissions Siemens estimated the cost of the unused items at £3 million [[TR100000290_C](#), pages 0151–0153, paragraphs 445–446]. In the absence of evidence, I make no finding about the precise value of these items, but I accept that they are not substantial in the context of the whole project. It is possible that these items will be used in the extension but that remains to be seen and depends, among other things, on their condition after several years in storage [Mr Eickhorn [PHT00000046](#), page 32]. CEC presumably has incurred costs in storing and insuring those items in the interim, but may save on cost inflation by having bought them sooner than required.

- 19.311** The most important conclusion about Siemens' price is that delay was the primary and major factor in its increase. Although that is not immediately obvious from Siemens' Project Phoenix proposal, it is clear enough when one considers the Project Carlisle proposals that preceded it.
- 19.312** The full cost impact of delay was not covered by the off-street works price. When the parties agreed that price at mediation, they did not also agree a specific programme for the remaining works [[TR100000276](#), page 0010, paragraphs 41–42; see also clause 8.1 of the Heads of Terms agreed following Mar Hall [[CEC02084685](#)]. Programme revision 3a was eventually agreed several months later with a service commencement date of 20 May 2014 – around eight months later than had been proposed in the Project Phoenix proposal. That programme extension was attributable to the inclusion of the on-street works which had not been part of the Phoenix proposal. The cost impact of that programme extension was addressed in the on-street price, as will be discussed further below.
- 19.313** Finally, it appears that immediately before the mediation CEC lacked any meaningful understanding of Siemens' element of the Project Phoenix price proposal. In an email dated 1 March 2011 (seven days before the mediation), Mr Nolan requested:
- "more detailed information in relation to Siemens' PPP [Project Phoenix proposal] Price Breakdown ...
- "Siemens' PPP of c £136.5m is double Siemens' original price of c £68m (Airport to Haymarket). It is not clear what the basis for this increase is. There is no Schedule Part 4 PA1 issue in relation to Siemens' work which has undergone little change since tender.
- "Without further information in relation to Siemens' PPP Price Breakdown meaningful analysis of it is not possible. Nor is it possible for **tie** and CEC to understand the basis for the very substantial increase which is being proposed."
[[TIE00685959](#)]
- 19.314** The same point was made by Dame Sue Bruce in her opening statement at the mediation [[CEC02084575](#), page 0013].
- 19.315** Given the brevity with which Siemens' price was presented in the Project Phoenix proposal, it is understandable that these points were made [cf. [BFB00053258](#), page 0027]. I am satisfied, for reasons explained by Mr Eickhorn, that it was misconceived to suggest that £68 million was, or ever had been, Siemens' price for the Airport to

Haymarket section [TR100000171, pages 0061–0062, paragraphs 133–134]. Further, **tie** had, in its Infraco Entitlement paper, estimated Siemens' entitlement for that section at between £98.6 million and £103.2 million based upon **tie**'s estimates and Infraco's estimates respectively [TIE00106500, pages 0015–0016]. Against that background, I read Mr Nolan and Dame Sue Bruce's comments as merely calling upon Siemens to provide more detail to justify its price, as a means of testing the robustness of the calculations in the Infraco Entitlement paper.

19.316 It remains the case, however, that there is no documentary evidence to explain on what basis those negotiating for CEC agreed to pay Siemens £125.881 million, which was its share of the £362.5 million agreed at mediation [SIE00000184]. That was around £25 million more than the range of £98.6 million to £103.2 million that **tie** had calculated as due to Siemens in its Infraco Entitlement paper [TIE00106500, pages 0015–0016]. The evidence of witnesses to the Inquiry added little. Mr C Smith was unable at the Inquiry's oral hearing to explain the significant increase in the price that CEC agreed to pay Siemens, and indeed said he had never known how it was to be explained. Nor did he know if those agreeing the price on behalf of CEC had satisfied themselves that the increase was appropriate [PHT00000053, page 82]. Mr Emery confirmed that the settlement was "a deal to get the project up and running back [sic] again, and not in detail" [PHT00000052, page 74]. The CEC negotiators did not examine the numbers and reach a professional view about them, as **tie** had done. Mr Emery understood that there should be an increase in Siemens' price because of the extension of time and some of the groundworks "[b]ut not to the level they claimed" [*ibid.*, page 75]. Although Mr Eickhorn has explained the increase in Siemens' price to the Inquiry, there is no evidence to confirm that the CEC negotiators sought, or were given, a similar explanation at the time. This is an unfortunate consequence of the lack of record keeping by CEC at the mediation. The tenor of the evidence of Mr Smith and Mr Emery is that they did not receive any explanation that would justify the increase in Siemens' price. If that is the case it is a matter of concern as it might suggest that public funds were expended on a settlement which was excessive. On the other hand, if an explanation along the lines of that supplied by Mr Eickhorn to the Inquiry was given to the CEC negotiators they must have accepted responsibility for much of the project delay in agreeing the increased price. I repeat, however, how unsatisfactory it is that there is no written record to give the public the necessary reassurance that CEC exercised proper scrutiny before expending substantial sums of public money.

Explanation of Bilfinger Berger's price

- 19.317** The Inquiry initially lacked an explanation of BB's pricing in the Project Phoenix proposal. Mr Gough, who had been heavily involved in pricing Project Phoenix for BB, when first questioned by the Inquiry, said that he had "no memory of how the Bilfinger price was arrived at" [TR100000040_C, page 0019, paragraph 9.5].
- 19.318** The Inquiry in due course recovered BB's internal project reports [BFB00112166–BFB00112250 inclusive]. These were the subject of an unsuccessful court application by BB both at first instance and on appeal to preserve the confidentiality of certain information that they contained. After that court application was resolved in the Inquiry's favour, Mr Gough was asked by BB to provide an additional witness statement, which he did [TR100000295, page 0001, paragraph 2; the statement is dated 1 October 2018]. This statement was intended to explain how the positive project outcome for BB, revealed by the reports, came about [*ibid.*, page 0001, paragraph 4]. In preparing his statement, Mr Gough was given access by BB to the Project Phoenix proposal and spent some time reminding himself about it [*ibid.*,

page 0002, paragraph 11]. As a result, he was able to provide a brief explanation of BB's Project Phoenix pricing. The discussion that follows is based on Mr Gough's comments and the Inquiry's own interpretation of the available documents.

19.319 BB's share of the original Infraco construction works price was £137.1 million [SIE00000227, page 0002]. That price included value engineering assumptions and provisionally priced items [USB00000032, page 0015].

19.320 Its share of the Project Phoenix price proposal was £231,837,820, broken down as follows [BFB00053258, page 0012].

- Direct cost (that is, sub-contractor costs): £149,993,600
- Items previously excluded from price: £8,058,450
- Indirect cost: £51,333,169
- Overheads (at 7 per cent): £15,716,821.06²⁵
- Profit (at 3 per cent): £6,735,780.45²⁶

19.321 I will now discuss these elements in turn.

Direct cost

19.322 The Phoenix price proposal included a detailed breakdown of the direct cost element of £149,993,600. It was broken down into work sections, in most cases by reference to the sub-contractor engaged by BB to carry out the work in each section. The breakdown showed the costs of each sub-contractor, broken down into preliminaries, construction costs, changes (including those already agreed, submitted but not agreed, and new submissions) and risk. The presentation is helpful, insofar as it allows one to see where the most significant cost changes occurred.

19.323 The direct cost total of c. £150 million was split: £27 million for the on-street works and £123 million for the off-street works [*ibid*, page 0013]. Those prices were compared with the original sub-contract prices quoted in the table of £12.3 million (for the on-street works) and £55 million (for the off-street works), being a total of £67.4 million. It is therefore apparent that:

- [t]he direct costs of BB's sub-contractors more than doubled, from £67.4 million to £150 million;
- [t]he greater part of that increase related to the off-street sections (an increase of £68 million, from £55 million to £123 million); and
- [t]his proposal, for completion of a line only to Haymarket, included an element for the on-street works which was more than double the original price (an increase from £12.3 million to £27 million). It must be kept in mind that the parties ultimately agreed a target price of £34.9 million for BB's part of the on-street works [see paragraph 19.582 below].

²⁵ This figure is higher than 7 per cent of the preceding figures in the list. The reason is that the overhead percentage was applied to a figure that, as well as the costs noted above, also included the SDS provider's price of £15,140,795.

²⁶ As with the overheads figure, this percentage was applied to a figure that included the SDS provider's price.

19.324 These increases were in part attributed to significant change. The changes shown may be summarised as shown in Tables 19.1 and 19.2:

Table 19.1: Estimates of cost of change in construction works (on-street sections)

On-street sections	
Changes already submitted and agreed	£8.3m
Changes already submitted and not agreed	£3.7m
New submission	£1.3m
Total	£13.3m

Source: Project Phoenix Proposal Appendix 1.1 [[libid](#), page 0013]

Table 19.2: Estimates of cost of change in construction works (off-street sections)

Off-street sections	
Changes already submitted and agreed	£12.1m
Changes already submitted and not agreed	£33m
New submission	£5.9m
Total	£51m

Source: Project Phoenix Proposal Appendix 1.1 [[libid](#), page 0013]

19.325 From these figures, it is apparent that BB's proposal incorporated its sub-contractors' costs of £64 million for change, and that about £44 million of that had not previously been agreed. £51 million of the total change costs related to the off-street section.

19.326 The increase in the sub-contractors' costs was also in part attributed to an increase in preliminaries and method-related charges. These figures are not presented in a way that allows one readily to ascertain what proportion of these costs was attributable to delay on the project. However, under the original Infracore contract programme the service commencement date was 16 July 2011. Any time after that was delay. In the table summarising direct costs in the Project Phoenix proposal, the figure for preliminaries and method-related charges from 1 April 2011 to completion is £16.988 million [[libid](#), page 0013, column 5]. I am unable to determine what proportion of that sum may be attributable to delay, but it is probably significant in view of the extent of the delay given in paragraph 19.327.

19.327 The price proposal also includes information on the sub-contractors' programmes [[libid](#), page 0014]. Table 19.3 shows the following additional durations over the original sub-contract programmes:

Table 19.3: Additional duration of sub-contractors' programme

Section	Sub-contractor	Additional duration
1A	McKean & Co	44 weeks
2A	John Graham (Dromore) Limited	72 weeks
5	Expanded Limited	106 weeks
6	Barr Limited	77 weeks
7A	Farrans Limited	142 weeks

Source: Project Phoenix Proposal Appendix 1.1 [[libid](#), page 0014]

19.328 The increased preliminaries included in the sub-contractors' prices presumably reflect these programme extensions.

19.329 From this summary, it is apparent that the much greater part of the increase in BB's sub-contractors' prices (£64 million) was attributed to change and that a significant, but lesser, part was attributed to delay.

19.330 The direct cost element of c. £150 million also included £2.629 million for risk. Mr Gough explained that this was one of the three risk elements that BB had included in return for providing a fixed price. He explained that this particular element was to cover items such as design changes, programme and general risk identified by BB's sub-contractors [[TR100000295](#), page 0002, paragraph 14.1.1]. Nearly all of this related to the off-street section [[BFB00053258](#), page 0013].

Items excluded from price

19.331 The figure of £8,058,450 appears with the label: "Previous GMP Exclusions/Qualifications now priced". There is no further breakdown or explanation of it in the Phoenix proposal. Mr Gough explained that it was BB's price for reducing the number of exclusions that had been included in the Project Carlisle proposals. According to Mr Gough:

"[t]he evaluation of these exclusions was predominantly based on rates agreed in earlier **tie** Change Orders or Infracore Notices of **tie** changes for work of a similar nature and largely related to dealing with contaminated ground" [[TR100000295](#), page 0002, paragraph 14.1.3].

Indirect cost

19.332 The Phoenix proposal did not include any further explanation of the indirect cost of £51,333,169, except to show that it included an element for "risk/opportunity" of £5.04 million. Mr Gough explained that this element was another of the three risk allowances that BB had included in return for fixing a price for certain items that had previously been the subject of pricing assumptions and exclusions. This figure, he said, derived from a Monte Carlo calculation of the probability of certain risks being realised [[libid](#), page 0002, paragraph 14.1.2]. A Monte Carlo simulation is a computer-based model used in assessing risk.

19.333 The Inquiry has no further explanation of the indirect cost element. I assume that it consists of costs attributable to BB itself. It is not clear, however, how that element was broken down or how it compared with the original construction works price.

Overheads and profit

19.334 Mr Gough, who had been employed by BB on the project between 2007 and 2012, initially as project quantity surveyor and thereafter as commercial manager, explained that BB internally reported a "project result" figure, which was a gross figure for the project's contribution to profit and overheads [*ibid.*, page 0007, paragraph 40]. The project result that BB achieved was considerably better than it had projected both at the outset of the project and on conclusion of the settlement agreement: the projected figure at contract close in 2008 was 11.07 per cent; following conclusion of the settlement agreement in September 2011 it was 7.23 per cent; and the outturn figure on conclusion of the project was 21.21 per cent [see, e.g., [BFB00112249](#), page 0003]. Put crudely, the commercial outcome for BB on the project was twice as good as it had forecast when it began, and three times as good as it had forecast on conclusion of the settlement agreement. As Mr Gough put it: "[t]he result for BCUK on the ETN Project was ultimately a positive one" [[TR10000295](#), page 0001, paragraph 4].

19.335 Mr Gough attributed the improvement in BB's project result (from that which was forecast on conclusion of the settlement agreement) to a number of factors, including: risks for which allowances and contingencies were made not coming to pass; constructive dialogue with CEC, Mr C Smith and Turner & Townsend; and BB's "proper and efficient management" of the contract and its sub-contractors [*ibid.*, page 0007, paragraph 40]. These will be discussed in paragraphs 19.339 and 19.340.

Risk elements

19.336 Mr Gough emphasised that the profit and overhead percentage that BB wished to achieve, and the contingencies that it had applied, were entirely visible to those negotiating for CEC at the mediation [*ibid.*, page 0003, paragraph 20]. He is correct. For example, BSC's Project Phoenix price proposal included a clearly shown 10 per cent figure for BB's overheads and profit [[BFB00053258](#), page 0012], as well as the following specified sums in relation to risk.

- £2,629,383 for risk related to direct costs for items such as design changes, programme and general risk identified by BB's supply chain partners [*ibid.*, pages 0012–0013].
- £5,040,000 for risk related to indirect costs, which Mr Gough said was derived from a Monte Carlo simulation [*ibid.*, page 0012].
- £8,058,450 for matters previously excluded from the Project Carlisle price proposals but included by BB within its Phoenix price proposal [*ibid.*]. The Project Phoenix proposal did not include a breakdown of that figure, but Mr Gough explained that these items were predominantly priced on rates agreed in relation to earlier contract changes for work of a similar nature, and related largely to dealing with contaminated ground [[TR10000295](#), page 0002, paragraph 14.1.3].

19.337 The sums mentioned in paragraph 19.336 were described by Mr Gough as having been intended to cover the additional items that, under the Project Phoenix proposal, would be included within BB's fixed price, but which had not previously been included by reason of the pricing assumptions in SP4 to the Infracore contract or the subsequent Project Carlisle proposals. In his statement he listed various items within this category of additional items, as follows:

- "15.1.1 design changes up to the issue of drawings included at Appendix Part 4 of the Project Phoenix Proposal;
- "15.1.2 known utilities on the Off Street works;
- "15.1.3 known quantities of contaminated ground;
- "15.1.4 third party approvals; and
- "15.1.5 programme and general risk" [libid](#), page 0003, paragraph 15].

19.338 These overheads, profit and contingency figures together made up 15.5 per cent of BB's total Project Phoenix price proposal. A reduction of c. £10.4 million from BB's proposed price for the off-street works was negotiated at Mar Hall. Taking account of that, and a 10 per cent overheads and profit element in BB's £25 million share of the £39 million target price proposed for the on-street works, the percentage of BB's price attributable to overheads, profit and contingencies reduced to 13.5 per cent. Mr Gough explained that, following negotiation of the settlement agreement, the percentage of BB's price attributable to profit, overheads and contingencies was 13.3 per cent [libid](#), page 0004, paragraph 29].

19.339 Mr Gough, like other witnesses, described how the project ran much more smoothly after mediation than had been expected. He referred to the improved relationships mentioned in paragraph 19.335 above that BBS had with CEC, Mr C Smith and Turner & Townsend when compared with the relationship that it had had with **tie**; to much more efficient tackling of planning and third-party approvals; and to the "bow wave" approach used for the diversion of utilities [libid](#), pages 0004–0005, paragraphs 30–34]. As Mr Gough put it, the consequence of these improvements was that "BCUK was able to bank the contingencies included within the revised Price". This, together with other operational and efficiency savings, was the primary reason why BB made a significantly improved return on the project than it had earlier forecast [libid](#), page 0005, paragraph 35].

19.340 It is apparent from this explanation that the price CEC agreed at mediation to pay BB included a significant element to compensate BB for taking on risks that did not, in the event, materialise. According to Mr Gough, the savings that BB made included the following principal items.

- £1.9 million for the 22-week time bank, being what Mr Gough described as a "net uplift" [libid](#), page 0005, paragraph 36.1.1]. I understand him to mean by this that £1.9 million net of its costs was BB's share of the £6.45 million cost of the time bank. (The Final Account Statement allocates £3.16 million of the £6.45 million total cost to BB [[WED00000101](#) page 0008, tCO reference 620].)
- Savings of £6 million achieved through negotiating confirmed orders with key sub-contractors and suppliers following mediation, and the careful management of them. Mr Gough said that this figure "includes the benefit of mitigating the risk provision of £2.629 million on this element of work, identified in Project Phoenix" [[TR100000295](#), page 0005, paragraph 36.1.2]. It is therefore clear that at least some of the risks for which this provision was made did not actually transpire.

- A saving of £5.04 million against the risk provision relating to indirect costs. Since that is the entirety of the risk provision, I infer that none of the risks for which this provision was made actually transpired. As it was put by Mr Gough: "Through good and proper management post the Settlement Agreement and developing a sensible way of working with CEC, we managed to avoid design, programme and commercial risks associated with the Off Street Works and this sum was added to the BCUK gross profit." [ibid](#), page 0006, paragraph 36.1.3.]
- A saving of £8.058 million resulting from a reduction in off-street risks, in particular relating to contamination. Once again, since that is the entirety of the risk provision, I infer that none of the risks for which that provision was made actually transpired.
- Further savings of £10.7 million from allowances made for costs for staff/consultants, legal support and office running costs, attributed by Mr Gough to the smooth running of the project.
- Savings of £1.2 million relating to the SDS designer [ibid](#), page 0006, paragraph 36.1.7].

19.341 These are very substantial savings, constituting a very considerable improvement in BB's profit on the project. What is most striking about them is the extent to which they resulted from risk provisions included in the price, and accepted by CEC, for risks which did not transpire at all. This is remarkable. It demonstrates that the project happened to be nowhere near as risky as the price agreed at Mar Hall had assumed. There are a number of possible explanations for this. It could be that BB overstated the risk and CEC naively agreed to pay for it. It might also reflect a degree of scepticism on BB's part that its working relationship with CEC would be so much better than it had been with **tie**. It could be that, based on their previous experience of the project, BB and CEC genuinely perceived it to be very risky, but worked exceptionally well together to eradicate that risk. To the extent that that was the case, the effort CEC put into working co-operatively with BBS to ensure that the curtailed project was completed on time and reportedly within budget benefited BB at the cost of the public purse. It could be that, once risk is transferred to an experienced contractor, it is very good at mitigating or avoiding that risk because it is incentivised, by the prospect of an increased profit, to do so.

On-street works

19.342 According to Mr Gough, BB's share of the proposed price of £39 million for the on-street works to St Andrew Square was £25 million [ibid](#), page 0004, paragraph 22].

Reduction

19.343 BB agreed to a reduction of £10.4 million in its price, compared with its Project Phoenix proposal [Mr Gough [ibid](#), page 0003, paragraph 19].

Discussion

19.344 BSC's Project Phoenix proposal was an offer of a new price for a reduced scope of the Infraco contract work. Siemens' and BB's prices increased substantially, notwithstanding the reduced scope. The increase in BB's price was attributable largely to change, and partly to delay. The increase in Siemens' price was largely attributable to delay, with a small amount attributable to change.

19.345 I have found no evidence that there was any substantial discussion at the mediation of the proper value of the claims that BSC had accrued under the Infraco contract. Indeed, the evidence suggests that this matter was so contentious that the parties

avoided any detailed discussion of it and focused instead on BSC's Project Phoenix proposal [see BSC's Mediation Statement, [BFB00053260](#), pages 0004–0005, paragraphs 2.7–2.8; Mr Foerder [TRl00000095_C](#), pages 0085–0086, paragraphs 256–258; cf. Mr Coyle [PHT00000006](#), pages 198–200].

- 19.346** The magnitude of the price increase represented by the Project Phoenix proposal, however, and the extent to which it exceeded intimated claims, tends to indicate that it aimed at something close to, if not greater than, full recovery by BSC of all claims that it had made, and anticipated, in respect of change and delay. There was evidence that the price proposal was intended to cover the value that BSC had placed on its claims [Mr Eickhorn [TRl00000171](#), pages 0059–0060, paragraph 127], and that is indeed as one might expect in an initial proposal.
- 19.347** Further, knowing that the price proposal was to form the basis for negotiations about to take place, one might expect the party making it to be mindful that a successful conclusion to the negotiations would probably require it to make some concessions. That is particularly so where the project costs had already been the subject of extensive dispute. It would be unrealistic, in my view, to imagine that the Project Phoenix proposal was made without headroom for concessions. There is nothing wrong with such an approach by experienced contractors with obligations to their shareholders: it would be commercially realistic.
- 19.348** Although CEC's negotiators at mediation can be said to have made some progress by negotiating concessions from the Project Phoenix proposal, those concessions have to be considered against that background. The main concessions that they achieved were:
- to agree an off-street works price that, at £362.5 million, was around £21 million lower than BSC had proposed (£10 million of which related to BB's price, and £11 million of which related to Siemens') [SIE00000184](#); and
 - to negotiate away the pricing exclusions that had been specified in the Project Phoenix proposal. Prior to the mediation, **tie** had placed a range of values on these, of between £21.6 million and £80 million [see paragraph 19.172 above].
- 19.349** Taken at face value, these seem to be substantial concessions by BBS. Indeed, that is how they were considered by representatives of BB and Siemens [Mr Foerder [PHT00000044](#), page 147; Mr Eickhorn [PHT00000046](#), pages 25–26]. The concessions were made by BBS to avoid the negative consequences of not reaching a settlement, being the risk of a disputed termination of the contract, and the reputational damage and expensive and lengthy litigation likely to result to its prejudice [Mr Eickhorn [TRl00000171](#), pages 0062–0066, paragraphs 137–147]. I accept that these factors will have influenced BBS to compromise, but not that they gave CEC any significant negotiating leverage. That is for the simple reason that the same considerations applied equally to it, and probably with greater force.
- 19.350** I am not satisfied, on the evidence available to me, that CEC's negotiators used the Infraco contract as a significant brake, or limiting factor, on the price agreed at mediation. There is no evidence of the various arguments identified by **tie** against BSC's claims having been used to any extent to reduce the settlement price.
- 19.351** In my view, for CEC's agreement to the off-street works price of £362.5 million to be capable of rational justification, one must assume that, in the absence of a settlement, further claims of very significant value would come from BSC; and that the very much increased price agreed at the mediation was a better option for CEC than taking its chances against BSC's claims under the existing terms of the contract.

In other words, the settlement involved an implicit rejection by CEC of the defences that **tie** had been running, and an implicit acceptance of the view of the contract that had been advanced by BSC.

19.352 Dame Sue Bruce could not remember whether CEC's negotiators rationalised the settlement in that way, but accepted that they might have done [[PHT00000054](#), pages 58–59]. Mr C Smith did not recall any such view being expressed, but accepted that by agreeing the off-street works price of £362.5 million CEC's negotiators were in substance accepting that BSC's claims under the Infraco contract for delay and change were well founded [[PHT00000053](#), pages 80–81]. So did Mr Coyle [[PHT00000010](#), page 114].

19.353 Mr Murray did not agree that, by accepting the settlement, CEC essentially conceded that BSC's claims in respect of design change and delay were substantially well founded. Rather, in his view:

"by the time we got to Mar Hall the disagreements over design change, the magnitude of design change and delay responsibility were set aside to consider the best outcome for the project stakeholders and the city" [[TRI00000249](#), page 0017, paragraph 26].

19.354 I do not accept that view. For the reasons that I have given, agreement to the off-street works price of £362.5 million at Mar Hall is only consistent with CEC having largely conceded BSC's arguments. Put another way, by settling at such a high price, CEC must (at least implicitly) have given up all the arguments that **tie** had identified and maintained during the life of the project. To maintain that BSC's claims were ill founded, while agreeing the price that it did, would have been irrational and an obvious waste of a substantial sum of public money.

19.355 Mr Walker said that:

"By the end of day one [at the mediation], there was agreement in principle that they were going to have to pay for what they could afford, *and we were right.*" [[TRI00000072_C](#), page 0084, paragraph 151; emphasis added.]

I accept that view.

19.356 Insofar as there was a limiting factor on the price that CEC's negotiators were prepared to agree, it was the estimated price at which CEC could separate from BSC and procure the works from a new contractor. That was in no sense, however, a closely defined or precise constraint: it was subjective, disputed and dependent upon last-minute, high-level adjustments.

19.357 That CEC should end up paying a price set in that way, having started with a public procurement strategy that aimed to minimise risk and cost and to maximise price certainty, demonstrates the complete failure of the Infraco contract, and its subsequent management by **tie** and CEC, to implement that strategy or to protect their interests and the public purse.

19.358 I accept that the CEC/**tie** representatives who resolved the mediation inherited a very weak negotiating position and had little choice but to do the best deal that they could. In the absence of a settlement agreed at mediation, the political pressure for a resolution would have increased and the future of the project would have been highly uncertain. That was particularly so because the project had reached its funding limit and a decision to increase funding would rapidly have been needed – something that would have returned decision making on the project to the political

arena. Moreover, the sheer complexity of the parties' dispute was such that the time, effort and cost involved in resolving it strictly according to their contract would have been disproportionate. Further delay was likely to result in further accrued cost, with a significant risk that that cost would be borne by CEC, making the project unaffordable.

- 19.359** Although I accept that continuing with attempts to resolve the dispute strictly in accordance with the contract was not an option and that the CEC/**tie** negotiators had to achieve the best deal that they could, that does not mean that it was necessary for them to accept sole responsibility for the full amount of the claims for design change and delay as quantified by BBS. When asked about the acceptance of these claims in the settlement figure, Dame Sue Bruce was uncertain but considered that the figures suggested that was the case. By way of justification, she added: "given the track record of **tie** on the adjudications, they were losing all the claims anyway" [[PHT0000054](#), page 59]. This suggests a failure to appreciate the distinction between the issues of principle referred to adjudication where BBS had been substantially successful and the claims for payment in respect of delay and design change where **tie** had enjoyed a measure of success in reducing the amounts claimed by the consortium. It does not appear that **tie**'s past success in reducing the claims for payment in respect of delay and design change was replicated by the CEC/**tie** negotiators.
- 19.360** In its closing submissions to the Inquiry, CEC contended that there was no proper basis in the evidence for concluding that settlement could have been reached with BSC at a significantly lower price, or that the contract could have been terminated and the works re-procured at a lower cost. In its submission, it followed that there was no support in the evidence for the view that the actions of CEC at mediation materially contributed to the increase in cost of or delay to the project [[TR10000287_C](#), pages 0504–0506, paragraphs 20.94–20.96]. I accept that the evidence does not enable me to conclude that the contract could have been terminated and re-procured at a lower price. I am of the view that any attempt by **tie** to terminate the contract prior to re-procurement would probably have been the subject of litigation and in that event would have delayed the project for a considerable period of time, with serious financial consequences for CEC that may even have prevented the project's partial completion. However, the question whether agreement could have been reached at a significantly lower price is one that I have found more difficult to reject. Indeed, it seems to me that the real question is whether CEC's negotiators did everything that they reasonably could at mediation to negotiate the price down. The absence of any detailed records of their decision making at mediation means that there is no audit trail to vouch that they did. Nobody in the CEC/**tie** negotiating team considered that the settlement agreed at Mar Hall was a good deal from their perspective, except Mr C Smith, whose evidence on that matter I discuss at paragraph 19.232. The settlement involved CEC paying £20 million more than the upper limit fixed by its negotiating team as a settlement price immediately before the commencement of the mediation. Moreover, as indicated in paragraph 19.359, the reduction negotiated by the CEC negotiators from the Project Phoenix price proposal was not of the same magnitude as the reductions that **tie** had achieved from BSC's estimates. The Project Phoenix price is not, of course, directly comparable with individual estimates, as it is a price for the whole project and not just one change. It must be remembered that the settlement resolved more than £120 million of disputed claims by BSC without any apparent discussion of these claims, although some of these will have related to works that did not, in the event, proceed.

19.361 In paragraphs 19.334 to 19.341 inclusive above I have discussed the contribution made to BB's enhanced profit due to its provision in Project Phoenix for risks that did not materialise, and that this benefit was at least partly attributable to the effort that CEC put into working co-operatively with BBS. The risk provisions were clearly stated in the Project Phoenix proposal. They were there, in my view, in response to CEC's risk aversion: it was CEC's desire for a fixed price that formed the basis for BB including the risk provisions in its price proposal. Although CEC negotiated a reduction in BBS's Project Phoenix price, BB appear to have proceeded on the basis that these risk provisions were retained in full. It therefore appears that, if CEC had had a different risk tolerance, and had been prepared to accept these risks itself, its outturn price would probably have been much reduced. Alternatively, or in any event, it must be borne in mind that the settlement at Mar Hall was achieved partly because of the fear of reputational damage that would be suffered by all parties if the negotiations failed, but mainly because of the optimism that the curtailed project would be completed on time and within a revised budget due to the radical change in culture and the commitment of all parties to work co-operatively towards securing their common goal. In that situation one might have expected CEC to challenge the reasonableness of the risk provisions. If CEC had done so it might have proved possible to include a provision in the settlement agreement for sharing the savings. The absence of records of the Mar Hall negotiations has prevented me from considering whether CEC ever advanced any such argument, but having regard to the fact that the settlement was described as a "horse trade" it seems unlikely that any attempt was made in that respect. The result was that all the benefit from unused risk provision accrued to BBS.

19.362 I do not consider that there is any basis in the evidence for criticism of BB in relation to its enhanced profit figures. It was its function, as a commercial enterprise, to generate profits for its shareholders, and to evaluate the risks that it was being asked to take. It transparently stated its proposed figures for risk. The parties' decision making at the time cannot be second guessed with the benefit of hindsight. As BB noted in its closing submission:

"the deal which was agreed at Mar Hall was not without risk ... there was a significant risk that post mediation the deal would break down and parties would be in deadlock once again" [[TR100000292](#), page 0258, paragraph 446D].

19.363 Dr Keysberg considered that a

"vital element ... of the outcome of the mediation was as well regaining trust and regaining a different project management and governance on the project itself" [[PHT00000036](#), page 72].

19.364 In that situation it is inconceivable that the risk provision did not take into account the possibility that these aspirations might not be achieved. Although there is no evidence from which I could conclude that the risk provisions were excessive at the time at which they were agreed, it is clear that the negotiations at mediation were predicated upon a change in culture if BBS were to resume work and complete the construction of line 1a as far as St Andrew Square/York Place. The change in culture involved the removal of Mr Walker and **tie** from the project and envisaged a co-operative approach between BBS and CEC to achieve the common goal of completing construction of the restricted line to York Place, as opposed to the confrontational approach that had frustrated the progress of the project hitherto. Even without the benefit of hindsight it ought to have been foreseeable that such a radical change might result in cost savings. In these circumstances I consider

that the settlement agreement ought to have included a provision for sharing the cost savings attributable to the improvements in working relationships, project management and governance in which CEC played a significant role.

19.365 In all the circumstances I am not prepared to find that CEC's negotiators did everything that they could and should have done to negotiate the price down.

Implementation of the mediation settlement

Minute of Variation 4

19.366 The agreement reached at mediation concerned only the high-level principles for settlement of the parties' dispute. Negotiation of the detailed terms, and CEC's decision making on whether to approve and fund the settlement, took place over the following six months.

19.367 CEC finally approved the settlement and agreed to fund it on 2 September 2011. Councillors did so after a summer of somewhat turbulent decision making. They first approved the settlement in principle (in June 2011). They then rejected it in favour of a further-shortened line between the Airport and Haymarket (in August 2011), only to reverse that rejection and approve the settlement once more on 2 September, at an emergency meeting arranged following the intervention of the Scottish Ministers. There was clear political division about the appropriate future for the project.

19.368 In the meantime, as noted in paragraph 19.3, on the direction of CEC's officials, **tie** concluded a legally binding contract with BSC that put in place a partial, and interim, settlement of their dispute. This contract was known as MoV4 and was signed on 20 May 2011 [[CEC01731817](#)]. It varied the Infraco contract to enable prioritised works to be undertaken by BB and payment to be made for these works as well as payment to Siemens plc for materials and equipment. It did not provide for any payment to CAF except where the contract was terminated in accordance with clause 3.3 [libid](#), page 0006]. In that event CAF was obliged to deliver to **tie** or CEC, as directed by CEC, the trams, tram related equipment and depot equipment specified in the Tram Supply Agreement and to receive payment for them [libid](#), page 0006, clause 3.3.6]. The contract was not terminated and all payments under MoV4 were made to BB or to Siemens, as appropriate.

19.369 MoV4 largely left open the major strategic decisions about the future of the project. Under its terms, CEC had the following options:

- it could approve any settlement agreement that its officials agreed with BSC and the funding necessary to implement it;
- it could refuse to fund a settlement and bring about an automatic termination of the Infraco contract on "no-fault" grounds; or
- it could refuse for any other reason to settle, and return to the project under the Infraco contract's original terms, except insofar as amended under MoV4.

These were all options that MoV4 left open.

19.370 MoV4 was in many respects an elegant interim solution. It allowed some work, of importance to the overall programme, to restart in early course. That mitigated further delay and the associated costs. It provided breathing space for negotiations on the detail of a final settlement. It introduced a new change procedure to replace clause 80 in relation to the prioritised works [libid](#), page 0012, clause 10]. It placed a moratorium on enforcement of BSC's claims and **tie**'s remediable termination and

underperformance warning notices, which would revive only if a final settlement was not agreed [[ibid](#), page 0013, clause 14]. It gave both parties an opportunity to see whether they could, with the benefit of a new understanding and partially revised contractual arrangements, work together successfully before committing finally to a settlement. It gave CEC, and the public, an opportunity to assess progress on those interim arrangements before the final vote to approve any final settlement. It gave CEC an opportunity to carry out further investigations into its alternative options, and their relative cost, so that its final decision could be informed by a better understanding of those alternatives.

- 19.371** On the other hand, MoV4 restored momentum to the project before CEC's councillors voted on whether to approve a settlement. By providing the legal basis for BB and Siemens to start the prioritised works, it brought them back on site. It also provided for the payment by **tie** to BBS of sums totalling £78 million. This was more than simply the cost of the prioritised works: it included a sum of £49 million, part of which was described as being for the contractors' remobilisation and part of which (£25 million) was for the Siemens materials and equipment that CEC had agreed at mediation to buy [[ibid](#), pages 0011–0012, clause 9 and pages 0027–0048, schedule part 2]. Under the terms of MoV4, BBS would keep that payment regardless of whether CEC in due course approved or rejected the settlement [[ibid](#), pages 0006–0009, clause 3].
- 19.372** **tie** considered the £49 million payment to be excessive. It also considered that MoV4 made financial commitments beyond the limits of **tie**'s financial authority of £546 million in terms of its Operating Agreement with CEC. **tie** committed to MoV4 only following direction by CEC's officials, who assured **tie**'s directors that CEC would not take any action in respect of their breach of the Operating Agreement between CEC and **tie**.
- 19.373** In these circumstances, the Inquiry was interested in the governance related to MoV4, and in particular the basis on which it was authorised.
- 19.374** As noted above, MoV4 was put in place before any decision of CEC's councillors to approve the settlement or the funding necessary to pay for it. On 30 June 2011, after MoV4 had been signed the councillors did authorise **tie** to progress the priority works in accordance with MoV4 and to incur expenditure within the limits of the project budget of £545 million, until the end of August 2011 [[CECo2083232](#), Part 1, page 0030]. By that time, work in terms of it had commenced and payments had been made to BBS in accordance with its provisions. In particular work had commenced on 4 April on the priority works at the depot and the mini test track with the balance of the priority works commencing on 3 May 2011. As will be noted below, **tie** made payments under MoV4 even although that resulted in **tie** exceeding the financial limits imposed upon it by CEC.
- 19.375** MoV4 was not subjected to scrutiny by the TEL or **tie** Boards, or the TPB [[TIE00896987](#), page 0004; Mr Emery [PHT00000052](#), page 88 onwards; Mr Hogg [TRl00000045_C](#), page 0051, paragraph 120]. Most of TEL and **tie**'s non-executive directors resigned in response to CEC's officials having agreed to MoV4 without their input or scrutiny [Mr Hogg [ibid](#); Mr Emery [PHT00000052](#), pages 88–90].

MoV4: the £49 million payment

- 19.376** There was disagreement between **tie**, on the one hand, and CEC's officials and representatives on the other, over the amount that should be paid to BBS under MoV4. The £49 million figure for mobilisation, materials and equipment had been proposed by BBS. **tie** considered it could not be justified and suggested that £19 million would be more appropriate [see, e.g., [TIE00687654](#); [CEC02083825](#), page 0014, paragraph 5.2.1; for the appendices to the latter document, see [CEC02087170](#), Parts 1–5]. BBS said that it could not remobilise for £19 million [[CEC02083825](#), page 0014].
- 19.377** The disagreement was resolved in favour of BBS [Mr C Smith [PHT00000053](#), pages 90–91; Mr David Anderson [PHT00000043](#), page 198]. Mr Smith thought that Dame Sue Bruce and Mr Emery had approved the payment, but that is not consistent with Mr Emery's evidence [[TR100000035](#), page 0027, paragraphs 81–86]. On this, I prefer Mr Emery's evidence: he was by this stage acting on CEC's instructions as **tie**'s shareholder, and I conclude that the ultimate authority to pay £49 million must have come from Dame Sue Bruce.
- 19.378** The £49 million formed part of the off-street works price of £362.5 million agreed at mediation [[CEC01731817](#), page 0012, clause 10; [CEC02084685](#), page 0003, clause 6.1]. The Council was, however, yet to approve any settlement at that figure. Payment of the £49 million prior to approval of the settlement therefore carried risks, as Mr Jeffrey had noted on 7 April 2011 in an email to Mr Emery:
- “ ... the profile of this payment means that, prior to any deal becoming unconditional on 1st September, the gap between value of work done, and payments made will be much larger than it is now. This obviously creates risks if the deal is not done.” [[TIE00686573](#), page 0001.]
- 19.379** Apparently to address this risk, an arrangement was put in place under which **tie** was to pay the £49 million against certificates issued by Hg Consulting (that is, by Mr C Smith). Mr C Smith, with legal input from McGrigors, had been the principal negotiator of MoV4 on behalf of CEC [Mr Emery [PHT00000052](#), pages 105–106; [CEC02087193](#); Mr Hogg [TR100000045_C](#), page 0051, paragraph 122]. As it was put by Mr Smith in a note:
- “The mobilisation certification process was to release cash flow against a measurement of value being transferred to the employer.” [[CEC02083825](#), page 0014, paragraph 5.2.1.]
- 19.380** It is clear that the payments under MoV4 were important to BBS to address their negative cash flow [Mr Foerder [TR100000095_C](#), page 0090, paragraph 272; Mr Eickhorn [TR100000171](#), page 0075, paragraph 183].
- 19.381** Mr Smith confirmed in his oral evidence that the purpose of his company's certificates was to certify that, in return for the payment of £49 million, CEC received something worth £49 million [[PHT00000053](#), page 90]. It was put a little more graphically on 23 April 2011 in a legal advice note on MoV4 by McGrigors:
- “There was considerable debate in relation to what the various payments under clauses 6, 7 and 8 of MOV4²⁷ (other than those for Materials and Equipment) were intended to be in respect of. The BBS view was very much that these were mobilisation payments, but tie/CEC had certain concerns in relation to making

²⁷ These were the clauses providing for payment of the £49 million in five instalments.

any form of advance payment or pre-payment in respect of matters which would have no value to the project if MOV5 does not go ahead (ie, will the payments pass the 'anti-embarrassment test'?)." [CEC02087178, page 0007.]

19.382 It also noted that:

"... Hg Consulting was comfortable with the value to tie/CEC in respect of the sums to be certified" [ibid].

19.383 £25 million of the £49 million was attributed by MoV4 to Siemens' materials and equipment, which CEC had agreed at mediation to buy. £12.5 million was attributed to BB's mobilisation and £11.5 million was attributed to Siemens' mobilisation [CEC01731817, page 0047].

19.384 Beyond the label of "mobilisation", there is little clarity about what was covered by the latter two sums. MoV4 gives no indication of the basis on which these payments were to be certified [ibid, pages 0010–0011, clauses 6–8]. The agreement appointing Mr Smith's company (Hg Consulting) as the certifier describes the first instalment of the £49 million payment (£27 million) in this way:

"£7,500,000 to BBUK in respect of an agreed first D&C Costs for design and structures and £19,500,000 to Siemens in respect of an agreed first D&C Costs for pre-installation and pre-commissioning works" [BFB00097700, Schedule Part 1, page 0018, clause 2.1].

19.385 The meaning of these descriptions is not clear, and the descriptions give little indication of the basis on which certificates relating to them were to be issued. Indeed, the wording of the certifier agreement indicates that the certifier was obliged to issue these certificates in these amounts [ibid]. However, from MoV4 it is apparent that the £19.5 million payment to Siemens consisted of £12 million for materials and equipment, and the balance of £7.5 million was for mobilisation.

19.386 The lack of clarity about these payments means that it is difficult to know whether, and if so to what extent, the payments made under MoV4 were sums that had already fallen due for payment under the Infraco contract, or whether their payment, at this time, either innovated on that contract or constituted settlement of previously unsettled claims. The reality is, however, that certificates issued by Hg Consulting were issued in terms of the Certifier agreement between tie, CEC and BSC and related to payments due under MoV4. Payments made in respect of these certificates were accordingly made under MoV4.

19.387 A meeting took place on 26 April 2011 to discuss Hg Consulting's first certificate relating to the payment of £27 million as the first instalment of the £49 million payment. On 27 April 2011, Mr Coyle circulated a note of the meeting with his observations to CEC's senior officials, who, at a meeting the following day, approved the payment [CEC02087180].

19.388 Mr Coyle referred to tie's disagreement over the amount to be paid, and said:

"Whilst I cannot comment from a QS perspective it would seem that the respective positions will never agree. What is important is that the Hg Certificate provides a fair and professional valuation of the issues. I believe, following the meeting yesterday, that the valuation is fair and professional, whilst, importantly, ensuring that CEC acquire something tangible for the payment, whether asset in the ground or intellectual property through design. The important issue is that the Hg position is arrived at without being clouded by detailed knowledge of

the Infraco contract and the original Construction Works Price (which has clearly moved on). The Hg position is also based on MOV4 and the Heads of Terms from Mar Hall." [\[ibid\]](#), page 0002.]

19.389 This confirms the view, which I expressed in paragraph 19.386 above, that the payments were made under MoV4. It also indicates that Mr Coyle was inclined to favour Mr C Smith's valuation over **tie**'s, and to do so on the basis that Mr Smith's valuation was not "clouded by detailed knowledge of the Infraco contract and the original Construction Works Price" [\[ibid\]](#), but was based instead on MoV4 and the Mar Hall heads of terms. This in turn indicates that the payments did indeed innovate on the pre-mediation provisions of the Infraco contract, and did so to reflect the mediation settlement. Indeed, the fact that Mr Smith was issuing certificates that had no basis in the original terms of the Infraco contract is itself an indication that the sums he was certifying innovated on those terms.

19.390 That view is confirmed by other passages in Mr Coyle's note:

"**tie** will argue that the £5.4m item for Siemens is a catch up on historical items and cannot be justified by any other means."

"Overall, **tie** will argue that, in part, the application from Infraco for Cert 1 has elements of historical delay costs included. They will also argue that Infraco are including changes that were in dispute (not formal DRP) either for areas of principle or value." [\[ibid\]](#), page 0003.]

19.391 The fact that there was scope for argument indicates that there was a lack of objective clarity over what these payments were for.

19.392 Mr Coyle's paper concluded:

"None of **tie**'s arguments are relevant at the point MOV5 is signed. They will argue that by agreeing to pay Cert 1 at the point of MOV4, that CEC increases it's [sic] risk of cash exposure if MOV5 is not signed.

"It is my view that this is a commercial call from CEC's perspective to make payment. However, the payment secures title to assets that we will use on the project and pays the consortium for work they have physically done. There is no point in continuing to argue historical commercial points when the issues have moved on as we seek to move the project forward for the good of the city." [\[ibid\]](#).

19.393 MoV5 was the name given by the parties to the settlement agreement of September 2011, which finally resolved their disputes in full.

19.394 In my view, the critical sentences here are the first and third ones:

"None of **tie**'s arguments are relevant at the point MOV5 is signed. ... It is my view that this is a commercial call from CEC's perspective to make payment."

19.395 In other words, the uncertainty over the payments under MoV4 would not matter if, in due course, CEC approved the settlement. At the time that Mr Coyle wrote his note, CEC's councillors had not yet approved that settlement. Indeed at that time CEC's officials had not even sought authority from councillors to sign MoV4 as an interim measure pending negotiation and agreement of the detailed MoV5. It is apparent that it was CEC's officials who approved the payments as certified by Mr Smith, and that it was therefore those officials who took the "commercial call" referred to by Mr Coyle in his note.

- 19.396** The payment was approved at a meeting on 28 April 2011, attended by Mr Emery, Dame Sue Bruce, Mr Jeffrey, Mr Bell, Mr David Anderson, Mr McGougan, Mr C Smith, Mr Maclean, Mr Coyle and Mr Somerville, another CEC official [[CECo2086882](#)].
- 19.397** The critical decision makers at this meeting were the Chief Executive, the Director of City Development and the Director of Finance of CEC. Unless they decided that it was appropriate to pay the sums as certified by Mr Smith, those payments would not have been made. Members of **tie**'s management team do not appear to have departed from their view that the payments were not supported by their own commercial analysis [[TIE00107170](#)].
- 19.398** In the absence of any other explanation, I proceed on the basis that CEC's officials authorised the payment on the basis of the reasoning articulated by Mr Coyle in his note mentioned above. That would indicate that the £49 million payment was most accurately rationalised as a down-payment on the off-street works price of £362.5 million which had been agreed at mediation, but which had not yet been approved by CEC's councillors; and which could not easily, or at least without disagreement, be reconciled to the payment structure of the Infraco contract in its pre-mediation form.
- 19.399** Mr Foerder, Infraco and BB Project Director, gave evidence that the sums paid under MoV4 were already due under the Infraco contract. That comment must, of course, be seen in the context that BSC's position was that very substantial additional sums were due under the contract. **tie** disputed the sums claimed by BSC in that respect. Mr Foerder said the sum paid under MoV4 was:
- "not really a remobilisation payment, even if it was quoted as such. This was actually a payment of the settlement sum which was agreed at mediation to bring us back to a so-called cash-neutral position." [[TRl0000095_C](#), page 0090, paragraph 272.]
- 19.400** In other words, it was a payment towards the off-street works price of £362.5 million.
- 19.401** Mr Foerder said that the sum paid under MoV4 was for outstanding preliminaries. Shortly before the mediation, Lord Dervaird had decided at adjudication that preliminaries were a time-based cost, and this formed the basis for a claim by BSC that it was entitled to payment of preliminaries that **tie** had left unpaid for some months [Mr Foerder [PHT00000044](#), pages 159–160; Mr Eickhorn [PHT00000046](#), pages 37–38].
- 19.402** Support for that view comes from an email exchange between Mr Foerder and Mr Gough, BB Project Quantity Surveyor, on 23 and 24 March 2011 attaching two documents [[BFB00095990](#)]. The first document listed outstanding preliminaries totalling £10.24 million for the period March 2010 to March 2011 [[BFB00095962](#)]. This sum included £764,000 in respect of an extension of time. Once that is deducted, the balance is equivalent to the outstanding figure for preliminaries quoted in BB's monthly reports between May and September 2011. The second document showed Mr Gough's proposed figures for the prioritised works including a figure of £10.24 million for mobilisation [[BFB00095963](#)]. The fact that the mobilisation figure is exactly the same as the figure for outstanding preliminaries indicates that what was described as a mobilisation payment was in fact, as Mr Foerder said in evidence, a catch-up payment to clear the overdue preliminaries.

19.403 In response to a specific question from the Inquiry, however, Mr Gough's evidence was that the shortfall in payments for preliminaries which had accrued prior to the Mar Hall mediation:

"was not cleared by the payments **tie** made to BCUK under Minute of Variation 4 (£12.5 million paid in instalments on 22 April and 17 May 2011: [CEC01731817](#), paragraphs 6–7). The payments made under MOV4 related to Site Wide Remobilisation as set on [sic] page 47 of MOV4, as well as some payment towards the unpaid preliminaries." [TR100000295](#), pages 0007–0008, paragraph 42.]

19.404 As Mr Gough noted, BB continued to report the shortfall in preliminaries in its monthly reports between May and August 2011 inclusive, and it was only in the September report (after the MoV5 settlement agreement was executed) that it stopped doing so [[BFB00112211](#); [BFB00112212](#); [BFB00112213](#); [BFB00112214](#); [BFB00112215](#)]. The reports between May and August do not support Mr Gough's statement that the MoV4 payments included some payment towards the unpaid preliminaries, since the amount that they report as outstanding does not change over the relevant period.

19.405 BB's monthly project report to 30 April 2011 noted a shortfall of approximately £16.7 million in the sums **tie** had paid as against those BSC had invoiced [[BFB00112210](#)]. Of that sum, £7,759,734 was in respect of "certified construction works to be paid in early May" [libid](#), page 0004, paragraph 1.2.4]. The balance (of approximately £8.9 million) was for preliminaries which had been invoiced but not certified by **tie**. The report also noted that, following payments expected in May, project cash flow would return to being positive [libid](#), page 0004, paragraph 1.2.5].

19.406 BB's report to 31 May 2011 indicated that the sum for construction works had indeed been paid and that the project cash flow had returned to positive, but that the figure for invoiced but unpaid preliminaries had increased to £9.5 million [[BFB00112211](#)]. This indicates that the payment BB received in early May 2011 did not include the invoiced but uncertified preliminaries, but probably did include the certified construction works.

19.407 Mr McGougan said that the payments under MoV4:

"were payments that had been withheld by **tie** in the run-up to the mediation and during the dispute process ...

"So it didn't have to wait for MoV4 because these sums were due and payable under the existing contract ...

"These sums would have been due and payable anyway." [[PHT00000043](#), pages 97 and 101.]

19.408 Apart from the £25 million that related to Siemens' materials and equipment, I have been unable to determine with any precision what the balance of the £49 million payments was for. At a pragmatic level, it was a payment that had to be made if BBS was to return to site and recommence work. It was important to it for cash flow reasons. The fact that it was paid was very important in re-establishing goodwill with the contractors [Mr Eickhorn [TR100000171](#), page 0075, paragraph 184]. It formed part of the off-street works price of £362.5 million agreed at mediation, and any uncertainty over what it was for would cease to matter if CEC's councillors approved a settlement at that price. That there was a lack of objective certainty over what the sum was for is, perhaps, a reflection of the parties' settlement having been a "horse trade", under which they compromised their respective claims but without placing any agreed price on any individual element of it.

- 19.409** I was not persuaded by Mr McGougan's attempts to justify payment of the initial instalment of £27 million, because the sums that it represented would have been payable anyway under the Infraco contract. The reality is that they were paid in accordance with MoV4, which was a separate agreement to vary the Infraco contract and appears to have been signed without the necessary authority from CEC. Indeed, payments were even made before MoV4 was signed but were ratified by its subsequent signature. For reasons that will be explained below, it seems to me that payments made under MoV4, whether before or after its signature, before CEC formally approved the mediation settlement were unauthorised public expenditure at the time that they were made but were legitimised after the decision of CEC on 2 September 2011 [[CECo2083154](#)] and signature of MoV5 on 15 September 2011 [[CECo2085585](#)].
- 19.410** My concern, which I have been unable to dispel with any confidence, is that the £49 million payment under MoV4 represented a partial implementation of a settlement that took place before CEC's councillors voted on whether to agree that settlement. In her evidence Dame Sue Bruce emphasised the different roles undertaken by councillors and CEC officials, with the former being responsible for taking decisions and the latter being responsible for making recommendations and implementing decisions [[TR10000084](#), page 0011, paragraph 34]. Following the mediation, a report ought to have been made to CEC to enable it to consider whether to approve a recommendation to implement the agreement reached at mediation, including a staged approach starting with MoV4. Such a report ought to have sought authority to exceed the existing budget of £546 million in the event that MoV5 was not signed.

Authority to enter into MoV4

- 19.411** **tie** was concerned that it lacked authority to enter into, and make the payments due under, MoV4. It considered that those payments would take them beyond the £546 million spending limit which CEC had set for the project. Although the limit imposed on **tie**'s expenditure was £545 million in terms of its operating agreement with CEC, TEL's expenditure limit was £546 million, as will be explained below. **tie** was the vehicle for all payments in respect of the project, including these authorised by TEL.
- 19.412** This led TEL to seek formal approval under its operating agreement to incur expenditure beyond that limit.
- 19.413** TEL's operating agreement reserved to CEC "any actual or reasonably expected increase in capital cost which would mean that the Baseline Cost is exceeded by greater than £1,000,000" [[CECo0645838](#), page 0009, clause 2.22]. The Baseline Cost was to be determined by CEC's Chief Executive and notified to TEL from time to time but CEC's Chief Executive would require Council approval to specify a Baseline Cost exceeding £545 million. This reflected the Council having approved the project only within a spending limit of that amount. Thus without CEC's approval the limit of TEL's authority was to permit **tie** to incur expenditure on the project up to a maximum of £546 million, being the maximum Baseline Cost plus a maximum sum of £1 million.
- 19.414** CEC's officials recognised that the approval of the councillors would be needed for expenditure beyond £546 million. Papers for the IPG meeting on 21 January 2011 included legal advice from Mr N Smith, a solicitor in CEC's Solicitor's Department, to that effect. The advice also noted that delegated authority could not be used to determine any application for approval of an increase in expenditure because of the politically contentious nature of the issue and that any decision would require to be taken by the Council as a whole [[CECo1715625](#), pages 0015–0016, Appendix 2].

- 19.415** Views to similar effect were expressed in a CEC paper dated 10 March 2011 [[CEC02087164](#)]. Mr David Anderson forwarded it to the Chief Executive (Dame Sue Bruce) with a handwritten note to the effect that Mr Maclean and Mr Somerville had prepared the paper. The reason for the paper was to identify the steps necessary to implement the mediation settlement. Apart from recognising the need to update CEC on the outcome of the mediation, the authors of the paper recognised that two authorities were required from CEC. The first related to the existing cap on expenditure and was in the following terms.
- “The Council will be required to give **tie** Ltd authority to allow for spend and commitments that will exceed the current £546M cap. This is not the same as saying that they will spend more than £546M, but rather that potential commitments exceed that figure;” [[ibid](#), page 0001].
- 19.416** As was noted in paragraph 19.413 above, the mechanism would be for CEC to grant the necessary authority to TEL in terms of its operating agreement with CEC, and TEL would authorise **tie** to pay such sums as may be due. The proposed course of action was to seek authority from an executive committee of the Council, or from the full Council:
- “to temporarily relaxes [sic] the provision of the Operating Agreement (Scope; Price; Programme), and either approves indicative potential spend from now to September (Operation Phoenix) or seek agreement to Project Phoenix and all the related issues associated with this” [[ibid](#)].
- 19.417** The authors of the paper noted, however, a pre-election period between 11 March and 6 May 2011, on which latter date the Scottish Parliament election was scheduled to take place. According to the paper, that:
- “politicises the context for decisions, and leads to a need to consider whether to delay progressing a formal request for authority until after this period” [[ibid](#)].
- 19.418** Alternatives considered in the paper included seeking authority from the Transport, Infrastructure and Environment Committee on 10 May 2011, or from the Full Council on 28 April. A third option was based on standing order 63, which the paper quoted as stating that:
- “[i]f a decision which would normally be made by a Committee requires to be made urgently between meetings of the Committee, the appropriate Head of Department, or the Chief Executive, in consultation with the Convener or Vice-Convener can take action subject to the matter being reported to the next meeting of the Committee for information” [[ibid](#), page 0002].
- 19.419** The authors did not recommend that course. Instead their conclusion was that while there were risks with whichever option was pursued, the balance of risk suggested proceeding irrespective of the pre-election period, giving an earliest reporting date of 28 April to the full Council. CEC officials did not submit a report about the mediation to this meeting. If this option had been taken CEC’s decision would have been known prior to the completion of MoV4. As I have noted at paragraph 19.374, at its meeting of 30 June 2011, some six weeks after MoV4 was signed, CEC’s councillors did give a measure of approval to **tie** progressing the priority works and incurring expenditure under MoV4, albeit only within the limits of the project budget of £545 million and only until the end of August 2011 [[CEC02083232](#), Part 1, page 0023].
- 19.420** On 15 April 2011, Mr Maclean gave similar advice about the need for councillor approval to increase TEL’s authority. On that date, Mr Bell emailed CEC a draft letter seeking an increase in TEL’s authority beyond the £546 million limit [[CEC02087172](#)].

The draft letter stated that the value of budget contingency available for drawdown was £2.8 million after including the £1 million funding variance permitted by TEL's operating agreement with CEC in addition to the £545 million cap. Mr Maclean forwarded Mr Bell's email to Dame Sue Bruce, and said:

"If they seek approval you cannot give that without council approval as it would amend the tel operating agreement." [\[ibid\]](#)

19.421 This is recognition by Mr Maclean that approval by the councillors was required, and that Dame Sue Bruce, as Chief Executive, could not herself provide the necessary authority. Mr Maclean appears, however, to have had in mind proceeding without seeking approval from the councillors, because he continued:

"Realistically we are not likely to sue tel as it is a wholly owned company of CEC for a technical breach of the operating agreement so long as actual spend does not go over 545/546m. they should be able to take a reasonable commercial view of this." [\[ibid\]](#)

19.422 In this passage, Mr Maclean appears to distinguish between a 'technical breach' of the operating agreement, and "actual spend" exceeding the approved limit. By this, I understand him to be distinguishing between TEL having financial commitments in excess of £546 million (the "technical breach") and TEL actually having spent over £546 million. Mr Maclean's suggestion appears to have been that TEL should be willing to incur liabilities in excess of £546 million without councillors' approval, as long as it could keep actual spending below that limit. Mr Maclean's email does not indicate his reasoning for such a distinction. It appears that Mr Maclean may have envisaged CEC granting TEL immunity from any action arising from exceeding the limit of its authority to incur expenditure as long as actual expenditure did not exceed that limit. That possible course of action would still result in a breach of the expenditure limit if actual and committed expenditure exceeded the authorised limit. The justification for granting immunity was the relationship between CEC and TEL. Although the relationship between them would undoubtedly influence the options available to CEC if there were a breach of the expenditure limit, the assurance by CEC officials that no action would be taken had the practical effect of inducing TEL to breach the limit of its expenditure without having the necessary approval from councillors as a whole to do so. I do not consider that the reluctance of senior officials to seek the required approval from the Council at that stage justified circumventing councillors in this way.

19.423 Whatever his reasoning may have been, I consider that the distinction that he sought to make was wrong. In the operating agreement between CEC and TEL dated 12 and 13 May 2008, which will be discussed more fully in Chapter 22 (Governance), various matters are reserved to CEC. In particular, there is reserved "any projected or actual overspend of the available funding budget (being £545 million) at any time (whether on an annual or overall basis)" [\[CEC01315173, page 0008\]](#). An actual overspend will arise where payments already made exceed the budget and a projected overspend may arise in two situations. The first is where actual expenditure together with liabilities incurred but not yet paid exceed the budget. The second is where anticipated expenditure necessary to complete the project is added to actual expenditure and current liabilities. It is clear that the intention of CEC was to impose limits on the ability of TEL to incur expenditure in excess of the budget of £545 million.

19.424 In the later agreement between CEC and TEL dated 18 December 2009, there is reserved to CEC "any actual or reasonably expected increase in capital cost which would mean that the Baseline Cost is exceeded by greater than £1,000,000"

[CEC00645838, page 0009]. As I have explained in paragraph 19.413 above, this resulted in a budget limit for TEL of £546 million. I have no hesitation in concluding that, in determining whether there was a reasonably expected increase in capital cost beyond £546 million, liabilities that had been incurred but not paid as well as any anticipated expenditure necessary to complete the project should be added to actual expenditure to date.

19.425 Further, Mr Maclean's suggested approach could only work if the councillors did in due course approve spending beyond the existing limit: a present-day spending commitment in excess of £546 million would at some point become actual spending in excess of £546 million and, without an increase in the permitted expenditure limits, would be unauthorised. Similarly, a contingent liability to pay compensation if the Infraco contract was terminated would become actual expenditure if termination occurred. As will be discussed in paragraphs 19.447–19.451 below the costs of termination would have resulted in CEC exceeding the authorised limit of £546 million when added to actual expenditure.

19.426 On 3 May 2011, when £27 million was due to be paid to BBS as the first instalment of the £49 million payment under MoV4, Mr Bell wrote to Mr David Anderson in the following terms:

"... whilst such a payment does not exceed the authorised actual expenditure of up to £546m delegated to **tie** via TPB, TEL and CEC, on execution of MoV4 this will become a commitment to a total project cost in excess of £546m. Consequently, in confirming agreement to pay Certificate 1, CEC confirm and accepts that this would take **tie**/TEL outwith their current operating agreements with CEC once MOV4 is signed." [CEC02086879]

19.427 I have no reason to doubt that this was an accurate statement of the spending position of **tie** and TEL relative to the approved budget, and I therefore treat it as such. It is consistent with Mr Bell's letter dated 15 April 2011, which was mentioned in paragraph 19.420 above. Moreover, in his evidence to the Inquiry, Mr Coyle said that by the time of the mediation project spending plus accrued liabilities was over the funding limit of £545 million [PHT00000010, pages 76–77]. He was the finance manager at CEC who had worked on the project since 2007 and considered himself to be familiar with the financial aspects of the project (see paragraph 19.96 above).

19.428 Mr Bell sent that letter by email to Mr David Anderson. Mr Maclean forwarded the email to Dame Sue Bruce and the file copy of that email carries the handwritten annotation:

"Stitch up – Alastair raging! This needs to be responded to formally and quickly. /S" [CEC02086879]

19.429 Although in her evidence at the Inquiry Hearing Dame Sue Bruce said this was not her handwriting and that she did not know whose it was, she subsequently advised the Inquiry that she now recognised the handwriting as that of a member of her secretariat. In her evidence at the Inquiry she accepted, however, that the letter from Mr Bell indicated there had been no formal Council approval to increase **tie** and TEL's spending limits [PHT00000054, page 131]. It is unnecessary for me to determine the author of the handwritten annotation; it is sufficient for me to conclude that it indicates that someone understood that Mr Maclean was irritated because Mr Bell had drawn attention to MoV4 taking **tie** and TEL beyond the limits of the authorised expenditure in their operating agreements.

19.430 Mr David Anderson responded to Mr Bell the same day. He referred to all parties at the meeting on 28 April having collectively agreed that the £27 million payment should be made, based on Hg Consulting's certificates, and confirmed, in his capacity as CEC's Senior Responsible Owner ("SRO") for the project, that he was content for that decision now to be implemented [[TIE00687804](#)]. I simply observe that it is irrelevant how many people agreed to this arrangement or that Mr David Anderson as SRO was content for the decision to be implemented if, as appears to have been the case, the expenditure limits imposed by CEC would be exceeded once the payment was made in implement of an obligation incurred by entering into MoV4. In that situation only CEC could authorise payment by increasing the expenditure limit.

19.431 On 6 May 2011, Mr Emery wrote to Mr David Anderson pursuant to TEL's reporting obligations under clauses 2.22 and 2.24 of the TEL operating agreement [[CEC02087184](#)]. The letter noted that only £2.823 million of the budget contingency remained available for drawdown. As was noted in paragraph 19.420 above, the remaining budget contingency included the £1 million funding variance permitted by TEL's operating agreement with CEC. Despite steps taken by TEL and **tie** to minimise additional funding commitments and to review expenditure, the letter advised that the remaining funding was under pressure. The letter continued that:

"... we now anticipate that we will have committed any residual funding within the current delegated limits before the end of May 2011" [[ibid](#), page 0002].

19.432 It concluded:

"In terms of the CEC/TEL and CEC/**tie** Operating Agreements, TEL and **tie** are unable to make any further commitments without a change in the authorised and delegated funding from CEC.

"I request an increase in TEL's delegated authority to make financial commitments exceeding the £546m in the TEL/CEC Operating Agreement and MOU." [[ibid](#)]

19.433 On 12 May 2011, Mr David Anderson emailed consortium representatives and advised that:

"[t]he Council is due to consider the initial outcome of the mediation and the provisions of MoV4 on Monday ...

... our elected members wish to see the full details of MoV5 before holding a formal debate on the issues." [[CEC02087186](#)]

19.434 That is a reference to the special meeting of CEC which took place on 16 May 2011. The Agenda for that meeting contained only one item of special business: an update on the project based upon a report from the Director of City Development (Mr David Anderson), which was to be produced [[CEC02083756](#)]. The only date on the report is 16 May 2011, and it is unclear when it was prepared [[CEC01891505](#)]. The report gave members an update on the outcome at the end of the mediation and told them in general terms about MoV4. Although it is in the name of the Director of City Development, who has ultimate responsibility for its contents I note that, in accordance with CEC practice, more junior officials were involved in drafting it. In this case one of the officials involved in drafting the report was Mr Coyle, who was aware that the spending limit of the project had been reached, if not exceeded by that date. Moreover, Mr Anderson was also aware from Mr Bell's letter dated 3 May that the signature of MoV4 would commit **tie**/TEL to expenditure greater than £546 million and from Mr Emery's letter dated 6 May that an increase in the expenditure limit was required. Despite that, the report makes no mention of the commitment to

expenditure greater than the £546 million limit following the signature of MoV4 or of Mr Emery's request for an increase in that limit. On the contrary the impression from the report is that the signature of MoV4 does not affect the expenditure limit imposed on the project by CEC. It states:

"The costs associated with the re-commencement of work, the transfer of [Siemens'] materials to Council ownership and related matters has [sic] been subject to independent verification by an external Chartered Quantity Surveyor and cleared with Transport Scotland officials. These costs, added to these already incurred, take the cumulative expenditure on the tram project up to 6 May 2011 to a total of £440M." [libid](#), page 0003, paragraph 3.8.]

19.435 The above observations about cost can only be reconciled with the contrary evidence of Mr Coyle and Mr Bell as well as Mr Emery's prior request for an increase in the expenditure limit if they relate to actual expenditure, ignoring any future payments due in respect of liabilities. As I have indicated above, treating the expenditure limit as restricted to actual expenditure is misleading and contrary to CEC's intentions when it imposed the limit. The report recommended that councillors should note the outcome of the mediation process to date, the proposals for remedial work in Princes Street and that a further detailed report would be brought to a meeting of CEC in the summer of that year. Councillors were not asked to approve MoV4 and to authorise its signature; accordingly they accepted Mr Anderson's recommendation. Mr Anderson's email indicates that this was because the councillors themselves did not wish any debate on the interim settlement arrangements reflected in MoV4. There is no explanation why that was their preference. The Inquiry is not aware which councillors were consulted about this arrangement, nor the nature of discussions with them. What is clear is that there is no record of any advice to councillors about the effect that the signature of MoV4 would have on the available budget of £546 million or about the request by Mr Emery for an increase in the expenditure limit. By virtue of the reference to the expenditure in terms of MoV4 taking "the cumulative expenditure on the tram project up to 6 May 2011 to a total of £440M", as well as the omissions mentioned above, I have concluded that the report was misleading.

19.436 In the context of whether the cost of the priority works could be undertaken within the budget limit of £545 million I have also considered the briefing note for Ministers (Mr Swinney and Mr Neil, the Cabinet Secretary for Infrastructure and Capital Investment) prior to a meeting with CEC Chief Executive (Dame Sue Bruce) and Director of Finance (Mr McGougan) on 21 June 2011 [[TRS00011522](#)]. Paragraph 2 of Annex A of that document refers to the priority works to be undertaken by Infraco in terms of MoV4 and states:

"[t]he cost of this work can be accommodated within the existing £545m funding envelope, and is expected to lead to a further drawdown of grant support from Scottish Government of around £50m to end of August" [libid](#), page 0003].

19.437 At first sight this might suggest that MoV4 did not result in **tie**/TEL exceeding the expenditure limit of £545 million or £546 million imposed on them by CEC. However, closer examination of the briefing note confirms that it is only concerned with actual expenditure to date. That is evident from paragraph 3, where it states:

"Total project spend to date is £431m of which the Scottish Government contribution is £395m (£105m of grant remains unspent), however, CEC has just invoiced Transport Scotland for a further £38m covering our share of CEC's substantial re-mobilisation costs of the Priority Works outlined above." [libid](#), page 0003.]

19.438 In his evidence to the Inquiry, Mr McGougan noted that many issues remained outstanding in May 2011 and that the issues taken before CEC's councillors that month were those

"that the Council needed to make a decision on there and then to make sure progress on the project was not delayed. We wanted to get as full a picture as possible before we could take the overall position back to the Council. We knew it was going to be a very difficult report for the Council to deal with. We didn't want to go back with a less than fully developed proposal. That's why we asked the Councillors to be patient and wait for the full picture." [TR10000060_C, page 0117, paragraph 295.]

19.439 This suggests that it was CEC's officials, rather than the councillors, who limited the issues put before the May meeting of the Council; and that they did so recognising the "difficulty" that CEC faced in dealing with a decision on the project's future. This also suggests that CEC's officials had rejected the option of a staged approval whereby councillors would be asked to approve the temporary suspension of the limit, authorise the signature of MoV4 to enable priority works to be undertaken and approve indicative potential spend under MoV4 until August or September when members would be asked to approve MoV5. Such an approach would have ensured that strategic decisions, including increasing authorised expenditure temporarily, were taken by councillors rather than officials.

19.440 On 13 May 2011, Mr David Anderson responded to Mr Emery's letter of 6 May. In his letter, Mr Anderson said that, at its meeting of 16 May 2011, CEC would receive a summary of MoV4, and he expressed the expectation that CEC would simply note the agreement and defer a decision on the future of the project until fuller details on scope, budget and programme were available. That seems to me to be different from CEC taking a decision "to make sure progress on the project was not delayed", as suggested by Mr McGougan in his evidence quoted in paragraph 19.438 above. Mr Anderson's letter continued:

"In the meantime, I would like to give you the comfort that after consultation with the Council's Chief Executive, Group Leaders, Director of Finance, and Head of Legal Services, we will not be recommending any action being taken in relation to any technical breach of the operating agreement as a result of implementing MoV4." [CEC02087187]

19.441 This letter implicitly acknowledges that implementation of MoV4 might place **tie** and TEL in breach of their operating agreement. It certainly does not contradict **tie** and TEL's concerns that this was in fact the case. The context would suggest that the breach that Mr Anderson had in mind was exceeding the approved budget. Mr McGougan accepted that MoV4 constituted a commitment to an amount in excess of the authorised expenditure [PHT00000043, page 99; see also Mr Emery PHT00000052, page 97]. Rather than secure the Council's authority for expenditure in excess of that budget, however, Mr Anderson's letter indicated that such approval was not going to be sought but that **tie** and TEL would be allowed to exceed their spending limits without action being taken against them for doing so. That decision was not approved by councillors as a whole but, taking Mr Anderson's letter at face value, had been approved by the group leaders. In my view that cannot be equated to a decision of councillors as a whole, who collectively were the only body with power to authorise the necessary increase in TEL's expenditure limits on the project.

19.442 Mr Emery signed MoV4 for **tie**, but had to be instructed by CEC's senior officials to do so [PHT00000052, pages 105–106; CEC02087193].

19.443 The decision to proceed in this way allowed progress to be made following the agreement at mediation brokered by Mr Rush by committing to expenditure which exceeded the spending limits thus far approved by CEC's councillors, but without seeking any formal authority for that to be done. Dame Sue Bruce came to accept that this was the nature of the arrangement [PHT00000054, page 139]. She could not, however, remember why it was done. When it was put to her at the public hearing that the matter was not put before CEC's councillors because of concern they would vote MoV4 down and scupper the entire Mar Hall deal, she said she did not think that was the case but could not remember [ibid, pages 114 and 140]. One might infer from the approval of the group leaders that such an outcome was unlikely, but Messrs Maclean and Somerville's paper of 10 March had identified a risk that:

"some elected members seeking election to the Scottish Parliament could see this as an opportunity to set out their own position, independent of their local government party stance" [CEC02087164, page 0002].

19.444 On the evidence, it seems to me to be clear that senior CEC officials, including the Chief Executive, the Director of City Development, the Director of Finance and the Head of Legal Services, had a desire to keep decision making on the project out of the political arena at this stage, while nonetheless restoring momentum to the project and taking steps towards an ultimate settlement. Their reason for acting in this way is far from clear, but in her oral evidence Dame Sue Bruce gave an insight into their thinking in response to a question from me about the risk that councillors might ultimately reject the settlement, even though the prioritised works had been undertaken. In her response Dame Sue Bruce distinguished between the remedial works in Princes Street and the prioritised works and said:

"it was almost like a statement of good faith by both parties, that whilst the rest of the work was going on to get the bigger parcel of agreement completed [i.e. MOV5 work] that this work [MOV4 work] could start off, and I think the term that was used at the time was to get yellow jackets back out there, make a visible impact that there was work going on to contribute to the bigger piece." [PHT00000054, page 84.]

19.445 Thus the intention of the strategy was to undertake work with the object of persuading councillors to support the settlement solution of constructing a line from the Airport to St Andrew Square/York Place on terms that had been agreed in principle, even if that strategy meant exceeding the formal limits of CEC's existing authority. If that is correct, it transgresses the distinction drawn by Dame Sue Bruce between the role of officials and councillors. Only councillors could authorise an increase in the spending limits. Even without the commencement of prioritised works councillors were capable of deciding the future of the project and it was not the role of officials to commission such work as a means of further influencing the decision of councillors.

19.446 There is no clear evidence to identify the source of any authority for CEC's officials to order **tie** to commit to payment of these sums, or to direct **tie** to execute MoV4. As I have noted in paragraph 19.441 above, the Director of Finance was aware that MoV4 constituted a commitment to expenditure beyond the permitted limit. I consider that in light of that awareness he had a duty, as the Chief Financial Officer of CEC, to advise his fellow officials of his views and to seek the approval of councillors as a whole for an increase in authorised expenditure. The view that the officials were operating inside the existing authority appears to have been founded on the contention that the £546 million spending limit related to payments actually made, rather than spending to which **tie** was committed.

- 19.447** The basis for the assertion that MoV4 had the effect of restricting the spending limit of £546 million to expenditure actually incurred appears to be that following the signature of MoV4 **tie** no longer had any obligation to make future payments in respect of liabilities incurred under the Infraco contract before MoV4 was signed. The reasoning appears to be that either party could terminate the Infraco contract on a no-fault basis if they did not enter into MoV5. If that were the case and there were no financial consequences of termination I agree that CEC's liability, as **tie**'s guarantor, would be limited to actual expenditure. As stated in paragraph 19.102 the Highlight Report to CEC's IPG meeting on 21 January 2011 noted that actual expenditure incurred to that date was £402.4 million [[CEC01715625](#), page 0004]. Payments totalling £78 million were due under MoV4 (see paragraph 19.371). Thus total actual expenditure was £480.4 million. On that basis it might appear that the commitments following MoV4 were contained within the budget of £546 million.
- 19.448** There is a fundamental error in that approach to the question of the legitimacy of the payments under MoV4. Although it is correct that once MoV5 was signed the expenditure incurred as a result of MoV4 would be legitimated, it is necessary to include within the budget provision for **tie**'s liabilities in the event of a failure to agree and sign MoV5. If the parties failed to sign MoV5 because **tie** and/or CEC did not have sufficient funding to meet **tie**'s obligations under the Infraco contract, the Infraco contract would terminate automatically at 5 pm on 1 September 2011 and the parties would have no future rights or obligations in respect of the future performance of the Infraco works "save as provided in Clause 94.6 of the Infraco Contract" [[CEC01731817](#), page 0006, clauses 3.3 and 3.3.3]. Clause 94.6 of the Infraco contract provided that termination did not affect each party's obligations in terms of various clauses specified in that clause [[CEC00036952](#), Part 3, page 0219]. Thus **tie** had contingent liabilities in the event of termination of the Infraco contract. At the stage of negotiating MoV4 CEC and **tie** ought to have assessed these contingent liabilities to satisfy themselves that the termination of the Infraco contract in accordance with MoV4 did not result in exceeding the budget. As is mentioned in paragraph 19.562 below by a second Memorandum of Understanding dated 2 September 2011 the funding deadline was extended to 14 September 2011 [[TIE00899947](#)] and the memorandum recorded the parties' agreement, albeit on a non-legally binding basis, that the compensation to be paid to BSC if funding was not approved was £27,761,517 to BB and £38,488,963 to Siemens. These figures for compensation in the event of termination of the Infraco contract are the best available to the Inquiry. If they are added to the actual expenditure of £480.4 million the resulting figure is £546.65 million.
- 19.449** Furthermore, the project budget included the cost of the supply of trams, tram-related equipment and depot equipment in terms of the Tram Supply Agreement (TSA) between **tie** and CAF. MoV4 did not vary or amend the TSA [[CEC01731817](#), page 0008] but it included provisions relating to the effect of termination of the Infraco contract on the TSA which had been novated to the Infraco contract. Clause 3.3.6 of MoV4 imposed an obligation upon CAF to deliver the trams and equipment to **tie** or CEC in exchange for payment by **tie** or CEC of all milestone payments listed in Schedule 5 of the TSA even although the milestones to allow application for payment of such milestone payments had not occurred [*ibid*, page 0007]. Although clause 3.3.6 provided for certified deductions to reflect any difference between what should have been delivered at a milestone payment and what was actually delivered, provision should have been made for contingency payments to CAF in the event of the termination of the Infraco contract. Clause 3.3.6 conferred upon CAF the right to pursue such claims independently of Infraco. Although it has not been possible

to estimate such contingent liabilities accurately, the Project Phoenix proposal illustrated the possible claims by CAF as at 24 February 2011 [[BFB00053258](#), pages 0031–0032]. This predated MoV4. It assumed that milestone payments would be met but there was £10 million outstanding of the contract price for the delivery of the trams and some allowance should have been made prior to the signature of MoV4 for this existing liability. If that had occurred there would have been a further increase in the sum of £546.65 million, possibly by as much as £10 million.

- 19.450** Finally CEC incurred expenditure in respect of the conduct of the mediation, the negotiation of the detailed agreement comprising MoV4, the supervision and certification of the work undertaken in terms of MoV4 and the negotiation of the detailed agreement comprising MoV5. That expenditure should properly have been allocated to the tram budget. Even if a proportion of the salary of officials engaged in these aspects of the project was not included as costs to be set against the budget, the costs incurred in retaining Mr C Smith, Mr Rush and McGrigors prior to, and during, the mediation and in retaining Mr C Smith as SRO and independent certifier and McGrigors as solicitors for the preparation of MoV4 and Mov5 ought to have been funded from the tram budget.
- 19.451** When one considers actual expenditure on work undertaken following MoV4 in addition to expenditure prior to mediation plus liabilities in the event of termination under MoV4 and the cost of experts it is clear that MoV4 would result in expenditure in excess of the budget if MoV5 had not been signed and the Infraco contract had been terminated. In these circumstances the decision to authorise the signature of MoV4 and to make payments in terms of it was a matter for councillors, not officials.
- 19.452** On the balance of the evidence available to me, I find that the effect of MoV4 was to commit **tie** to expenditure in excess of the spending limit. It was, therefore, in excess of the authority conferred by CEC. Any lack of authority was subsequently addressed but only when councillors authorised officials to enter into MoV5 in September 2011. At its meeting on 30 June 2011, CEC authorised **tie**:
- “to progress on [sic] the priority works, in accordance with MoV4, and incur expenditure within the limits of the project budget of £545m, until the end of August 2011” [[CEC02083232](#), Part 1, pages 0023 and 0030].
- 19.453** Thus even the approval of MoV4 at that date was subject to the expenditure limit imposed by CEC. As I have already explained, there was clear evidence, which I have accepted, that the signature of MoV4 breached the expenditure limit. It was not until CEC's decision on 2 September 2011 authorising the Chief Executive to enter into MoV5, the Settlement Agreement with Infraco to build the line from the Airport to St Andrew Square/York Place, that it can be said that the expenditure incurred following MoV4 was authorised by CEC. At the time that MoV4 was signed, however, no authority existed to do so, although it could have been sought in April [[CEC02087164](#)].
- 19.454** In her evidence Dame Sue Bruce agreed that it was “putting a coach and horses through good financial governance at the Council” for CEC's officials to respond to Mr Bell's concerns about MoV4 resulting in the expenditure limit being breached and to Mr Emery's request for an increase in TEL's delegated authority to make financial commitments exceeding the £546 million by telling them to proceed with the payment of £27 million and by indicating that no action would be taken for any breach of the expenditure limits [[PHT00000054](#), pages 134–136]. CEC's officials had been advised by Mr Maclean that any request for an increase in the expenditure limit had to be determined by CEC or one of its committees, and that officials had no power

to determine such applications because it would involve amending an operating agreement between TEL and CEC. The granting of immunity for any breach of the expenditure limit is not an appropriate response to a request for an increase in the limit, even where it seems to have the approval of the Chief Executive, the Director of City Development, the Director of Finance and the Head of Legal Services as well as Group Leaders. By purporting to grant immunity they were in reality authorising a variation of the operating agreement by permitting increased expenditure. That was a matter solely within the discretion of CEC or one of its committees.

Payments under MoV4 before it was signed

- 19.455** MoV4 was signed on 20 May 2011 [[CEC01731817](#), page 0015]. Of the £49 million, it provided for £27 million to be paid on 22 April 2011 and £9 million to be paid on 17 May 2011 – that is, on dates before it was signed [ibid](#), page 0010, clauses 6.1 and 7]. The £27 million was in fact paid on or around 3 May 2011 [see, e.g., [TIE00107170](#); Mr McGougan [PHT00000043](#), pages 95–98; [TIE00687901](#), page 0001, paragraph 3; [TIE00109614](#)], and the £9 million was at least authorised for payment, and appears to have been paid, before MoV4 was signed [see, e.g., [TIE00690794](#); [TIE00687929](#); [TIE00107232](#)].
- 19.456** The concern with payments being made before the related agreement is signed is that it puts the money out of the paying party's control, without them having yet secured a legally binding commitment by the other party to the terms on which the payment was made. Where the sums in question are in the tens of millions, it would ordinarily be a serious failure of governance for payments to be made in such circumstances and I see no reason to reach any other conclusion in this case.
- 19.457** In approving payment, CEC's senior officials appeared to be confident that the paperwork would catch up. While that ultimately occurred, it does not alter my views expressed in paragraph 19.456. Moreover, the senior officials in CEC mentioned in paragraph 19.458 were, or should have been, aware that the signature of MoV4 resulted in **tie**/TEL exceeding the expenditure limits imposed upon them by CEC. As was noted in paragraphs 19.430 and 19.437 above, the restriction on expenditure could only be varied by CEC itself. CEC officials breached that limit by making payments before CEC authorised the settlement agreement or otherwise increased the limit on expenditure. This, too, was a serious failure in governance. To the extent that senior officials acted in this manner they must also bear responsibility for these governance failures.
- 19.458** In his letter to Mr David Anderson of 3 May 2011, which was copied to the Director of Finance and Head of Legal Services, Mr Bell said that the £27 million payment would be made:
- “ ... on the basis of agreement by CEC that they have the reasonable expectation that MoV4 and the draft Certifier Agreement will be executed as soon as they can convene a Council Meeting We understand that Infracore have advised Hg Consulting that they intend to sign MOV4 in its current form and will be sending a time bound offer letter to confirm that.” [[CEC02086879](#), page 0003.]

19.459 Mr Bell's letter also stated:

"... whilst such a payment does not exceed the authorised actual expenditure of up to £546m delegated to **tie** via TPB, TEL and CEC, on execution of MOV4 this will become a commitment to a total project cost in excess of £546m. Consequently, in confirming agreement to pay Certificate 1, CEC confirm [sic] and accepts that this would take **tie**/TEL outwith their current Operating Agreements with CEC once MOV4 is signed." [\[ibid\]](#)

19.460 Mr Maclean forwarded a copy of the letter to the Chief Executive. Although it appears that this letter may have been based on the actual expenditure and committed expenditure under the Infraco contract, for the reasons explained in paragraphs 19.447 to 19.451 the payments under MoV4 exceeded the authorised expenditure notwithstanding the varied terms of the Infraco contract as a result of MoV4.

19.461 In his emailed reply [\[TIE00687804\]](#), Mr Anderson referred to the payment being made:

"on the understanding that MoV4 and the associated certification arrangements are in train and that all the outstanding matters will be concluded quickly."

19.462 Mr David Anderson's evidence to the Inquiry was that, although MoV4 had not yet been signed at this stage, he understood it to have been substantively agreed by both parties and he was acting under the direction of the Chief Executive [\[PHT0000043\]](#), page 200]. There is some support for his understanding in a draft **tie** paper on MoV4, dated 20 April 2011, which notes that the terms of MoV4 had been agreed by 16 April 2011 [\[TIE00687724\]](#) and an updated draft dated 12 May 2011 refers to the terms being revisited on 10 and 11 May to address matters concerning CAF [\[TIE00086095\]](#).

19.463 BB and Siemens subsequently sent letters dated 11 May 2011 offering to undertake to enter into an agreed form of Minute of Variation [\[BFB00094819; BFB00094820\]](#). The letters purport to attach the Minute of Variation, but it is not attached to the versions available to the Inquiry. It is therefore not possible to confirm what terms they contained, although I infer it was likely to have been a version of MoV4. Nor has the Inquiry identified any acceptance by CEC of the offers, which would be necessary for it to have taken legal effect. Without an acceptance, the offers from BBS could have been withdrawn at any time, at least in theory.

19.464 In any event the offer letters, being dated 11 May 2011, came eight days after the £27 million had been paid [\[TIE00107170\]](#). On the face of it, therefore, CEC's officials authorised very large sums to be paid prior to the related terms and conditions having been made the subject of a legally binding agreement. Although this did not in the event have any negative impact, since BBS did in fact sign MoV4 shortly afterwards, it is concerning that CEC's officials should have authorised the payments in these circumstances.

19.465 **tie**'s non-executive directors were not told about the £27 million payment until after it had been made [Mr Hogg [TR100000045_C](#), page 0052, paragraph 124].

19.466 No satisfactory explanation is available to the Inquiry for the payment of such large sums of money without the necessary signed agreement, which in turn required the approval of councillors to exceed the expenditure limits imposed by them on the project. CEC officials did not seek the necessary approval at the CEC meeting on 28 April 2011 or at the meeting of 16 May 2011. At its meeting on 16 May CEC was simply asked to note the outcome of the mediation, and did so [\[CEC01891389\]](#).

- 19.467** This was a matter of concern to Mr Jeffrey, who, in an email to Mr Emery dated 16 May 2011 noted that CEC was not to be asked to approve MoV4. He explained that the first MoV4 payment of £27 million had been made on the basis that MoV4 was due to be signed imminently, but that this had not happened. In his view, **tie** needed a specific written instruction from CEC to make the second payment of £9 million, which was to be paid the following day [[TIE00687929](#)].
- 19.468** Mr C Smith's evidence was that the payments were made before MoV4 was signed so that progress could be made with the priority works. He recognised there was a risk in paying the sums before MoV4 was signed, but considered it was "contained", and referred to the fact the sum fell "within the 362 figure". That is a reference to the sum of £362.5 million agreed at mediation for the off-street works which was part of the settlement that was not agreed by CEC until September 2011. He said that whether to take the risk was a decision for the Tram senior management team ("SMT") meeting [[PHT00000053](#), pages 99–100]. As noted at paragraph 19.396 above, members of CEC's SMT approved payment of the first instalment at a meeting on 28 April 2011 [[CEC02086882](#)].
- 19.469** Dame Sue Bruce said the sums were paid in the context of a "good faith element of the period between Mar Hall and the final signing", and that it was fair and reasonable to pay the contractors to remobilise and get ready for the priority works [[PHT00000054](#), page 92]. She confirmed that it would cause her concern that CEC paid £27 million when the agreement creating the liability had not been signed and could not recall why this had occurred although she considered that "[t]here must have been certainty around why we did this at the time" *ibid.*, page 98].
- 19.470** Mr McGougan said that the payments were made to honour the parties' agreement at Mar Hall to show mutual goodwill, through executing the works (BSC) and paying for them (CEC/**tie**). The contractor started the works on 4 April 2011, well in advance of MoV4 being signed [[PHT00000043](#), page 96 onwards; [CEC02083825](#), page 0009, paragraph 3.2.1]. The payments were, Mr McGougan said, of sums withheld by **tie** in the run-up to mediation: "it didn't have to wait for MoV4 because these sums were due and payable under the existing contract" [[PHT00000043](#), pages 96–100]. In paragraph 19.410 above I have expressed my concern that the £49 million payment under MoV4 represented a partial implementation of a settlement that had not been approved by councillors. Nevertheless, I have difficulty in accepting Mr McGougan's evidence that the payments could be made because they were due under the Infraco contract before it was varied by MoV4.. Prior to Mar Hall, the procedure followed for payments made under the Infraco contract was that BSC requested payment from **tie** and if **tie** agreed that it was due TEL applied for funds from CEC to make the necessary payment. Unless TEL requested funds from CEC for payment of sums due to BSC, CEC did not make payments to Infraco. The request from TEL with supporting documentation was an essential part of the audit trail for the CEC payments. The arrangements for payment were varied by the agreement at Mar Hall. Thereafter the audit trail depended upon Mr C Smith issuing certificates for payment.
- 19.471** Mr Walker also referred to the prioritised works as time-critical works to be completed before the Edinburgh Festival, which were carried out in the context of restored good faith [[TRI00000072_C](#), pages 0084–0085, paragraph 152]. His reference and that of Dame Sue Bruce in paragraph 19.469 above support my conclusion that the payments were only due as a result of the mediation settlement and were regulated by MoV4, although it was unsigned.

- 19.472** In its submissions, Siemens referred to the fact that the terms of MoV4 had been agreed between **tie**, CEC, Siemens and BB by 16 April 2011 but that it was not executed until 20 May 2011 because of amendments required by CAF. The parties were, Siemens submitted, prepared in good faith to implement what they had agreed (BB starting the prioritised works, and CEC authorising payments) before the agreement was signed, making progress that avoided delay and therefore saved money [**TR100000290_C**, page 0154, paragraph 449 onwards]. BBS did indeed start the priority works at the depot and mini-test track as early as 4 April 2011 [**CEC02083825**, page 0009, paragraph 3.2.1; **BFB00003297**].
- 19.473** As events turned out, CEC suffered no negative consequences as a result of £36 million being paid to BBS prior to MoV4 being signed. In return for the payment, BBS started work and substantial goodwill appears to have been generated – the importance of which I do not underestimate, given the project's history. CEC also held a vesting certificate for Siemens' materials and equipment valued at c. £14.6 million, which took effect on receipt by Siemens of the equivalent payment [**SIE00000393**, dated 15 April 2011]; and, by 17 May 2011, CEC held another vesting certificate for equipment valued at c. £402,676 [**SIE00000394**]. The effect of these was that, on payment being made, CEC became the owner of the items specified in the certificates. I am not, however, satisfied that in instructing these payments prior to the execution of MoV4, CEC achieved the standards of administration that one would reasonably expect of a local authority.

Council meetings, May–September 2011

- 19.474** Between May and September 2011, CEC held four meetings to update councillors about the future of the project and to ascertain their views, namely on 16 May, 30 June, 25 August and 2 September. These will be considered below.

Meeting on 16 May 2011

- 19.475** As was discussed in paragraph 19.434 above, on 16 May 2011 a special meeting was convened to discuss the project. As requested in the report to them, councillors noted the update from the Director of City Development about the outcome of mediation in the expectation of a more detailed report in the summer. For their next meeting, among other things, they also called for detailed figures and analysis of the cost of cancelling the project to enable them to weigh it up against proceeding to St Andrew Square. The information was to be as accurate as possible and officials were to provide the sources of the information so that it could be verified [**CEC01891389**, page 0003, paragraph 5].

Meeting on 30 June 2011

- 19.476** Prior to the meeting on 30 June 2011, various reports were made available to councillors. First, the Director of City Development produced a report recommending approval of the terms agreed at mediation and pursuit of the option to complete the line to St Andrew Square/York Place [**CEC02044271**]. This was the principal report to councillors but the other reports underlay its recommendations. In a marked departure from protocol, CEC's standing orders were suspended to allow officials to make presentations at the meeting to explain their recommendation in that report [**TR100000084**, page 0029, paragraph 91 onwards]. As Dame Sue Bruce put it:

"We had tested and re-tested it and were trying to demonstrate to elected members that we felt very strongly that our recommendations were reliable and we had come to do the right thing, the right way." **libid**, page 0029, paragraph 92.]

- 19.477** Councillors were given the opportunity to ask questions of the officials at the meeting, and did so [Mr Maclean [PHT00000008](#), pages 142–143].
- 19.478** The recommendation was based on a comparison of the merits of the settlement with two other options, namely continuing with the status quo or separation from the Infraco contract either by mutual agreement or unilaterally based on specific grounds followed either by re-procurement of the works or cancellation of the project. According to the report neither of these other options was likely to be materially less expensive than the recommended option and each of them involved significant risks and uncertainties. Only the recommended option would, with a strong degree of certainty, produce a tram line for Edinburgh [[CEC02044271](#), page 0008, paragraph 3.38].
- 19.479** In Mr David Anderson's opinion, continuing under the Infraco contract in its existing form was likely to be fraught with practical difficulties; would involve a lack of certainty on timescales and cost; presented the risk of **tie** losing in dispute resolution forums on key points of contractual principle; would involve the risk of additional project management and legal costs; and would result in a prolonged period of disruption and uncertainty for the city, with no guarantee of a positive outcome. The report noted that the "costs of this type of attrition are difficult to estimate" [ibid](#), page 0007, paragraphs 3.32–3.33]. Given the history of the project, it is difficult to disagree with any of these remarks.
- 19.480** On the option of separation, the report noted, no doubt correctly, that it came with no guarantee that there would ever be a return for the £461 million already sunk into the project [[ibid](#), page 0007, paragraph 3.34]. If separation were to be based upon unilateral termination by **tie**, it could lead to a protracted and costly legal dispute with no clear outcome [[ibid](#), pages 0007–0008, paragraph 3.36]. Again, it is difficult to disagree.
- 19.481** Section 4 of the report considered the financial implications of terminating the line at St Andrew Square or Haymarket as well as terminating the project. The comments on the financial implications of termination of the project were highlighted and were as follows:
- "Should the project be terminated separation and cancellation costs will create a significant funding gap to be met from revenue, with a potentially higher risk to the sums for grant support already received from Transport Scotland"** [[ibid](#), page 0018, paragraph 4.4].
- 19.482** As is apparent two issues would arise in the event of termination of the project. The first was that, if cancellation meant CEC would receive no functioning asset for its expenditure, the expenditure would be treated as revenue spending rather than capital spending, and could not therefore be funded from borrowing [Mr Coyle [PHT00000010](#), pages 146–147]. The second point was a perceived risk that, if the scheme were cancelled, Transport Scotland might seek repayment of grant sums already paid.
- 19.483** On the settlement proposal, the report also noted the option of a first phase of a line from the Airport to Haymarket only, but explained that such a line would be loss-making, require a substantial subsidy and compromise integration of the tram with bus and rail [[CEC02044271](#), page 0009, paragraph 3.46]. The business case estimated the annual operating loss to be initially £4 million and getting no better than £3.1 million per year over the life of the project [[ibid](#), page 0012, paragraph 3.61].

19.484 The report stated that:

"Whilst negotiations (both between the Council and Infraco and also within Infraco itself) are not yet complete the intended commercial position has been set." [\[ibid\]](#), page 0008, paragraph 3.40.]

19.485 In my view, this was intended to make clear to councillors that there was no realistic prospect of any change being agreed to the key settlement parameters agreed at Mar Hall, including most importantly the off-street works price of £362.5 million [see, e.g., Mr Coyle [PHT00000010](#), page 149 onwards]. Those had been fixed by the agreement in principle at mediation, without input from members, and indeed did not subsequently change.

19.486 The councillors approved the recommendation in the report, subject to being satisfied in due course that sufficient funding was available to pay for the settlement and that risks, particularly relating to the on-street section, were sufficiently mitigated. They instructed the Chief Executive to report on these matters later in the summer [[CECo2083232](#), Part 1, page 0023 onwards]. In the meantime, by approving the Director's recommendation (c) they retrospectively authorised **tie** to progress with the priority works under MoV4 and to "incur expenditure within the limits of the project budget of £545m, until the end of August 2011" [\[ibid\]](#). As already discussed, expenditure following the signature of MoV4 required an increase in the budget but the report failed to advise councillors of that fact or of the request by TEL to increase the budget.

19.487 The approval of these steps did not rest on a political consensus. The motion that passed was proposed by the Liberal Democrat group. Separate amendments were proposed by each of the Labour, Scottish National Party ("SNP"), Conservative and Green groups. The amendments reveal the political divisions over the project. The Labour amendment favoured a line between the Airport and Haymarket, as phase one of a longer-term plan, should funding be available, and sought the resignation of the Council Leader and deputy leader; the SNP amendment proposed a referendum on the Tram project; the Conservative amendment expressed no confidence in the figures presented in the Director's report, noting in particular that it lacked detailed figures and analysis of the cost of cancelling the project, and sought further information on that option as well as the options of building the line to either Haymarket or St Andrew Square; the Green amendment favoured a line to St Andrew Square, subject to information on cost and risks [\[ibid\]](#).

Other material available to councillors

19.488 In reaching the decision mentioned above it should be borne in mind that in advance of the meeting councillors had access to other documents, apart from the report by the Director of City Development. These documents underlay the Director's report and were made available to members on a confidential basis in a "data room" because CEC was still negotiating with BSC over the settlement. Exactly what documents were made available to members in this way remains unclear: CEC was unable, in response to the Inquiry's requests, to provide that information. It appears to have included reports by the following professional consultants: McGrigors [[CECo2086431](#)], Atkins [[CECo2085600](#)], Hg Consulting [[CECo2085602](#)] and Ashurst [[CECo2086430](#)]. According to Mr Coyle, only about a third of the members took the opportunity to consult these documents [[PHT00000010](#), pages 143–145]. Although the majority of members would appear not to have consulted the documents, it remains relevant to consider them because they formed the basis for

the recommendations in the Director's report and may well have influenced those members who did consult them.

- 19.489** The documents in the data room also included a spreadsheet file (or workbook) entitled 'Budget Appraisal' [[CEC02085613](#); Mr Coyle [PHT00000010](#), page 151 onwards]. This was prepared by CEC's finance department and compared the estimated costs of the various options for the future of the project. The figures in this spreadsheet lay behind the statement in the Director's report that none of the alternatives to the settlement proposal was likely to be materially less expensive than that settlement which had an anticipated outturn cost of £773.4 million [Mr Coyle [ibid](#), page 153].
- 19.490** The cost estimates set out in the spreadsheet, from least expensive to most expensive, were as shown in Table 19.4:

Table 19.4: Cost of options to be considered by CEC on 30 June 2011

Options	Estimated Cost
"Mothball/Cancel" (i.e., separate from BSC and either suspend or cancel construction)	£645 million to £687.1 million
Settlement Agreement	£773.4 million
Unsuccessful termination (i.e., failed attempt by tie unilaterally to terminate the Infraco contract)	£910.1 million +
Continue with BSC under the Infraco contract on its existing terms	£941.7 million to £1,055.2 million
Separate from BSC and re-procure the works under the Infraco contract	£1,032.2 million to £1,144.7 million

Source: Budget Appraisal prepared by CEC's finance department comparing the estimated costs of the various options for the future of the project [[CEC02085613](#)]

- 19.491** Taking these headline figures at face value, the settlement proposal was by far the most attractive option when considered on cost grounds, and might reasonably be described as the only rational choice out of those presented in the spreadsheet. All other options leading to a functional tram line were forecast to be significantly more expensive, and beyond the reach of any additional funding likely to be available. The only option that was less expensive – to suspend or cancel the project – would produce no tram line for over £600 million of expenditure, and would result in a significant cost being written off against CEC's revenue account [Mr Coyle [ibid](#), pages 157–158]. It is no surprise that no political group committed itself to any of these alternatives to the settlement proposal.
- 19.492** Prior to the mediation, the front-running alternative to settlement with BSC was to separate from them and re-procure the works from another contractor. That had, indeed, been **tie**'s preferred option. What is particularly striking about the cost estimates presented to councillors in June 2011 is the enormous increase in the estimated cost of that option. Immediately before the mediation, **tie** had estimated its cost at between £646 million and £698 million [[WED00000134](#), Part 3, page 0234, paragraph 7.3]. The discussion on the day before the mediation led to an increase of £150 million on those estimates, taking them to between £796 million and £848 million. The estimates presented to councillors in June 2011, just three months later, were £1.032 billion to £1.145 billion, an increase of a further £236 million to £297 million. Compared with **tie**'s original estimate, the increase was as much as £500 million.

- 19.493** It is clear, therefore, that, over the three months between March and June 2011, the estimated cost of re-procuring the project was increased to such an extent that it went from the least expensive option to being so expensive that it could not be seriously contemplated at all.
- 19.494** Such variance in the cost estimates is difficult to accept. At the very least, the enormity of the increase is a stark illustration of the extent to which subjectivity and uncertainty affected cost estimating over this period of the project.

Cost estimates: discussion

- 19.495** On closer analysis, the key distinction between the cost estimate for the settlement proposal and the cost estimates for the other options for a completed tram line is its degree of certainty. The estimated cost of the settlement proposal was the most certain of all options. That is not surprising, since the settlement proposal was a negotiated agreement-in-principle which had specifically aimed at cost certainty, whereas all of the other options remained, at this stage, hypothetical scenarios replete with unknown parameters and outcomes.
- 19.496** The uncertainties affecting all of the options except the settlement option, fell broadly into the following categories:
- the extent of **tie**'s accrued and future liabilities under the Infraco contract, in the absence of a settlement;
 - the risks, and likely resultant costs, of re-procuring work from a new contractor.
- 19.497** The first of these was not known with any certainty because of the range of unresolved disputes between the parties and the unpredictability of their outcome. The second was not known with any certainty because no re-procurement process had taken place [see, e.g., Mr Coyle [PHT00000010](#), pages 166–167].
- 19.498** The spreadsheet reflects that uncertainty. One significant manifestation of the uncertainty is in the risk provisions included in the cost estimates.

Risk provisions

- 19.499** For the settlement option, the proposed risk allowance was £77.5 million [[CECo2085613](#), worksheet 'McG Entitlement Basis', cell B79]. For continuing under the existing Infraco terms, it ranged from £178.4 million to £248.1 million. For separating from BSC and re-procuring the works, it ranged from £192.4 million to £262.1 million [[libid](#), cells Q79, O79, J79, H79 respectively].
- 19.500** To the non-specialist eye, the risk provisions for these alternatives to the settlement proposal are astonishingly high. At their upper limit (£262.1 million), they are greater than the entire construction works price in the Infraco contract as originally concluded (£238.6 million [[USB00000032](#), page 0003, clause 2.5]), and more than eight times the risk allowance for the whole project fixed at financial close (£32.3 million [[CECo1338853](#), page 0005]). The latter figure should, however, be seen in the context of the criticisms of the risk allocation matrix at financial close contained in Chapter 12 (Contract Close). In particular it failed to give any real indication of the nature or magnitude of risk that had been allocated to the public sector (in practice, CEC). The fact that three years after financial close CEC's options involved such large risk provisions illustrates the extent to which CEC and **tie** had failed to identify, manage or control the project's risks.

- 19.501** However, it appears from the evidence that a considerable degree of caution is required when assessing the robustness of the risk figures. Mr C Smith, the source of many of the risk figures, accepted that many of them were based on broad exercises of judgement rather than detailed analysis. He estimated that his calculations for risk were based to the extent of one-third upon empirical evidence and two-thirds on his judgement [[PHT00000053](#), pages 109–114].
- 19.502** Mr Murray, **tie**'s commercial director and the most senior quantity surveyor on the employer side with significant experience of the project, was not involved in the preparation of these risk allowances. When he was questioned about the risk allowances by the Inquiry, he noted that the figures for risk were not explained or supported and seemed "extraordinarily high allowances in my opinion". I understand this comment by Mr Murray to relate to the allowances for risk in general, but he referred in particular to the figures for "primary risk" (£106 million), "bad project risk" (£40 million), "inflation risk" (£25 million) and the "specified and exclusion risk" (£77.5 million). He accepted that these allowances were highly subjective. He did not agree with them and did not consider them to be reasonable [[TRI00000249](#), page 0018, paragraph 27]. Mr Murray's comments also applied to another element of the estimated cost of separation, an £80 million "premium" for settling with BSC, which will be discussed further below.
- 19.503** The "primary risk" figures (an upper figure of £106 million and a lower figure of £36.9 million) in fact came from **tie**. These are the figures which Mr Bell had supplied shortly before the mediation, as an estimate of the cost associated with items excluded by BSC from its Project Phoenix proposal [[TIE00355073](#); [TIE00355074](#)]. The view was apparently taken in compiling the spreadsheet that similar risks would exist on pricing proposals from other contractors. As noted above, there was a very significant degree of uncertainty about these figures (see paragraphs 19.501 and 19.502 above).
- 19.504** The £80 million "premium" for settling with BSC appears in the Budget Appraisal spreadsheet for each of the scenarios involving separation from BSC [[CEC02085613](#), worksheet "McG Entitlement Basis", row 59]. The description for the entry is "BSC Settlement Premium +Risk (Demob etc.) + potential further claim items". The figure was supplied by Mr C Smith, and his explanation for it is set out in a short report [[CEC02085602](#)]. That report is very brief and difficult to understand. Taken in and of itself, it is so lacking in detail as to be virtually meaningless. It certainly does not contain sufficient information to satisfy me that there was a properly reasoned basis for the inclusion of the £80 million figure. It gives rise to a concern, which I have been unable to resolve, that it double counts other items shown elsewhere in the spreadsheet – for example, entries for BSC's accrued entitlements under the contract. I am also concerned that it has been misunderstood by whoever assembled the spreadsheet: as I read the report, its £80 million estimate applied only to the attrition scenario, and not to separation, yet that figure has been used indiscriminately in the spreadsheet for both of these alternatives. In his evidence to the Inquiry, Mr Smith said that the figure had not been analysed in any depth beyond an impressionistic level [[PHT00000053](#), pages 109–111]. If this report is evidence of anything at all, it is the lack of reliable, evidence-based cost estimates available to CEC when deciding on the future of the project in mid-2011.

Non-risk elements of the cost estimates

- 19.505** The source for many of the non-risk entries in the spreadsheet was a report by McGrigors [[CECo2086431](#)]. The purpose of this report was to set out the cost of the tram infrastructure works under each of the principal options open to CEC for the future of the project.
- 19.506** It had been intended for the report to include a section on the settlement agreement itself, but since that agreement remained under negotiation at the date of the report, that section was never drafted [Mr Nolan [TRl00000114_C](#), page 0034, paragraph 86; [CECo2086431](#), pages 0006, 0014, paragraphs 1.8 and 4 of the report].
- 19.507** The report did not, therefore, seek to analyse, or scrutinise, the off-street works price of £362.5 million agreed at mediation. That figure was in substance a price to settle all of BSC's accrued claims, and to complete the line between the Airport and Haymarket. Neither the McGrigors report nor any other report obtained by CEC breaks that price down, or assesses whether it constituted a fair, or objectively reasonable, price to pay for what **tie** or CEC was receiving in return. Indeed, the price of £362.5 million was not analysed or scrutinised, in and of itself, in any way after having been agreed at the Mar Hall mediation [Mr Coyle [PHT00000010](#), pages 212–214]. The only way in which its acceptability was measured was to compare it with what the project would cost under the other options.
- 19.508** The final version of the McGrigors report was dated 29 June 2011, but the version made available to CEC's councillors in the data room in advance of their meeting of 30 June was an earlier version of 24 June 2011 [version of 24 June: [CECo2086431](#); Appendix 1, [CECo2086429](#); [CECo1942217](#); version of 29 June: [CECo1942218](#); [CECo1942219](#); [CECo1942220](#); [CECo1942221](#); [CECo1942222](#); [CECo1942223](#); [CECo1942224](#); [CECo1942225](#)].
- 19.509** The McGrigors report included an appendix that set out cost ranges for each of the options. These cost estimates did not include the risk allowances which appeared in the Budget Appraisal spreadsheet. Without those risk allowances, the cost differences between the options were much reduced, although the settlement agreement option was still the least expensive. At this point in time, the estimated cost of the works of BSC under the settlement proposal, and excluding any risk allowance, was £447.9 million [[CECo2085613](#), worksheet 'McG Entitlement Basis', cell B36]. A comparison of that figure with the cost ranges for the alternatives set out in McGrigors' appendix is set out in Table 19.5 (the McGrigors figures are from the latest version of its report, dated 29 June 2011 [[CECo1942219](#)]).

Table 19.5: Estimated cost of options excluding risk allowance

Options	Estimated Cost
Settlement proposal [CEC02085613, cell B36]	£447.9 million
Separation from BSC: <ul style="list-style-type: none"> • With re-procurement • Without re-procurement 	£470.9 million to £495.3 million £293.8 million to £318.1 million
[CEC01942219, worksheet "Separation"); same figures in worksheet "Successful termination"]	
BSC to continue, under Infraco contract, to build to York Place [ibid, worksheet "Continue"]	£498.8 million to £523.2 million
Unsuccessful attempted termination of Infraco contract by tie [ibid, worksheet "Unsuccessful termination"]	£498.8 million to £523.2 million, <i>plus</i> the costs associated with delay caused by any period of formal dispute resolution proceedings

19.510 It is apparent from the McGrigors report that uncertainty pervaded these cost estimates.

19.511 The first point to note is that the report's conclusions were heavily qualified. At paragraphs 1.5–1.7, McGrigors noted:

"1.5 The approach taken to the assessment of the options in this report is to arrive at the prudent assessment that should be made in relation to tie/CEC's exposure for the purposes of carrying out a comparison of the consequences of adopting the various options identified.

"1.6 This does not involve arriving at a definitive view of the value and merits of each head of Infraco claim; that could only be achieved following detailed factual, legal and expert analysis. Instead, the approach that has been taken is to build up the commercial components of the various options in order to arrive at a working comparison between them.

"1.7 The outcome of this exercise does not represent the starting point that would be adopted in the context of any negotiations with Infraco, nor does it necessarily reflect the approach that would be taken in the context of any formal dispute resolution proceedings. It provides a context in which to examine a number of potential options in order to provide a basis of comparison between them."
[CEC02086431, page 0005.]

19.512 McGrigors did not arrive at a definitive view of the value and merits of each head of BSC's claims, because the "detailed factual, legal and expert analysis" necessary to do so had not been carried out. Indeed, it never was carried out [ibid, page 0005, paragraph 1.6; Mr Coyle PHT00000010, page 181 onwards]. Broad assumptions had to be made. The conclusions of this report were, therefore, subject to a significant degree of uncertainty, as were the spreadsheets based upon the report [Mr Coyle ibid, page 187].

19.513 Secondly, there were other important qualifications to the report's conclusions. The report was based on figures supplied by **tie** and assumed that they were correct. The accuracy of **tie**'s figures had not, however, been verified [CECo2086431, page 0010, paragraph 2.7]. For the valuation of disputed change, the report used a mid-point between **tie**'s estimate and BSC's estimate, rather than any definitive prediction of the sum BSC might recover **libid**, page 0010, paragraph 2.8]; and, in relation to a number of key issues affecting **tie**'s liability, BSC's position was not even known **libid**, page 0010, paragraph 2.9].

Extension of time

- 19.514** The McGrigors report proceeded on an assumption that BSC were likely to be successful in securing a significant extension of time because of delay attributable to **tie** but noted that the additional cost associated with that delay was "difficult to predict with any degree of certainty" **libid**, page 0006, paragraphs 1.10(c)–(d)].
- 19.515** Two relatively small extensions of time had been substantially resolved: EoT1 (arising from the delay in the design programme prior to financial close) and INTC 429 (arising from the utility diversion delays disclosed in revision 8 of the MUDFA programme). The cost of EoT1 had been agreed at £3.542 million for a delay of 7.6 weeks but had not been paid as it was not yet due and Infraco had only claimed £2.8 million of the total sum prior to the date of the report **libid**, page 0041, paragraph 11.4]. INTC 429 had been agreed at £210,715 for Siemens and €785,797 for CAF. BB's claim for £565,455 remained in dispute **libid**, page 0041, paragraph 11.5]. There were two other extension of time claims which had not been resolved: INTC 536 (arising from further utility diversion delays up to 31 July 2010); and a claim arising from delays affecting work at the depot **libid**, page 0033, paragraph 9.2]. The financial claims associated with these were much higher: £43.67 million in relation to INTC 536 and £20.08 million in relation to the depot **libid**, page 0041, paragraphs 11.6–11.7].
- 19.516** The report acknowledged the existence of arguments in **tie**'s defence against the INTC 536 claim, but expressed the view that BSC was nonetheless likely to receive a substantial extension of time **libid**, page 0034, paragraph 9.6]. It does not explain that view, nor how it was reached. It does not discuss or address the conclusion of a report that **tie** had obtained from Acutus: that issues relating to design, and not utility diversions, may have been the dominant cause of delay. Two possible explanations for that occur to me. The first is that **tie**/CEC had come to accept that, on a proper construction of the Infraco contract, BSC was entitled to an extension of time based on the falsification of the utilities programme pricing assumption, regardless of other contemporaneous causes of delay. The other is that **tie**/CEC had come to accept that, whatever those other contemporaneous causes of delay, **tie** carried the contractual responsibility for them [compare, for example, BB's closing submission: TRl00000292, pages 0133–0140, paragraphs 225–235A]. There does not appear, however, to be any record of any reasoned basis for **tie**/CEC in 2011 accepting responsibility for the project delays.
- 19.517** In addition to the four specified extension of time claims, other claims had either been made as part of the contract change process, or were reasonably anticipated [CECo2086431, page 0033, paragraph 9.3]. These claims related to: the hiatus associated with the settlement process, during which construction work was confined to the MoV4 prioritised works; delays in the operation of the clause 80 change mechanism; and presently unknown heads of claim. A significant degree of uncertainty was associated with these. As the report said:

"[i]t is almost impossible to gainsay the likely nature of these claims and even harder to predict any financial outcome" **libid**, page 0034, paragraph 9.9].

- 19.518** The value of these claims was, therefore, unknown and additional to the total of £64.5 million claimed under INTC 536 and in relation to the depot.
- 19.519** In the face of these uncertainties, the view taken in the report was that:
- “it would be prudent to assume that [BSC] are likely to be entitled to an extension of time that would cover at least the period to the point at which separation occurs” [libid](#), page 0034, paragraph 9.10].
- 19.520** That was in spite of the acknowledgement that:
- “there are arguments available to **tie** in relation to issues of causation, conditions precedent, and so on” [libid](#), page 0034, paragraph 9.11].
- 19.521** Chapter 10 (Events between October and December 2007) and Chapter 11 (Contract Negotiations) are concerned with the financial value of the assumed extension of time. That value was affected first by uncertainty over the correct basis for BSC's entitlement: it was entitled either to payment of preliminaries due simply to the effluxion of time (as Lord Dervaird had held at adjudication),²⁸ or to the actual costs suffered through delay. Each of these bases would lead to a different financial outcome. McGrigors favoured the view that Lord Dervaird's decision was correct, in which event the preliminaries due for the extension of time to separation would be £54.405 million [libid](#), pages 0038, 0044, paragraphs 10.15 and 11.18–11.20]. If Lord Dervaird was wrong, and BSC was entitled to its actual costs, the report proposed a figure of up to £82.176 million, but it is clear from the discussion in the report that there was much uncertainty about that [libid](#), pages 0042–0045, paragraphs 11.11–11.23]. These two figures formed the upper and lower estimates of the cost of extended time that were used in the Budget Appraisal spreadsheet.
- 19.522** The extent of the uncertainty over extension of time is also revealed by the work underlying these estimates. The estimated duration of extension of time for which **tie** would be held liable rested on work by Acutus – in particular, an email from Mr McAlister dated 4 May 2011 [[TIE00899963](#)]. This estimated that the range of delay to the completion of work section D, for which **tie** might be found liable, was between 340 and 686 days. Mr McAlister made clear, however, that the estimate was primarily based on judgement and not on a completed or fully detailed analysis. Indeed, Acutus had not previously been directed to carry out a detailed assessment of **tie**'s overall liability for delay. In his evidence to the Inquiry, Mr McAlister said his advice was prepared under some pressure of time, having been requested only a couple of days previously. He lacked the information needed to fully assess the causes of delay. He could not rule out the possibility that, had a full investigation into delay been carried out, **tie**'s liability might have been significantly lower than his estimated range [[PHT00000039](#), page 98].
- 19.523** Mr McAlister explained that the size of the range in his estimate reflected uncertainty on a key issue: whether BSC was entitled to an extension of time for matters which appeared to him not to be the dominant cause of delay. The analysis supporting his view was limited by the time available to him.

²⁸ This entitlement would apply up to 1 September 2011, under the Infraco contract and then MoV4, after which BSC's entitlement would be for actual costs incurred through delay [[CEC02086431](#), pages 0038–0039, paragraphs 10.17–10.24].

19.524 It is clear that the settlement was reached without any full investigation by **tie** or CEC into, or analysis by them of, the “factual” causes of delay. **tie** never reached the point of having sufficient information about the reasons for the apparent delay in production of the design to be able to form a view about that. Mr McAlister and his colleague Mr Burt gave evidence that a full investigation of these matters would be a very large task (perhaps involving four or five staff in work for more than a year, at a cost of several hundred thousand pounds or more), and could not be carried out in any event until the end of the project [Mr McAlister [PHT00000039](#), pages 100–103; Mr Burt [TR100000146_C](#), page 0029, question 84].

Change

19.525 On the cost of change, as noted above, the report took a mid-point between **tie**'s estimate and BSC's estimate (where that was known). It acknowledged that this was “not based on any scientific or definitive prediction of the sums which Infraco might recover”, although it at least reflected **tie**'s suggestion that changes it managed to agree with BSC were typically 50 to 55 per cent of the sum BSC had originally claimed [[CECo2086431](#), page 0010, paragraph 2.8].

19.526 It noted that it would be prudent to proceed on the assumption that BSC would be entitled to recover on disputed INTCs relating to Pricing Assumption 1. The value of the dispute between the parties on change relating to work done was relatively low [[ibid.](#), pages 0024–0032, chapter 8], but was greater in relation to work yet to be carried out [[ibid.](#), pages 0055–0060, chapter 19].

Other matters

19.527 The McGrigors report also addressed the question of whether, on termination of the Infraco contract, **tie** would be entitled to reclaim any part of a £45.2 million payment that it had made to BSC at an early stage of the Infraco contract as a mobilisation, or advance, payment. If CEC accepted the settlement proposal, this payment would be set off against the overall cost of the project. If the Infraco contract were terminated, however, and BSC's work stopped, the question would arise over the extent to which **tie** had received proper value for this payment and, if it had not, the extent to which it would be entitled to repayment. The view expressed in the report was that although there was

“... some force to the proposition that some of this money [fell] to be returned to **tie**” it was “not straightforward to arrive at a formulation of the way in which this repayment should be calculated” [[ibid.](#), page 0007, paragraph 1.10(f)]

and that:

“[i]n the absence of a cogent explanation of the way in which the calculation of any repayment ought to be calculated, the prudent approach ... would be to assume that Infraco will be entitled to retain the full extent of the mobilisation payment” [[ibid.](#), page 0047, paragraph 12.10].

19.528 It would seem, therefore, that a failure of the contract to provide clearly for the treatment of this payment in the event of termination of the Infraco contract prior to the completion of the works, was a further factor adding to the uncertainty of the cost of separating from BSC.

- 19.529** The approach taken in the McGrigors report was the subject of a review by Atkins [[CEC02085600](#)]. It, too, made plain the limitations on the scope of *its* work: it had been
- "a sense check on the figures taken forward [from the McGrigor's report] to the Budget Analysis spreadsheet produced by the City of Edinburgh Council (CEC).
- "This has been a very high level review of [the processes and procedures used in the McGrigors report] with information taken at face value. Faithful+Gould [i.e., Atkins] has not had access to the contract documents nor had the time to scrutinise at a molecular level the build up of costs/prices supplied." [ibid](#), page 0004.]
- 19.530** It was unable to comment "on the validity of the conclusions reached" by McGrigors [ibid](#).
- 19.531** In the context of risks arising from the employment of another contractor Atkins noted that in addition to the direct cost of employing a new contractor other risk items had been identified and included in the budget analysis spreadsheet. It was of the view that "between the McGrigor [sic] report and the Budget Analysis spreadsheet the relevant heads of liabilities have been covered" [ibid](#), page 0007]. Its report does not, however, comment on the *level* of the risk allowances.

McGrigors report: summary

- 19.532** It is pertinent for the Inquiry to consider what benefit CEC derived from the McGrigors report. In my view, it was a useful exercise to carry out and, within its express limitations, it bears to be a careful analysis. However, it was extremely limited in its utility as a cross-check of the costs which the CEC negotiators had agreed to pay for a revised deal with BSC. That is not criticism of McGrigors: it reflected the uncertainties about the correct interpretation of the contract and the surrounding facts.
- 19.533** Further, since it brought out costs that were, on any other option leading to the construction of a tram line, more expensive than the settlement proposal, the report could not have applied any downward pressure on the price that CEC would have to pay under the settlement agreement.
- 19.534** Mr David Anderson, who had not seen the reports until asked by the Inquiry to consider them, considered that they were "rather high level and [didn't] add a lot of value" [[TR100000108_C](#), page 0109]. Mr Coyle disagreed with that assessment [[PHT00000010](#), page 195]. Mr Anderson's assessment of the context prevailing at the time was that:
- " ... there was strong political pressure to complete the project and ... the Council's Chief Executive Mrs Bruce and the Chairman of tie/TEL were keen to deliver the tram to St Andrew Square. I think these reports were commissioned primarily to check that this option was reasonable, relative to the costs and risks associated with other options" [[TR100000108_C](#), page 0108].
- 19.535** Mr Coyle considered that to be a fair assessment [[PHT00000010](#), pages 193–194]. It seems to me likely that this was the case.

Discussion on material available to councillors in June 2011

- 19.536** As there is uncertainty about the nature and extent of other material available to councillors in the data room this discussion is, of necessity, confined to a consideration of the material known to have been available. Viewed at the highest level, the message conveyed to CEC's councillors by the Budget Appraisal spreadsheet was that it was too risky for CEC to contemplate completing the tram line either under the Infraco contract in its existing form, or by separating from BSC and re-procuring the work from another contractor. The extent of the uncertainties associated with those options, at least as they had been valued and presented in the spreadsheet, was sufficient on its own to rule them out as credible options.
- 19.537** The exclusion of these alternatives was consistent with the preference identified by the CEC management team, and in particular Dame Sue Bruce and Mr C Smith, at a relatively early stage in preparations for the mediation. Therefore the possibility has to be considered that the cost estimates of the alternatives to the settlement proposal, and in particular the magnitude of the risk elements, were deliberately set high to rule out any possibility of the councillors (for whose benefit the estimates had been prepared) taking any option other than the settlement proposal.²⁹ To this it might be added that Mr C Smith, who was the source of many of the risk figures, stood to benefit from engagement as the independent certifier for the project if it proceeded [Mr Coyle *ibid*, page 173 onwards].
- 19.538** I have no hesitation in rejecting any suggestion of any intention deliberately to present unduly high-risk estimates in order to influence the decision-making of councillors. There is no evidence of any such intention and it would be entirely at odds with the impression I formed of Mr Smith and Dame Sue Bruce as individuals.
- 19.539** There was, however, a lack of solid, objective evidence to support the very high-risk allowances that were used. Although that is unsatisfactory, in my view little could realistically have been done to gain greater objective certainty. To have achieved greater certainty over the extent of **tie**'s liabilities under the Infraco contract would have required either an agreed resolution to the parties' disputes, or decisions on those disputes from a third-party decision maker. The former was very unlikely to be achieved, having proved impossible to date, and the latter would have absorbed enormous resources of time and cost, neither of which was realistically available to **tie**/CEC by the spring and summer of 2011. To have achieved greater certainty over the costs and risks of re-procuring the works would in practice have required a new procurement exercise to be carried out. It is plainly unrealistic to expect that to have been done in circumstances where its main purpose was to assess the merits of a settlement proposal from the incumbent contractor.
- 19.540** In my view, the cost estimates of the alternatives to the settlement proposal were undoubtedly on the high side, reflecting a high degree of caution about the risks those alternatives involved. I do not, however, find any basis for criticism of those who presented these figures. In my view, they were plainly correct in the headline point that the alternatives to the settlement proposal involved significant uncertainties and risks, not quantifiable with any precision, which were not present in the settlement proposal. It was obviously important to CEC that any assessment of the cost of risks and uncertainties did not underestimate them again, as had happened at financial close. Given what had happened on the project, CEC was if anything even more averse to risk than it had been at financial close. The only way to be confident that

²⁹ See Closing Submissions of SETE [TR100000289_C, page 0122]; Closing Submissions of CEC [TR100000287_C, pages 0494–0495, paragraph 20.76].

the estimated cost of the alternatives would not be exceeded if those alternatives were chosen was to make a large provision for risk. As is clear from the evidence of Professor Flyvbjerg, the higher the risk allowance, the more confidence one can have that the cost estimate will not be exceeded.

19.541 In my view, therefore, the very high cost estimates in June 2011 for alternatives to the settlement option reflected two things: (1) the genuine uncertainty about those costs; and (2) CEC's increased risk aversion. Those presenting the cost estimates in 2011 were not responsible for either of those factors. Both factors were a consequence of the risk inherent in the project at financial close, and the failure of the Infraco contract to allocate that risk in a manner which accorded with CEC's expectations. In my view, any criticism about the lack of options for CEC in June 2011 is properly directed to those who were responsible for committing **tie** to the Infraco contract in May 2008.

Council meeting, 25 August 2011

19.542 On 30 June 2011, CEC had approved in principle the option of building a line to St Andrew Square, subject to the availability of sufficient funding and also subject to CEC's satisfaction that the project had been sufficiently de-risked. To that end CEC had instructed the Chief Executive to report on how funding was to be provided and on the risks to be incurred by CEC in relation to utilities in the on-street section from Haymarket to St Andrew Square and the extent to which, and how, that section had been de-risked [[CEC02083232](#), Part 1, pages 0023–0024]. Those matters were the subject of a report from the Director of City Development to councillors in advance of their meeting of 25 August 2011 [[TRS00011725](#)].

19.543 On funding, the report noted that the settlement required £231 million more than the previous budget of £545 million, based on a revised total budget of £776 million [*ibid.*, page 0003, paragraph 3.13]. The most immediately deliverable funding source was borrowing via the prudential framework for local authority investment mentioned in paragraph 19.5 above [Mr Connarty [PHT00000048](#), page 34]. On a 30-year repayment period, at an interest rate of 5.1 per cent per year, the annual cost of the additional borrowing was estimated to be £15.3 million, or 1 per cent of the Council's gross budget. The total cost of the borrowing would therefore be £459 million over 30 years, reduced to a net present value of £291 million using the UK Government's discount rate of 3.5 per cent. The revenues derived from the completed tram line would offset its costs. It was noted that the allocation of revenue streams to the Tram project had an opportunity cost, and would reduce CEC's options to meet future service pressures which might result from demographic changes, inflation and reduced government funding. Even with the additional borrowing CEC's existing capital commitments would be honoured [[TRS00011725](#), page 0007, paragraph 3.32].

19.544 The report explained that if the Tram project were cancelled, there would be a one-year negative revenue impact of over £161 million, equivalent to a one-year increase in council tax of 80 per cent, which CEC's reserves were not sufficient to meet. That assumed the Transport Scotland grant funding would not have to be repaid. The negative revenue impact would arise because, without a completed asset, any costs arising as a result of the separation could not be capitalised [Mr Coyle [TRI00000144_C](#), page 0112, answer 59; [PHT00000010](#), page 146]. As discussed in paragraph 19.76 above the impact of funding the revenue shortfall by cutting CEC services would be unacceptable. There would also be reputational damage, potentially harming the city's future investment prospects [[TRS00011725](#), page 0007, paragraph 3.34].

- 19.545** On risk, the report noted that a detailed review of the key project risks had been carried out and had been 'validated' by Faithful+Gould, construction cost management consultants, to ensure appropriate risk management procedures were in place [libid](#), pages 0001–0002, 0004, paragraphs 2.3, 3.4–3.6, 3.16]. A confidential appendix summarising their findings was said by the report to have been shared with councillors. On utilities, the report noted that further investigations had been instructed on key sections between Haymarket and York Place, in particular to identify conflicts arising from the finalised design, including the locations for overhead line poles [libid](#), page 0002, paragraph 3.8]. Trial bore holes supplemented by radar scanning had identified around 550 potential utility conflicts, although not all of these were believed to lie on the critical path [libid](#), page 0002, paragraph 3.9]. An appropriate risk allowance was said to have been included in the project budget to cover clashes between utilities and infrastructure [libid](#), pages 0002–0003, paragraph 3.10].
- 19.546** The report's recommendations included that the councillors:
- agree to the funding proposals;
 - agree to increase CEC's prudential funding limits to accommodate the funding proposals;
 - note the risks highlighted in the report;
 - agree arrangements that it proposed for the project's governance; and
 - note the appointment of Turner & Townsend as project managers in place of **tie**.
- 19.547** At the meeting, a Liberal Democrat motion sought approval of those recommendations, with amendments concerning funding and risk. In relation to funding, the proposed amendment sought to allow CEC to seek funding without being bound to do so from the resources specified in the report. On risk, the proposed amendment was to note the risks and instruct the Chief Executive to pursue further risk mitigation prior to settlement and beyond. These amendments were no doubt tabled in an attempt to address opposition to the recommendations, reflected in the competing amendments which were proposed.
- 19.548** An SNP amendment contrasted that party's historic opposition to the Tram project with the support the project had received from the other parties, and sought a full public inquiry.
- 19.549** A Conservative amendment sought, inter alia, to reject the funding package and instruct the Chief Executive to negotiate a binding cost for termination of the existing contractual arrangements and develop an alternative funding package for future tram line construction.
- 19.550** A Green Party amendment called for ongoing work to continue to further reduce risks and fix costs for the line to St Andrew Square. It also noted that the likely cost of cancellation of the project was £161 million in one financial year, which CEC could not afford, and that financing of the construction of the line to St Andrew Square through prudential borrowing would have a possible impact on the delivery of other CEC services in the future.
- 19.551** The ultimately successful amendment was proposed by Councillor Hinds on behalf of the Labour group. Support from the Conservative group was sufficient for it to pass because of abstentions by SNP members. The councillors approved the governance proposals but rejected those for funding. As the minutes noted, the resolution of 30 June 2011 in favour of a line to St Andrew Square/York Place had been subject to

funding. The rejection of the funding proposals meant the approval of that option fell away. The majority of those councillors who voted agreed that that option had not been sufficiently de-risked, and that the proposal with the least risk was to build a line between the Airport and Haymarket as phase one of a longer-term, strategic plan. The councillors instructed the Chief Executive to negotiate a settlement agreement reflecting that revised approach.

19.552 This outcome came as a surprise to nearly everyone [Ms Hinds [TR10000099_C](#), page 0140, paragraph 566; Dame Sue Bruce [TR10000084](#), pages 0056–0057, paragraph 180; Councillor Dawe [TR10000019_C](#), page 0215, paragraph 807; Mr Eickhorn [TR100000171](#), pages 0078–0079, paragraph 194; Mr Cardownie [TR100000104_C](#), pages 0069–0071, paragraph 144; *Evening News* report, [WED00000167](#)]. Dame Sue Bruce said in evidence to the Inquiry that, following the decision, there was:

“chaos because nobody in the Chamber expected the motion to be approved. The press were all over it and you could tell from the reactions of the members that they had not really expected it to be approved ... I had ministers, Infraco reps and the papers all calling on the phone.” [[TR10000084](#), page 0058, paragraph 185.]

19.553 Some witnesses expressed the view that this decision was influenced by wider political considerations, rather than being based on the best interests of the project [Councillor Dawe [PHT00000001](#), page 200; Councillor G Mackenzie [TR10000086_C](#), pages 0152–0153, paragraph 473; Mr Donald Anderson [TR100000117_C](#), pages 0088–0089, paragraph 220].

19.554 Councillor Dawe described this decision as “absolutely disastrous” and “very foolish”, and said there was outcry at the decision with strong condemnation from the press and stakeholders [[TR10000019_C](#), pages 0213–0214, paragraphs 802–803].

19.555 The decision was, arguably, not without logic. It reflected the amendment that the Labour group had proposed at the June meeting. Councillor Whyte, of the Conservative group, explained that:

“My group voted for it because it was the quickest and cheapest way of getting out of the contract whilst still having something and it would certainly have left the possibility of extending to St Andrew’s [sic] Square/York Place in the not too distant future.” [[TR100000125](#), page 0057, paragraph 71.]

19.556 Moreover, at the June meeting the Conservative amendment had sought further information on other options, including building the line to Haymarket.

19.557 If, as appears to have been the case, some councillors remained uncomfortable with the level of risk still to be borne in relation to the on-street work, it was rational for them not to commit to that risk. A majority of the councillors clearly supported a tram line of some extent and having rejected the on-street works as too risky, approval of a line between the Airport and Haymarket was one way to get something for all of the money spent to date. The decision instructed the Chief Executive to negotiate a settlement with BSC to reflect members’ preference for the terminus at Haymarket. Since the construction of a line to Haymarket was the subject of BSC’s Project Phoenix proposal, it is probable that such a settlement would have been achieved. Such a settlement would also avoid the risk of a single-year impact on the Council’s revenue budget, which the councillors had been told would arise if the scheme were cancelled. On the basis of the information provided to councillors at the time, such a payment would only arise if the Infraco contract was terminated. As

ultimately occurred, a negotiated settlement for a truncated line, whether it ended at Haymarket or St Andrew Square or York Place, would result in a capital asset being obtained in exchange for the expenditure incurred. In such an event the risk of a one-year revenue impact, mentioned in paragraph 19.65 above, would be avoided.

- 19.558** The option of a line to Haymarket had not been raised in the officials' August report. At the June meeting CEC had rejected this option, because CEC officials had advised that it would be loss-making and in need of annual subsidy. In the context of Carlisle 2, Mr Eickhorn described a similar proposal to terminate the line at Haymarket with the intention of extending it later as "an idea born out of desperation". Although he acknowledged that it would have been "a first step to establishing a functioning tram system and significant parts would have been built such as the depot", it would not have fulfilled the objective of removing traffic from the city centre [[TR100000171](#), pages 0053–0054, 0078–0079, paragraphs 117 and 194]. This option was also criticised by others [see, eg, Mr Richards [TR100000116](#), page 0025, paragraph 31; Dame Sue Bruce [TR100000084](#), pages 0056–0057, paragraph 180; Councillor Dawe [PHT000000001](#), page 200; Mr Maclean [TR100000055_C](#), page 0047, paragraph 129; Mr McLaughlin [TR100000061_C](#), page 0009, paragraph 21; Mr Donald Anderson [TR100000117_C](#), pages 0088–0089, paragraph 220; Mr Cardownie [TR100000104_C](#), pages 0069–0071, paragraph 144; Mr Wheeler [TR100000092_C](#), pages 0071–0072, paragraph 159]. Transport Scotland considered a line to St Andrew Square to be more logical than a line which stopped at Haymarket, given that the bulk of the infrastructure had been installed albeit not completed; the Scottish Ministers agreed with that view [Mr Ramsay [TR100000065_C](#), page 0029].
- 19.559** The councillors' decision to stop the line at Haymarket had significant implications for the infrastructure works themselves. It introduced the need to design a new turn-back at Haymarket and an increase in the price; the need to address compensation for the non-execution of the on-street works; and caused delay [Mr Eickhorn [TR100000171](#), page 0079, paragraph 196; [TR100000179](#), page 0007].
- 19.560** Mr Swinney decided that, in consequence of the Council's decision to stop the line at Haymarket, he would not release the remainder of the grant funding [[TRS00011809](#); [TR100000149_C](#), page 0121, paragraph 377]. Transport Scotland therefore wrote to Dame Sue Bruce, advising that the Scottish Ministers took the view that the Council's decision represented a fundamental change to the basis on which they had agreed to grant fund the project, and that they were not prepared to make any further payments [[CEC01721794](#)]. Mr Swinney said he:
- "knew full well if [he] withheld money at that stage the Council would have to reverse its decision to stop the line at Haymarket" [[TR100000149_C](#), page 0121, paragraph 379].
- 19.561** Mr Swinney plainly considered that the Scottish Ministers, as the principal funder of the project, were in a strong position to influence decision making. That is how it was perceived by councillors [see, e.g., Councillor Whyte [PHT000000003](#), page 99; Councillor Hinds [TR100000099_C](#), pages 0141–0142, paragraphs 569–571; Councillor Jackson [TR100000106_C](#), page 0152, paragraph 109(b); Councillor Dawe [TR100000019_C](#), page 0215, paragraph 809]. Indeed, Councillor Hinds said that she felt that the decision was that of the Scottish Ministers rather than CEC [[TR100000099_C](#), pages 0141–0142, paragraph 571].
- 19.562** On 30 August, BSC wrote to CEC, offering to extend until 5pm on 2 September 2011 the deadline for CEC to approve funding. In the absence of such approval the Infraco contract would terminate and, as discussed in paragraph 19.448, compensation

would fall due by CEC to BB and Siemens [TR100000179, page 0007]. That outcome was in line with clause 3.3 of MoV4 [CEC01731817, page 0006]. **tie**, CEC and BSC agreed a second memorandum of understanding on 2 September 2011 formally extending the funding deadline to 14 September [TIE00899947]. The memorandum recorded the parties' agreement, albeit on a non-legally binding basis, that the compensation to be paid to BSC if funding was not approved was £27,761,517 to BB and £38,488,963 to Siemens. Those figures had been proposed by BBS, in a detailed breakdown supplied to CEC on 21 June 2011 [SIE00000399]. They appear, therefore, to have been BBS's proposal for the sum to be paid to them under clauses 3.3.4–3.3.6 of MoV4 [CEC01731817, page 0006]. It is not clear what, if any, scrutiny CEC applied to these figures, or on what basis CEC was prepared to agree to them even on a non-binding basis. They excluded the cost to CEC of purchasing the trams **ibid**, clause 3.3.6 of MoV4]. Mr Emery's evidence was that he did not know how these figures had been calculated and considered that they "were excessive and designed to encourage CEC to proceed to complete the project" [TR100000035, page 0030].

19.563 The memorandum also recorded the parties' agreement that, as a consequence of CEC's decision on 25 August, BSC were entitled to additional cost and time. Although there was only a two-week delay between that decision and its reversal on 2 September 2011, which will be discussed further below, that caused a six-week delay to the programme for which CEC had to compensate BSC [Mr Maclean **TR100000055_C**, page 0048, paragraph 132]. Those costs were ultimately fixed by the Independent Certifier, Mr C Smith, at £4.541 million [CEC02031937]³⁰, and formed part of the final cost of the project [WED00000101, page 0005, tCO529]. These costs would not have been incurred if the councillors had followed the officials' recommendation at the August meeting. Having said that, I do not consider the councillors should be blamed for the cost increase, not least because they made their decisions without having been fully informed of their funding implications. I will elaborate on that view later in this chapter.

Council meeting, 2 September 2011

19.564 A further meeting of CEC's councillors was held on 2 September 2011. It had been called by the Lord Provost under CEC's Standing Order 6. The Lord Provost ruled, in terms of Standing Order 22, that there had been a material change of circumstances since the meeting of 25 August 2011, being the further information about the financial implications to CEC of terminating the tram line at Haymarket [CEC02083154].

19.565 The Chief Executive's report to that meeting sought to update the councillors on critical developments since the meeting of 25 August that had a material effect on the Haymarket option [CEC01891495].

19.566 The report commented on Transport Scotland's letter of 30 August, and noted that the remaining balance of the grant that the Scottish Ministers were now refusing to pay was £72 million [**ibid**, page 0002]. That new funding shortfall would result in CEC having to fund around £4.8 million per year out of its revenue budget for 30 years.

³⁰ This is considerably greater than the costs reported by the press. See, for example, the report in the *Evening News* of 6 August 2012, which indicated that the cost was "nearly £1.4 million", based on information in the Council's annual report on over-expenditure [WED00000167].

- 19.567** An Appendix noted the steps taken in implementation of the councillors' decision that a line be built only to Haymarket [*ibid.*, page 0007]. Dame Sue Bruce had met BBS, which, although expressing willingness to discuss a further truncation of the route to Haymarket, had raised a number of issues that required to be addressed. These included:
- the additional costs resulting from CEC having reversed its June decision to proceed with a line to St Andrew Square/York Place. These costs included: the cost of demobilising sub-contractors who had been ready to start on-street on 5 September 2011; prolongation costs to BSC; and a loss of profit claim by BSC for the section between Haymarket and St Andrew Square, the extent of which, as yet, was unclear.
 - whether the existing switch at Haymarket Yards, which had been designed for occasional use, could be used as a regular turn-back point. There were other options, but they would come with additional cost.
 - other technical matters would have to be addressed.
- 19.568** The report said that, on automatic termination of the Infraco contract, "[t]he costs of termination would require to be agreed with the Infraco" and were "likely to be significant" [*CEC01891495*, page 0001, paragraph 2]. That is a reference to the anticipated cost to CEC of meeting its obligations on termination of the Infraco contract on "no-fault" grounds under clause 3.3 of MoV4. CEC's officials had agreed with BBS, albeit on a non-legally binding basis, that the payment due by CEC to BBS on these grounds would be £66,250,480 [*TIE00899947*, page 0012, SP4]. As noted above, that figure appears to have come from BBS, and it is not clear to the Inquiry that it was subject to any scrutiny or challenge by CEC's officials. The figure stands, nonetheless, as an indication of the level of claim likely to have been made by BBS if CEC refused to fund the project.
- 19.569** CEC was, therefore, faced with the imminent termination of the Infraco contract if it did not agree to fund completion of the line either to St Andrew Square/York Place or to Haymarket.
- 19.570** Against that background, the Chief Executive's report included recommendations to councillors to agree, once again, to pursue the option to build the line to St Andrew Square/York Place; to agree to the funding proposals in the 25 August report; and to authorise her to enter into a settlement agreement, unconditionally in relation to funding [*CEC01891495*, page 0003]. The councillors approved those recommendations following several rounds of voting.
- 19.571** Councillor Hinds' evidence was that the Council had no option but to go to St Andrew Square/York Place, and that it was "bullied" into it by the Scottish Ministers [*TR100000099_C*, pages 0141–0142, paragraphs 569–571]. Mr Maclean agreed that the "members had effectively no choice. They had to change their mind" [*TR100000055_C*, page 0047, paragraph 130; see also Councillor Jackson *TR100000106_C*, page 0152, paragraph 109(b)].
- 19.572** An amendment on behalf of the Labour group [*CEC02083154*], which was unsuccessful, referred to the Scottish Ministers' decision to withhold the final project grant payment as "a belated and aggressive tactic which forced the Council into an intolerable level of risk and financial commitment", accepted that "to reject this thinly veiled ultimatum, to take the trams to St Andrew Square, would be likely to lead to the cancellation of the project", and noted that to complete the line to St Andrew Square would require CEC to borrow at least £231 million, raising its debt

to unprecedented levels. It also noted concern that this would "lead to an ongoing reduction in services" [\[ibid, page 0005\]](#).

- 19.573** An SNP amendment noted that "the cost of cancellation notified to the Council is £161m" [\[ibid, page 0006\]](#).
- 19.574** A Conservative amendment again sought to instruct the Chief Executive to negotiate a binding cost for termination of the existing contract and to develop an alternative funding package for any future line.
- 19.575** A Green Party amendment noted that Transport Scotland's decision to withhold funding effectively made the option of a line to Haymarket financially unviable. It also noted that the cancellation cost was £161 million, and that this would devastate CEC's finances requiring large increases in council tax or sale of council assets. It also noted that the £15 million annual cost of prudential borrowing would have a "possible impact on delivery of other Council services in future" [\[ibid, page 0009\]](#).
- 19.576** On 14 September 2011, Transport Scotland announced the reinstatement of its grant funding, following the councillors' decision of 2 September to construct the line to St Andrew Square/York Place. The remaining £72 million of that funding would now be paid. A team of experienced project managers from Transport Scotland would take up key senior roles in the new governance structure [\[TRS00012212\]](#).
- 19.577** In my view, the Scottish Ministers' intervention was a critical factor in CEC's councillors reversing the decision that they had made in August. I do not accept the description of their intervention as "bullying": as principal funders of the project they were entitled to bring their influence to bear upon it.
- 19.578** Nor do I consider that councillors should be criticised for their decision of 25 August even though its reversal the following month had a measurable financial impact of £4.541 million. Councillors have an essential role to play in the taking of strategic decisions at appropriate stages in major infrastructure projects. It is important that they are asked to make those decisions at the appropriate time, and are given the information they need to do so. An important piece of information for councillors was the potential impact of the mediation settlement on project funding. Since the settlement was for a shortened line instead of the full Phase 1(a), it was in my view clear from the moment the mediation concluded that the project was no longer the one that the Scottish Ministers had agreed to fund [\[CEC00021548; CEC00021547\]](#). This was the case whether the line ended at Haymarket or continued to St Andrew Square or York Place. Stopping the line at Haymarket would also require an operating subsidy [\[CEC02044271, pages 0012–0013, paragraph 3.61\]](#), another departure from the basis on which the grant was made. In those circumstances it was, in my view, incumbent on CEC's officials to obtain, if they could, written confirmation from Transport Scotland about the Scottish Ministers' attitude to funding the project in either of these guises, and to report on that response to councillors. Councillors should have been given that information before they were asked to vote on whether to approve the mediation settlement or pursue a different strategy. The councillors should also have been told, before voting, what the financial implications for the project and CEC would be if the Scottish Ministers withdrew their funding. Had that been done, the councillors would have made their decisions fully informed about the funding implications of stopping at Haymarket, instead of being confronted with that information only after they had made their decision. Based on what they ultimately did at their September meeting, they would probably not have voted to stop at Haymarket, and the £4.5 million delay costs would not have been incurred. It is not clear to me why councillors were not given this information. At their meeting

on 16 May, they had resolved to instruct the Chief Executive to "to seek absolute clarification on the new Scottish Government's intention in relation to the release of the remainder of the £500 million Government Grant and that such an update be received by Council prior to any further decisions on this project" [CEC01891389, page 0002]. Notwithstanding that instruction, it appears clarity was not forthcoming. The report to the meeting on 30 June 2011 stated that:

"[f]uture capital allocations from the Scottish Government are, at this stage, uncertain and may not be known in advance of the September spending review ...

"Given the current decision making timetable, further engagement will be needed with the Scottish Government before a funding package for the project can be concluded. ... The Scottish Government's current position is that they remain committed to a grant of up to £500m. Once clarity on funding is established, the proposed solution will be brought back to Council." [CEC02044271, page 0011, paragraphs 3.54–3.56; see also page 0018, paragraph 4.5.]

- 19.579** The councillors were, therefore, called upon to make a strategic decision on the project in June without clear information about the funding implications of their decision. They were given funding information in August, but unsurprisingly that did not deal with the Haymarket option they had apparently rejected in June. It is not clear to me whether failure in this regard lay with CEC's officials, in not taking sufficient steps to obtain clear information, or with Transport Scotland and/or the Scottish Ministers in not providing it. Whatever the explanation, I am not prepared to criticise the councillors for the costs resulting from the project delays consequent on CEC's decisions in August and September 2011. It is also, in my view, unsatisfactory that the timing of the August meeting was such that the councillors' decision had an immediate, and substantial, cost impact on the project. Ideally, meetings should be timed so that the strategic decisions of councillors can be investigated and given effect without having an immediate and dramatic impact on costs. I recognise, however, that the settlement negotiations were complicated and drawn out and that it may not have been possible for the final decision to have been taken any earlier.
- 19.580** In paragraphs 19.260–19.263 above I have referred to the telephone call made by Mr McLaughlin to the Cabinet Secretary (Mr Swinney) before the final offer of settlement was made by CEC officials. I concluded that the purpose of that call was to obtain Mr Swinney's approval of the proposed offer and that he gave it. There was no evidence that CEC officials were made aware of the content of that conversation. Nevertheless it seems to me that Mr McLaughlin's continued involvement in the mediation might have given them some comfort that the grant would continue to be available if a settlement was achieved that resulted in the line terminating at St Andrew Square. To proceed to settle the mediation on that basis was not unreasonable as any settlement was to be conditional on CEC's approval which in turn would depend upon CEC having the necessary funds from whatever sources. However, following the conditional settlement it would not, in my view, have been appropriate for officials to continue to assume the availability of the continued grant funding from the Scottish Ministers for the purposes of advising councillors on that matter.

On-street price

- 19.581** The parties were unable at mediation to agree a price for the on-street works between Haymarket and St Andrew Square/York Place. BBS had proposed a “target price” of £39 million.
- 19.582** The price for these works was the subject of further discussion between the parties over the summer of 2011. They ultimately agreed a target price of £47,384,510 (split: £34.9 million for BB and £12.5 million for Siemens) [CEC02085642, page 0003, clause 2.1; SIE00000184].
- 19.583** Mr Gough of BB attributed the increase from the Mar Hall proposal as being “in large part dictated by CEC’s decision to extend the tram from St Andrew’s Square [sic] to York Place” [TR100000295, page 0004, paragraph 26].
- 19.584** BBS’s price proposals for the on-street works were the subject of some critical comment. In a report dated 19 August 2011, Faithful+Gould, which had been engaged by CEC to advise on a post-settlement agreement budget, commented on the price then proposed by BBS for the on-street works [CEC02083979]. It expressed the view that the costs presented by Siemens for the on-street works were “extremely high and not value for money”, but that CEC had little negotiating leverage because they had already paid for Siemens’ materials and changing a contractor on the systems works would probably introduce a very high risk. Both Siemens’ and BB’s price proposals were said to be “grossly inflated”. Faithful+Gould recommended that CEC consider instructing the works on a cost-plus basis *ibid.*, pages 0005–0006, paragraphs 2.6–2.8].
- 19.585** These comments have to be seen in context. Faithful+Gould suggested a revised price for the on-street works of £41.7 million *ibid.*, page 0016, paragraph 4.2.4.1], subject to further investigation and re-measurement *ibid.*, page 0016, paragraphs 4.2.4.2–4.2.4.3]. The target price ultimately agreed for the on-street works in the settlement agreement was £47.38 million [see above]. The report noted that, following observations already made by *tie*, Siemens’ proposed price had been reduced from £20.16 million to £14.48 million *ibid.*, pages 0014–0015, paragraph 4.2.3.1], and that a further reduction of between £1 million and £1.5 million could be realised following completion of the negotiations. In the event, the target price agreed for Siemens’ on-street works was £12.5 million, suggesting success by CEC/*tie* in negotiating a price for Siemens’ on-street works that reflected their advisers’ view of what would be reasonable.
- 19.586** The BB price was also reduced from that considered by Faithful+Gould. Faithful+Gould expressed the opinion that a reduction of around £6 million might be negotiated from BB’s proposal of £36.76 million then under consideration *ibid.*, pages 0014 and 0016, paragraphs 4.2.2.5 and 4.2.4.1–4.2.4.2]. They also suggested that other elements of BB’s proposal be further investigated, including their proposal of £5 million for indirect costs *ibid.*, page 0016, paragraph 4.2.4.2] and that certain works might be repriced provisionally and re-measured *ibid.*, page 0016, paragraph 4.2.4.3]. The target price agreed in due course for BB’s works was £34.9 million, again suggesting a measure of success in negotiating them down.
- 19.587** Mr C Smith agreed with Faithful+Gould’s comments, but said that CEC was ultimately able to address and overcome the concerns it had raised [PHT00000053, page 117 onwards].

- 19.588** BB conducted an open-book tender process for their sub-contractors, in which Mr C Smith participated on behalf of CEC. Dr Keysberg of BB described the process as a transparent one in which it was difficult to inflate a price, and as being close to a cost-plus fee basis, which Faithful+Gould had recommended [[PHT00000036](#), pages 76–78]. Mr Foerder referred to the change of culture after Mar Hall and described "an approach of partnership and open collaboration" with CEC in concluding the settlement agreement. He said that the CEC representative was permitted to be present at negotiations with the sub-contractors over their prices [[PHT00000044](#), page 157 onwards].
- 19.589** Mr C Smith explained that BB's prospective sub-contractors tendered against bills of quantities and that, through his supervision of that process, he could see clearly which prospective sub-contractor proposed the best value price. The lowest tendered rates were incorporated into the revised Infraco contract. Mr Smith took encouragement from his involvement in the tendering process that he was able to see exactly what the market rate was for the work. Measurement of that work thereafter took place, using the tendered values. He was satisfied that the prices paid by CEC for the on-street civil engineering works represented good value.
- 19.590** In addition to the cost of the sub-contracted work BB included a mark-up for themselves, to cover their overheads, profit, preliminaries and work in managing the sub-contractors. Mr Smith was not given access to the process used for arriving at the mark-up percentage used by BB, which he said was the same one as had been agreed in the original Infraco contract. It was Mr Smith's view, however, that this mark-up percentage was excessive. His attempts to renegotiate it were rebuffed.
- 19.591** As reported by Faithful+Gould, BB used a mark-up of 10 per cent, made up of 7 per cent for overheads and 3 per cent for profit. Faithful+Gould described that as high in the prevailing economic climate, but as reflecting the values contained in the original contract [[CECo2083979](#), page 0013]. That is consistent with the view expressed by Mr C Smith. Faithful+Gould also expressed the view that £5 million for BB's indirect costs appeared excessive when viewed against the programme timescales. It also noted that the off-street price might itself already include an element of built-in indirect cost, although it did not know if that was so [[ibid](#), pages 0012–0014 and 0016, paragraphs 4.2.2.3–4.2.2.4 and 4.2.4.2]. BB's share of the off-street price did, in fact, include an element for indirect cost: their Project Phoenix price proposal included £51.3 million for that. Since that price proposal included direct costs relating to the on-street works, it is reasonable to infer that this indirect cost partly related to the on-street works [[BFB00053258](#), page 0012].
- 19.592** I see no reason not to accept Mr Smith's evidence that the cost of the sub-contracted part of the on-street civil engineering works ultimately represented good value reflecting the market at the time. That was the consequence of the open tender process that Mr Smith described.
- 19.593** I have some difficulty in accepting his view that the BB mark-up percentage was excessive. This had been negotiated with BB prior to financial close in 2008. BB had been selected as the preferred bidder following a tender process and had participated in a negotiation with **tie** in which price was, as one would expect, a major component. It is reasonable therefore to infer that the mark-up percentage for BB agreed at that time was the best which could be negotiated in the market in relation to this project. Although Faithful+Gould remarked in its report that the mark-up was high for the prevailing economic climate, that was not the subject of detailed evidence before me and I do not feel able to conclude that it was the case. Even if

that were the case, I can understand that BB would wish to retain the higher mark-up rate negotiated for the Infraco contract which was to be varied once agreement was reached. I prefer to find that there was room for differing views about the appropriate rate for such uplifts and that BB's view prevailed. In my view, that is plainly a consequence of its strong negotiating position.

- 19.594** As noted in the Faithful+Gould report, Siemens had accepted reductions in its price following negotiations with **tie**, and the price ultimately agreed with Siemens reflected the further reduced price recommended by Faithful+Gould in its report.
- 19.595** Mr C Smith provided further explanation of the negotiation of Siemens' price, by reference to a document recording discussions about the on-street price which had been circulated on 16 August 2011 [[TIE00691425](#)]. This document noted that the reduction in Siemens' proposed price for the on-street works from £20 million to £14 million, referred to by Faithful+Gould in its report, followed **tie** having identified that the higher price included provision for preliminaries that **tie** considered already to have formed part of the off-street price. Although Siemens had responded to all of **tie**'s detailed queries, **tie**'s view as expressed in that document was that:
- "there are still many issues that remain illogical and a lot of detail missing. There is no attempt to correlate programme with resources for each section of work."
[[ibid.](#), page 0003, paragraph 2.]
- 19.596** The document noted further that, at a meeting on 10 August 2011:
- "... Siemens stated that they have arrived at a price for the works and there was to be no further reduction. Infraco confirmed at this meeting that the price was the price and if we did not like it then we could find another contractor."
[[ibid.](#), page 0004.]
- 19.597** It also noted that **tie**'s assessment of the price for Siemens' works was £8.399 million. That was considerably below the price that CEC ultimately agreed to pay for Siemens' part of the on-street works. Notwithstanding **tie**'s concerns, Mr Smith's evidence was that he became satisfied that the price CEC agreed to pay was justified, and referred to a greater understanding of that price which he derived from a project programmer. Mr Smith agreed with the way this had been put by Mr Eickhorn in his evidence to the inquiry, that the on-street price included the cost of the programme extension which was necessary if the on-street works were to be carried out, the off-street price having been based only on the duration of programme needed to complete the line to Haymarket [Mr Eickhorn [TR100000171](#), page 0076, paragraph 187 onwards; Mr C Smith [PHT00000053](#), pages 124–129].
- 19.598** In light of this evidence, I see no basis for concluding that the price CEC ultimately agreed to pay for Siemens' element of the on-street works was excessive.
- 19.599** Mr Bell's understanding was that Siemens, having conceded at Mar Hall a £14 million reduction in its Project Phoenix price from £140 million to £126 million, then simply sought to recover that £14 million by adding it to the cost of the on-street works [[TR100000109_C](#), page 0168, paragraph 144]. I am not sure I have fully understood why Mr Bell reached that view, except that it may derive from an email chain involving Mr Coyle, Mr Murray, Mr Bell and Mr Emery in which Mr Murray gives an account of a meeting he had with Mr Eickhorn about the calculation of Siemens' price for the on-street works [[TIE00688781](#)]. Mr Murray also mentions the reduction in Siemens' price for off-street works agreed at Mar Hall as being £14 million. Both Mr Bell and Mr Murray are clearly wrong about the amount of that price reduction. As indicated in paragraph 19.348 above, the discount was £11 million, not £14 million.

19.600 Apart from the error mentioned in paragraph 19.599, suggestive of a lack of rigour in the assessment of Siemens' estimate for the on-street works, the assertion that Siemens sought to recoup the £14 million discount [sic] by adding it to the actual cost of the works plus an allowance of £2 million for changes since Mar Hall to arrive at a sum for the on-street works also appears to me to involve a misunderstanding of Siemens' pricing. The difference between the estimated cost of the construction work, including the installation of equipment on the street, and the estimated total price was principally due to an extension of about eight months in the programmed completion date in the Project Phoenix proposal, which had not included the on-street works and is mentioned in paragraph 19.312 above. Moreover the terminus of the truncated line was extended from St Andrew Square to York Place. The fact that, in terms of the Employer's Requirements, Siemens had to commence and complete final Systems Acceptance Tests after the completion of construction work also required Siemens to retain the necessary staff for this purpose. All the above factors contributed to increased costs.

19.601 The price for both the on-street and off-street works rose subsequent to the settlement agreement as a consequence of further change. That will be considered further in Chapter 20 (Post-Mar Hall), which relates to events leading to the completion of the line to York Place and the final cost of the project at the commencement of revenue service in May 2014.

Settlement agreement

19.602 tie, CEC and BSC signed a settlement agreement, known as MoV5, on 15 September 2011 [[BFB00005464](#) (also [CEC02085585](#); [CEC02085622](#))]. This finally settled the parties' dispute and made extensive revisions to the Infraco contract. Its key provisions included the following:

- An off-street works price of £362.5 million (being the price which had been agreed at mediation), being "genuinely a fixed price" [Mr Foerder [TR100000095_C](#), page 0095, paragraph 285(b)].
- A target price for the on-street works of £47,384,510, split £34,911,010 to BB and £12,473,500 to Siemens.
- A full and final settlement of all the parties' claims against one another under the Infraco contract, with a few specified exceptions [[BFB00005464](#), pages 0004–0005, clause 3]. The exceptions included any disputes arising in relation to the prioritised works under MoV4, third-party claims and claims by **tie** for, inter alia, latent construction defects [Mr Foerder [TR100000095_C](#), pages 0094–0095, paragraph 284(c)].
- All the pricing assumptions were removed from SP4, with the consequence that few pricing assumptions any longer applied to the off-street works [[CEC02085642](#); Mr Maclean [TR100000055_C](#), pages 0049–0050, paragraph 136].
- A revised set of pricing assumptions applied to the on-street works, and were set out in Schedule Part 45 [[CEC02085627](#); [CEC02085628](#)]. In the event of any change to these pricing assumptions, any claim by BBS was to be processed through a new mechanism in Schedule Part 45 instead of through clause 80 [[TR100000095_C](#), page 0095, paragraph 285(c)]. Under that new mechanism, there was no prohibition on BBS working on a change prior to agreement on its value, although there was an escalation procedure requiring senior representatives of the parties to discuss any disagreement over price or programme consequences above a specified level, and which allowed BBS to suspend work if the

disagreement related to higher values [[ibid](#), page 0096, paragraph 285(d)]. This was described by Mr Foerder as:

"a far more workable mechanism that [sic] the previous Schedule Part 4 and Clause 80 mechanism which had been at the centre of so many of our disputes with TIE" [[ibid](#), page 0096, paragraph 285(e)].

- Clause 80, which continued to apply to **tie** changes outside of the on-street works, was amended to make clear that **tie** was entitled to instruct BBS to commence work on a change prior to the submission, determination or agreement of any estimate in respect of the change, by issuing a Change Order to that effect [[CECo2085623](#), Part 4, pages 0205–0206, clauses 80.13 and 80.15].
- The CAF contracts for tram supply and maintenance were novated from the BSC Consortium back to CEC.
- The Employer's Requirements were amended to reflect the reduced scope [Mr Foerder [TRl00000095_C](#), page 0095, paragraph 285(a)].

19.603 A new contractual programme (revision 4) was agreed, with the following completion dates:

- Section A, 16 December 2011;
- Section B, 8 March 2013;
- Section C, 9 April 2014;
- Section D, 8 July 2014. [[BFB00112215](#), page 0004, paragraph 1.2.7. As will be noted in Chapter 20 (Post-Mar Hall), the works were completed five weeks ahead of this date.]

19.604 A revision 5 of the programme was later agreed, but it did not change the completion dates [[BFB00112221](#), 31 August 2012, page 0005, paragraph 1.3.3].

Conclusions

19.605 By late 2010, the project had reached a crisis point. Resolution of the parties' disputes had become a pressing requirement due, among other things, to BSC having stopped work, CEC's funding limit being reached, project cash flow issues for the consortium, and **tie**'s failure to establish any momentum behind its preferred interpretation of the contract.

19.606 The decision to mediate was a political decision, taken out of frustration that **tie** and CEC had failed over the preceding two and a half years to resolve the difficulties of the Infraco contract. The decision to mediate, and its timing, were a reaction to failure and there was no evidence that it was part of any co-ordinated strategy aimed at achieving an outcome most beneficial to CEC. In practical terms the decision was taken by Mr Swinney, endorsed by Councillor Dawe as Council leader and then by CEC's councillors.

19.607 The involvement of CEC instead of **tie** brought renewed optimism that a settlement might be possible.

19.608 The fact that the project had reached CEC's funding limit of £545 million, and required an increase in that budget to be approved by CEC's full council, meant that, in practice, given the political sensitivities, CEC's negotiators had to leave mediation with a resolution of the project disputes.

- 19.609** Before the mediation took place, **tie** and CEC had ruled out unilateral termination by **tie** of the Infraco contract on the basis that they had established no solid foundation for doing so, despite **tie** having served Remediable Termination Notices and Underperformance Warning Notices. **tie** and CEC's decision to rule out unilateral termination of the contract increased BSC's already strong bargaining position and further undermined CEC/**tie**'s room for negotiation. CEC and **tie** had also ruled out continued strict adherence to the terms of the Infraco contract on the basis that doing so was unlikely to deliver a tram network with any degree of cost or programme certainty. This meant that the only realistic options were to agree a revised basis for BSC to complete part of the project or to negotiate an end to the Infraco contract and either shelve the project or re-procure the works from another contractor.
- 19.610** **tie** and CEC entered mediation in a weak negotiating position. Both viable alternative outcomes required them to get an agreement with BSC. They had no realistic alternative: failing to reach an agreement and returning to the Infraco contract on its existing terms, was not viable. It would have necessitated a request to CEC's councillors for additional funding, the prospects for approval of which without a resolution of the disputes were highly uncertain.
- 19.611** I am not persuaded that any significant benefit would have been achieved by CEC delaying mediation any further; indeed, there was a risk that their position would have got worse.
- 19.612** CEC's negotiators entered mediation with the primary objective of negotiating a revised deal with BSC for the completion of a tram line. The main alternative, of negotiating a separation from BSC and re-procuring the work from another contractor, was a reserve option which had not been fully investigated by the time of the mediation because the limited available resources were allocated to the Project Phoenix proposal, which had been identified as the preferred option before detailed cost estimates were available.
- 19.613** It was important for CEC's negotiators to have an estimate of the cost of separating from BSC and re-procuring the work from another contractor to enable them to compare it with any settlement proposals by BSC. By the time of the mediation, the "external" advisers, namely Mr C Smith and Mr Rush, had come to the view that separating and re-procuring was risky and, as a consequence, likely to be expensive. The extent of that expense was not known or assessed with any precision. Nevertheless on the day before mediation started a highly subjective adjustment of £150 million was made to reflect the risks of separating and re-procuring, which was of a magnitude that was unacceptable to Mr Murray, the quantity surveyor with the most detailed understanding of the project of all those who were at mediation.
- 19.614** The effect of the adjustment was to increase significantly the amount that CEC's negotiators could justify paying for a Phoenix-based deal with BSC, and therefore the prospects of a settlement price being agreed at the mediation.
- 19.615** CEC's negotiators decided that if the overall project cost was likely to exceed £740 million, they would have to think seriously about the alternative option of separating and re-procuring. At the time of mediation the price agreed exceeded that sum by £20 million. The reason for doing so rested upon the political need to leave the mediation with a deal of some kind. That price could not be regarded as good value for the work, and instead reflected the highly unusual circumstances of this project.

- 19.616** There is very little evidence of the basis on which the new price was agreed, or of any expert advice **tie** and CEC received about it. The Inquiry was not provided with any contemporaneous record of the discussions or reasoning among CEC's negotiators explaining the decision to settle at that price. The settlement was close to the price sought by BSC, and their price was presented with a rational explanation. BB's price increased to meet the costs of change and delay; Siemens' and CAF's prices increased largely due to delay. There was no evidence of CEC having any advice of its own that it was an objectively reasonable price for the work. There is no evidence of a reasoned connection between the price agreed at mediation and BSC's accrued entitlement under the Infraco contract. The price was less than the estimate of the cost of separating from BSC and re-procuring the work which had been increased by £150 million on the eve of the mediation. Agreement to a revised deal with BSC reflected the advice CEC's officials received about the risks and uncertainties inherent in seeking to re-procure the project.
- 19.617** The level of the settlement implies that those negotiating for CEC accepted full, or almost full, responsibility for the project changes and delays. They were compelled, in effect, to renegotiate a new price for the scope and programme as they were now understood in 2011. They did so from a very weak position: they had little or no leverage under the existing contract in relation to the accrued claims; they lacked the resources to establish a stronger position under that contract, if that could even be achieved; they had a half-constructed tram line into which they had invested hundreds of millions of pounds; and their reputation for proper and effective management of the project had been damaged. The Inquiry found no evidence that CEC's negotiators engaged in any detailed discussion about the costs associated with individual changes and delays with a view to reducing them, as **tie** had done to reduce sums originally claimed by BSC in its change estimates during the pre-mediation phase.
- 19.618** The mediation was the point at which the true cost of the previous failings was crystallised. Those negotiating for CEC at the mediation were not responsible for those failings. However, in the absence of detailed records vouching how CEC's negotiators reached their decisions at mediation, I am not prepared to find that they did everything they could and should have done to negotiate the price down. I cannot therefore rule out the possibility that the conduct of the mediation negotiations itself contributed to the increased cost of the project.
- 19.619** By the time of the mediation settlement, CEC had departed from the project governance structure that had until then been in place. **tie**, TEL and the TPB had no decision-making role in the settlement reached at mediation or its implementation. The mediation settlement was partially implemented by MoV4, concluded on the direction of CEC's officials prior to formal approval being obtained from CEC's councillors. This committed **tie** to spending that exceeded the £546 million funding limit that CEC had imposed, without prior formal authority from CEC's councillors to that effect. Further, £36 million was paid under MoV4 before it was signed. This was done in return for early progress by BBS on the prioritised works and to restore goodwill between the parties. It had that effect. It was therefore an important step towards the completion of a tram line, attributable to the efforts of CEC's officials. Nevertheless, the payment of £36 million in those circumstances and the signature of MoV4 in advance of authority to do so represented a serious breach of good governance and amounted to actions by the Chief Executive, Director of Finance, Director of City Development and Head of Legal Services which transgressed the boundary between the advisory role of officials and the strategic role of politicians.

who alone should have determined whether to increase the limit on funding set by them and whether to authorise the signature of MoV4. Although CEC's approval of the final settlement in September 2011 meant that there were no negative consequences from these actions, in the interim period CEC had been exposed to unauthorised expenditure. An apparent desire to keep decision making on the project out of the political arena at that stage is no justification for the actions of officials and merely confirms my view that they strayed into the political arena itself.

- 19.620** CEC's approval of the settlement was informed by reports on the estimated cost of the alternatives. Although those cost estimates demonstrated that the alternatives were unlikely to be materially less expensive, they were highly subjective, full of uncertainty and rested on incomplete investigation into the facts. CEC's approval of the settlement was attributable, in the final analysis, to two things: its desire to get something for the money already spent on the project; and its aversion to any further risk that project costs would increase further.
- 19.621** Ultimately, approval of the settlement occurred only because of the intervention of the Scottish Ministers, threatening to withdraw funding unless CEC's August 2011 decision to seek a line only between the Airport and Haymarket was reversed. The project delay caused by CEC's decision of August 2011 and its reversal in September 2011 increased the cost of the project by £4.541 million. This additional cost could have been avoided if, before asking councillors to take a decision about the reduced scope, CEC officials had investigated Scottish Ministers' attitude to the reduced scope. Had they done so they could have advised councillors about the views of the Scottish Ministers towards funding the project if the line terminated at Haymarket and if it terminated at St Andrew Square/York Place. In my view, any criticism for the increase in costs that resulted from the councillors' decision, taken in the absence of such information, should not be directed towards them.

Chapter 20

Post-Mar Hall

Introduction

- 20.1** Resolution of the infrastructure contract ("Infraco contract") dispute allowed work on the Tram project to resume with a new shared objective of building mutual trust. City of Edinburgh Council ("CEC") made substantial changes to project governance. Progress was much improved. The contract works were completed approximately five weeks ahead of the revised schedule on 30 May 2014 [[BFB00112249](#), page 0004; [CEC02083198](#), Part 1, page 0034; Mr Foerder [TR100000095_C](#), page 0105, paragraph 312; Mr Eickhorn [TR100000171](#), page 0085, paragraph 213].
- 20.2** The Edinburgh Tram project (the "Tram project") came in slightly above its revised budget: CEC agreed the budget of £776 million in September 2014, and the reported project cost as at 31 March 2017 was £776.7 million [Mr Connarty [TR100000153](#), page 0007, paragraph 8.2 and pages 0021–0023, Appendix 6]. That does not, however, give a complete picture of the total cost of the Tram project, which, as I will discuss more fully in Chapter 24 (Consequences), was far in excess of the reported cost of £776.7 million.

Contract

- 20.3** Following the Mar Hall mediation, where a settlement had been reached subject to the ratification of CEC and the boards of the members of the consortium [Mr Maclean [TR100000055_C](#), page 0038, paragraph 96], changes to the Infraco contract were reflected in two Minutes of Variation ("MoVs"), namely MoV4 and MoV5. As was explained in Chapter 19 (Mediation and Settlement), MoV4 was an interim and partial settlement of the parties' dispute, including CEC's purchase of materials from Siemens, and Infraco's commencement in May 2011 of certain priority works. MoV5 was the principal agreement to vary the Infraco contract to reflect the agreed settlement terms. Mr Maclean provided a useful summary of the issues that had to be negotiated following Mar Hall, for incorporation into MoV5 [[libid](#), pages 0043–0045, paragraphs 106–124]. The first issue mentioned by him was the need to amend the defective Infraco contract. Later issues specified particular changes that were necessary. It is unnecessary to detail all the changes to the Infraco contract effected by MoV5 but of particular significance was the amendment to clause 80, which I consider in paragraph 20.12 below. It is also worth noting at this stage that following mediation there was disaggregation of Construcciones y Auxiliar de Ferrocarriles SA ("CAF") from the consortium [[libid](#), pages 0043–0044, paragraph 115]. For that reason, in this chapter references to the consortium refer to BBS unless there is a particular reason to include CAF, in which case I refer to Bilfinger Berger, Siemens and CAF ("BSC").
- 20.4** The changes to the Infraco contract negotiated after the Mar Hall mediation were well received. By way of example, Mr Donaldson, the construction manager of Bilfinger Berger ("BB"), said: "I never needed to look at the contract after Mar Hall. We just went out and built it. That is the sign of a good contract." [[TR100000033](#), page 0022, paragraph 41.] Mr Foerder noted that, after the settlement, all relevant parties understood the contract [[TR100000095_C](#), page 0100, paragraph 291].

Utilities

- 20.5** As I have discussed more fully in Chapter 8 (Utilities), the diversion of utilities in the on-street section was far from complete even by 2011. CEC representatives at the mediation were taken aback by the scale of the task that remained, and concern about the risks still presented by utilities was a factor in the ill-fated decision by CEC's councillors in August 2011 to stop the line at Haymarket.
- 20.6** The cost of utility diversions in the post-Mar Hall phase alone ended up considerably higher than budgeted and used up a substantial amount of the post-mediation risk allowance. Mr Weatherley, a director in Turner & Townsend's Infrastructure Division, explained that the extent of the works required to the on-street utilities was not apparent until about spring 2012 when the on-street excavation had been completed. Problems emerged concerning utility works in the on-street section of the restricted route as well as works north of York Place in relation to unresolved issues from the Multi-Utilities Diversion Framework Agreement ("MUDFA") that had been managed by **tie**. The scope of these works was altered and included repairs or replacement of fire hydrants, insufficient protective cover of services, insufficient separation of services, the need to replace lead water mains supply pipes and incorrect connection of gully pots. Issues with pre-mediation works mainly affected Scottish Water's assets [[TR100000103](#), page 0028; [CEC01891068](#), page 0007].
- 20.7** Nonetheless, the parties were able to manage the remaining utility diversions without any significant dispute or disruption to the project overall. A number of factors contributed to that result:
- the increase in resources allocated by Turner & Townsend after it took over the work stream that had previously been managed by **tie**;
 - the relatively extensive utilities surveys carried out after the mediation under the direction of Mr C Smith and Turner & Townsend, providing a clearer factual basis for decision making;
 - the "bow-wave" approach to utility diversions, with work sites being excavated to formation level and utility issues being resolved shortly before the arrival of the infrastructure contractors;
 - regular meetings, providing a forum for discussion and swift resolution of utility-related problems; and
 - close co-operation of the parties whose participation was necessary for the utilities issues to be resolved (clients, project managers, utility contractors, infrastructure contractors, designers, utility companies and CEC's roads and planning departments) [see, eg, Mr Foerder [TR100000118](#), pages 0115–0116, paragraphs 21.3.3–21.3.5; Mr Weatherley [PHT00000046](#), pages 43 onwards and 75 onwards; [TR100000103](#), pages 0024–0036].
- 20.8** The appointment of a dedicated utilities project manager, acting like a clerk of works, was regarded by Mr C Smith as "absolutely vital" [[TR100000143_C](#), page 0073; [PHT00000053](#) pages 145–146].
- 20.9** An important example of the co-operation between the parties was the re-organisation of work in the Infraco programme, as part of a cost-engineering initiative, to build up a "time bank" of 22 weeks' spare time. The time bank was built up in anticipation of utility conflicts causing delays and was in fact used up in accommodating such delays [see, eg, [CEC01890999](#), page 0044; [CEC01942252](#), page 0008; [CEC01942260](#), page 0005; [CEC01891022](#), page 0006]. This in my view

serves to illustrate both the risks still presented by utility diversions to the timely completion of the project in the post-mediation period, and the manner in which a co-operative approach among the relevant stakeholders allowed that risk to be successfully managed.

Change

- 20.10** As has been noted in previous chapters, the change mechanism in the Infraco contract and the sheer volume of disputed change notifications prior to mediation caused significant delay to the progress of the project. Even after mediation a significant number of changes were instructed [Mr Walker [TR10000072_C](#), page 0086, paragraph 155]. However, there was a significant difference in the treatment of changes in the post-mediation period from their treatment prior to that. Prior to mediation both parties adopted an entrenched position, with **tie** seeking to resist Notified Departures, and with BSC (notably BB as the member of the consortium undertaking civil engineering works) submitting estimates at values which were in excess of what was likely to be acceptable to **tie**, resulting in both of them seeking support from the dispute resolution procedure. In contrast, BBS and CEC adopted a more conciliatory approach after mediation. Changes were identified, discussed and agreed in a timely manner through the control meetings, which, as will be discussed below, had been set up as part of the new governance structure for the project [Mr Weatherley [PHT00000046](#), pages 93–95].
- 20.11** Change control was managed by Turner & Townsend, CEC's appointed project manager. It reported to Mr C Smith, the project Senior Responsible Owner ("SRO") and independent certifier. Changes were reviewed and decided upon at regular change control meetings chaired by Mr Smith, whose role included making decisions to resolve differences of opinion between Turner & Townsend and BBS. His involvement was perceived as avoiding formal disputes [Mr Easton [TR10000034_C](#), pages 0025–0026, paragraphs 73–80]. The effects of change were effectively managed during the post-Mar Hall period [[ibid](#)], pages 0043–0044, paragraph 136].
- 20.12** One of the most significant changes following mediation was the recognition that it would be necessary to modify the change mechanism in clause 80 of the Infraco contract. In that regard Mr Maclean observed:
- "The problem with Clause 80 as it was in the contract was that if there was a dispute around a change and the price that had to be paid, work stopped. Work did not continue. That is why Edinburgh was a mess for months or years. That was why no one could force the consortium to get on with the Works if a dispute arose unless it was urgent. A lot of problems arose around that. That clause had to be discussed. Ultimately it was rewritten." [[TR100000055_C](#), page 0044, paragraph 119.]
- 20.13** It is not surprising that CEC reached that view. Progress of the Infraco works had been substantially behind schedule because BSC (essentially BB) had refused to progress works until the estimates in relation to changes were agreed under clause 80 of the contract. In the adjudication about the Murrayfield underpass dispute Lord Dervaird considered the interpretation of clause 80, particularly clauses 80.13 and 80.15. He decided that **tie** could not instruct BSC to commence works that were the subject of a dispute before an estimate for these works had been agreed, unless it issued an instruction to proceed with the works in terms of clause 80.15. In that event, however, **tie** had to pay BSC for the works on a demonstrable cost basis.
- 20.14** The change mechanism in clause 80 of the Infraco contract was amended to allow CEC to instruct work to progress prior to agreement on an estimate [[CEC02085623](#), Part 4, pages 0205–0206, clauses 80.13 and 80.15]. CEC took advantage of the new

mechanism. For example, it issued Change Orders under clause 80.15 with "a not-to-exceed value to allow design works to progress". Costs were then tracked through submission of weekly time sheets, and agreed, on a weekly basis. All estimates were agreed within acceptable timeframes [Mr Foerder [TR10000095_C](#), pages 0098–0103, paragraphs 287(e) and 301]. Under the new Schedule Part 45 (which applied to the on-street works), Infraco was obliged to progress works except in certain defined circumstances, which included an entitlement to suspend the on-street works if Infraco's uncertified claims exceeded a certain level [[CEC02085627](#), pages 0010, 0018, clause 8.1 and appendix B, paragraph 7.3]. Mr Foerder described the variation procedures under Schedule Part 45 as:

"a far more workable mechanism that [sic] the previous Schedule Part 4 and Clause 80 mechanism which had been at the centre of so many of our disputes with TIE" [[TR10000095_C](#), page 96, paragraph 285(e)].

Design and consents

- 20.15** Design and consents issues did not cause any significant problems in the post-mediation period. It had been agreed in MoV4 that BBS would self-certify compliance of the civil engineering, systems and trackworks design with the Employer's Requirements [[CEC01731817](#), page 0006, clause 3.5]. As soon as the parties had settled their dispute at mediation, very rapid progress was made in resolving technical approvals by CEC: between 24 March and 5 April 2011, the number of open technical approval comments was reduced from 2,782 to 85 [[CEC02083973](#), Part 2, page 0118]. This resulted from the relocation of the CEC project management team and CEC planning and technical officials to the consortium's project office, the allocation of increased resources within CEC and the willingness of CEC officials and BSC representatives to work seven days a week during April 2011 [Mr Foerder [TR10000095_C](#), pages 0098–0099 and 0103, paragraphs 287 and 304; Mr David Anderson [PHT00000043](#), pages 191–193]. Mr Foerder also pointed to a far more open, collaborative and solution-orientated approach, and to BBS having direct contact with CEC as planning and design authority [[PHT00000044](#), pages 161–164]. Mr Chandler said that the collaboration on design after Mar Hall was the "step change that had been missing to that point" [[PHT00000020](#), page 111]. Similar evidence came from Mr Glazebrook [[PHT00000015](#), page 29], Mr Reynolds [[PHT00000019](#), page 125; [TR100000124_C](#), pages 0185–0186, paragraph 496] and Mr Dolan [[PHT00000019](#), pages 208–210]. Mr Chandler thought that if a similar degree of collaboration had been present throughout the project, many of the problems could have been resolved much more easily and more quickly [[TR100000027_C](#), page 0172, paragraph 704]. I have little doubt that a collaborative approach involving **tie**, CEC and BSC from the outset and throughout the project following the signature of the Infraco contract would have resolved many of the issues relating to planning consents and technical and prior approvals, but it would not have resolved the fundamental difficulties with the contract itself. The collaborative approach after Mar Hall should be seen in the context of a contract that had been fundamentally amended to remove the provisions that were an impediment to the progress of the contract, notably the change mechanism mentioned above.
- 20.16** In his evidence to the Inquiry, Mr Sharp had his own explanation for the rapid progress with technical approvals after the Mar Hall mediation. He suggested that, for tactical reasons, BSC and System Design Services ("SDS") had withheld progress towards obtaining technical approvals that could otherwise have been made [[PHT00000015](#), page 176 onwards]. Their motivation, he suggested, was to achieve a better deal on their commercial claims [*ibid*, page 177]. This allegation was directed at

BSC and is a serious criticism of the consortium. I have given it careful consideration and have concluded that I am unable to accept it. Mr Sharp acknowledged that his view was at least "partly speculation". Moreover, Mr Sharp's allegation was denied by witnesses from Parsons Brinckerhoff ("PB") who would be expected to have known about it because they would have been involved in designing solutions to concerns raised by CEC as highways authority [see, eg, Mr Chandler [PHT00000020](#), pages 111–113; Mr Dolan [PHT00000019](#), page 211]. Any strategy by BSC to withhold solutions from **tie**/CEC for tactical reasons would have necessitated the involvement of PB. I accepted the evidence of Mr Chandler that it was not in PB's financial interests to delay reaching a possible solution to technical concerns. I also accepted his evidence that it would have been unethical for PB to collude with BSC in this way and that they would not have done so.

- 20.17** Under the new governance structure established after the mediation, there were weekly design and consent meetings chaired by Mr C Smith and attended by all parties having an interest in design. Mr Foerder commented favourably on the greater input from CEC than previously, as well as that of Network Rail and Scottish Water when particular issues affected their assets. He summarised the change in approach after Mar Hall as follows:

"The fact all the partners were working closely together meant that when a problem arose, everyone worked together to identify a solution." [[TR100000095_C](#), pages 0091–0094, paragraphs 274 and 279–282.]

- 20.18** Mr Weatherley, of Turner & Townsend, described a number of areas in which design was incomplete after Mar Hall. He was, however, unable to recall any instances of a lack of design holding up construction in the post-mediation period. Utility clashes gave rise to a need to redesign works, but he could not think of any examples where that had caused any significant delay to the programme [[PHT00000046](#), pages 63–69]. SDS's completion of the design was held up, which it attributed to a lack of information from BBS (for example, on the trackform design), but these difficulties did not prevent construction from being concluded ahead of schedule [Mr Chandler [TR100000027_C](#), pages 0171–0172, paragraph 702; [BFB00097924](#)].

Non-completion of design

- 20.19** Although BBS agreed, at mediation, to produce an "integrated Design from Airport to Newhaven" [[CEC02084685](#), page 0003], on 1 March 2012, CEC instructed it to stop work on the design for the section between York Place and Newhaven and to provide CEC with a status report indicating the outstanding design elements [[BFB00000913](#)]. BBS sent the relevant report to CEC on 27 June 2012 [[CEC02087247](#)].
- 20.20** The decision to instruct cessation of that design work was taken in the expectation that it was highly likely that a significant design review and redesign would be needed before the section from York Place to Newhaven was built, and that any new contractor would want to use its own design [[BFB00000913](#), page 0004]. The decision does not appear to have saved cost [[WED00000101](#), page 0006, tNC593, tCO558].
- 20.21** Turner & Townsend prepared a report dated 9 June 2015 relating to the proposed extension of the line from York Place to Newhaven, which noted the aspects of the design that required further work. It described them as "in the main, minor elements", the most significant of which was the alignment design from York Place to the top of Leith Walk, including a redesigned junction at Picardy Place [[CEC02087245](#), Part 1, page 0005]. Mr C Smith's recollection was that the uncompleted parts of the design were peripheral, and not the core design [[PHT00000053](#), page 174].

20.22 The Updated Outline Business Case of June 2017 for the line extension described the design for this phase as being approximately 85 per cent complete [[CECo2086792](#), Part 2, page 0063]. It suggested that the existing design would not necessarily be wasted, as it could be provided to bidders in the form of an unwarranted reference design, which those bidders could either use (having carried out due diligence upon it) or discard. The possibility of the design being discarded does therefore raise the possibility that the expense incurred in developing it will be substantially wasted [cf the 2019 Final Business Case, [CECo2087287](#), page 0075].

Attitudes and behaviours

20.23 Apart from the changes to the terms of the Infraco contract, the parties recognised that there had to be a radical change in the behaviour and working relationships that had blighted the project before mediation, with the emphasis being on co-operation rather than confrontation if the agreement at mediation was to result in completion of the line as far as York Place. In making that observation I do not wish to imply that all the difficulties with the previous working relationship were attributable to one party alone. These difficulties reflected the distrust that existed between the parties, for which each of them must bear some responsibility.

20.24 In implement of their desire to improve upon the past performance of the Infraco contract the parties took several different steps. Firstly, they addressed the need to improve upon the working relationship that had existed between BBS and **tie** before the mediation at Mar Hall. The Heads of Terms agreed after mediation recorded that:

“There will be a substantive cultural shift in the behaviour of all parties including interaction, co-location and empowerment.” [[CECo2084685](#), page 0005, clause 13.1.]

20.25 The change in attitude and behaviour was crucial to the success of the project [Mr Foerder [TRl00000095_C](#), pages 0087–0088, paragraph 263].

20.26 Secondly, they agreed to change their management teams and working practices [[CECo2084685](#), page 0002, clause 4.1]. Mr Walker and Mr Jeffrey left the project, as did Mr Bell (the latter after conducting a project handover to CEC and Turner & Townsend) and **tie** ceased to be involved in the project [[TRl00000072_C](#), page 0085, paragraph 154; [TRl00000095_C](#), page 0100, paragraphs 290–291; [TRl00000097_C](#), page 0061, paragraph 376; [TRl00000109_C](#), page 0170, paragraph 146(2)].

20.27 The parties succeeded in establishing a new relationship of trust, which enabled them to work more collaboratively [see, eg, [TRl00000095_C](#), pages 0091, 0103, paragraphs 274–275, 302; Mr Foerder [TRl00000118](#), page 0115, paragraph 21.3.2; Dr Keysberg [PHT00000036](#), page 72]. The minutes of the Joint Project Forum of 30 May 2012 recorded Dr Keysberg of BB as having said that the project:

“had been one of the worst projects for co-operation but within the short period since the settlement agreement it had become an example of one of BB’s best projects for co-operation.” [[CECo1942270](#), page 0009.]

20.28 Dr Schnependahl, of Siemens, agreed. The senior management of the consortium considered the leadership of Dame Sue Bruce and Mr C Smith at CEC to be central to the improved relationships [Dr Keysberg [TRl00000050_C](#), page 0033; Mr Eickhorn [TRl00000171](#), pages 0086–0087, paragraph 216.4].

- 20.29** Tensions still emerged from time to time, but the parties were able to resolve them. For example, on 26 June 2012, Mr C Smith sent an email requesting a meeting
 “to review recent behaviours and actions in order to take us back in line, by common agreement, to that which was envisaged when we came out of mediation” [[CEC01933207](#)].
- 20.30** Moreover, on 8 October 2012, CEC, BB and Siemens signed a memorandum of understanding “to record and affirm the partnership working between the parties” [[CEC01933565](#), page 0001].
- 20.31** The terms of the memorandum of understanding acknowledge the significant progress that had been made since mediation by “working together in the spirit of mutual respect, partnership working, cooperative and collaborative working” [*ibid*] and that it was necessary to maintain that commitment. The obligations specified in paragraph 2.5 of the document are indicative of the need to reinforce the commitment of parties to continue working together in a collaborative manner. The reason for the preparation and signature of the memorandum of understanding is unclear, other than that there may have been a perception that parties were not behaving as they had agreed following Mar Hall. Mr C Smith explained that this memorandum was signed around the time when he was trying to get meaningful access to the Infracore contractors’ programme [[TR100000143_C](#), pages 0074–0075]. That tends to suggest that BBS was not being as co-operative as one might have hoped. Mr Foerder, on the other hand, suggested that the “reset” was required because “there was a tendency for T&T [Turner & Townsend] to try and act in a similar fashion to **TIE** pre-Mar Hall” [[TR100000095_C](#), page 0106, paragraph 313].
- 20.32** Although the above comment related to an email from Mr C Smith, dated 26 June 2012 [[CEC01933207](#)], suggesting that there was a need to “reset our behaviours” and predating the memorandum by more than three months, it confirms that Mr Smith was concerned for some time about parties failing to co-operate to the fullest extent necessary.
- 20.33** I am unable to determine whether the explanation given by Mr Smith or that given by Mr Foerder is the more accurate. Having regard to the scale and complexity of the project and its ability to impact on the reputation of BBS and CEC alike, it would be surprising if there were no tensions between the parties even after their resolve to work together in a co-operative manner to achieve their mutual goal of completing the project to York Place. Whatever the causes of the perception that there was a need for the memorandum, it is sufficient to note that none of these tensions spilled into any serious dispute. The parties attributed this to the improved relationship of trust and respect, and to the new governance structure that provided a forum for difficulties to be raised, addressed and resolved [see, eg, Mr Eickhorn [TR100000171](#), pages 0086–0087, paragraph 216.4; Mr Weatherley [TR100000103](#), page 0042, paragraph 75].

Governance

- 20.34** The project governance structure was significantly reformed after the Mar Hall mediation. In a report for the Council meeting on 30 June 2011 the Director of City Development (Mr David Anderson) acknowledged “the difficulties experienced in managing the delivery of the Tram project through **tie** Ltd, as an arms length [sic], Council-owned company” [[CEC02044271](#), page 0015, paragraph 3.81] and he proposed the revision of the governance arrangements for the project. In a later report dated 25 August 2011 to CEC’s councillors Mr Anderson noted that “The

existing governance arrangements for the Tram project are complex [and] have not been effective" [TRS00011725, page 0010, paragraph 3.47].

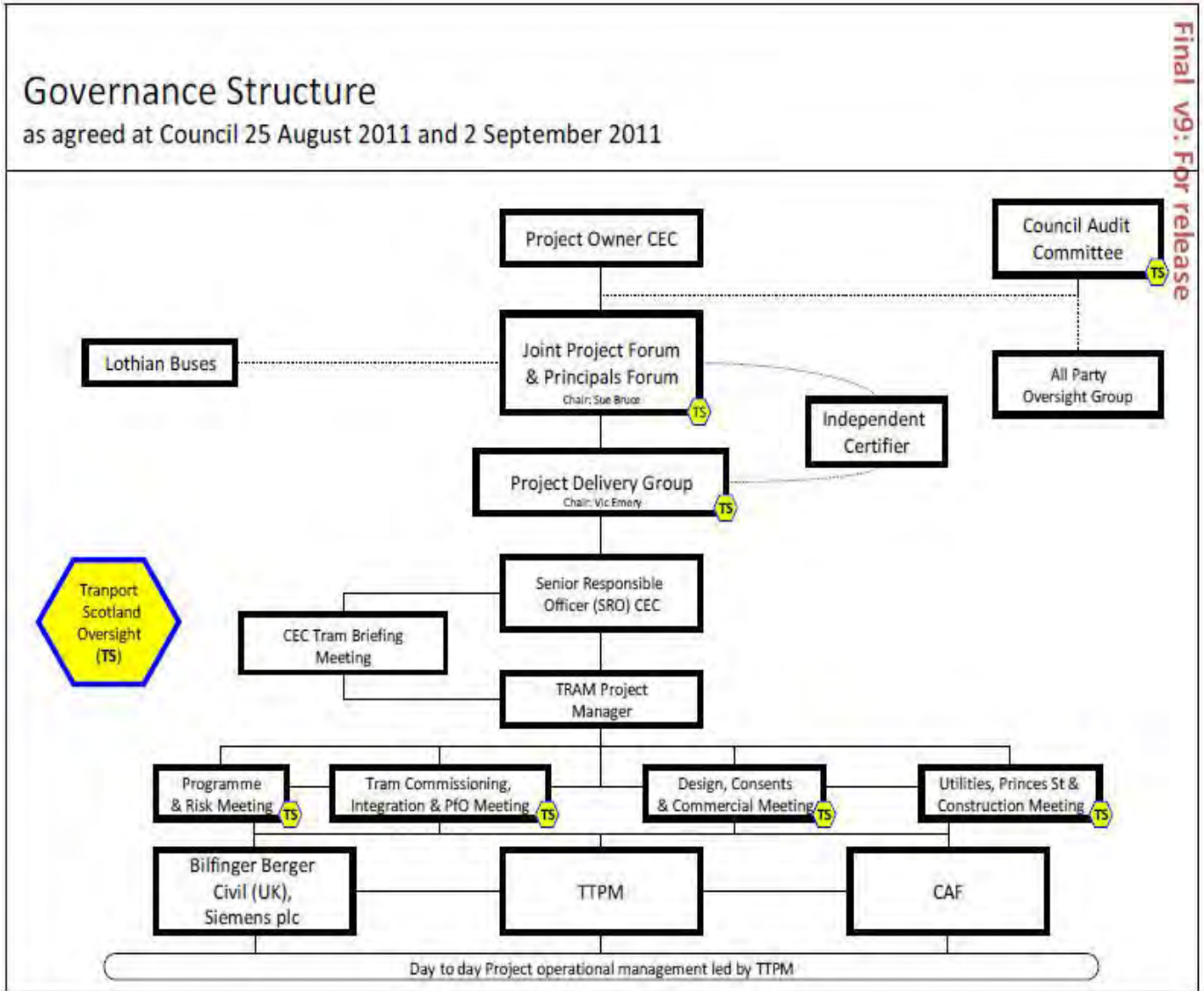
20.35 In a report to CEC's Audit Committee on 26 January 2012 the Chief Executive (Dame Sue Bruce) advised councillors that the new governance arrangements were in place and were set out in Appendix 1 to the report [TRS00019622]. As at January 2012, the key features of the new governance structure were as follows.

- **tie** was removed as CEC's delivery agent for the project and was wound down.
- CEC took direct control of the project as employer, with **tie**'s interest in the Infracore contract having been assigned to CEC on 12 December 2011.
- CEC appointed Turner & Townsend as project manager in autumn 2011. Turner & Townsend had experience in light rail projects and a number of people from that firm who had managed utility diversions in the tram projects in Sheffield, Nottingham and Croydon and who had been involved in other light rail projects, such as Dublin Metro North, were involved in the mobilisation and delivery of the Tram project [Mr C Smith TR100000143_C, page 0078, questions 298–299; Mr Weatherley TR100000103, page 0007, paragraph A6.3]. It was a mature organisation with "established processes and the corporate capability to adapt [its] approach to suit the needs of the tram project and to resolve issues" [Mr Easton TR100000034_C, page 0047, paragraph 141]. This was in stark contrast to **tie**, which had been a new company employing freelance and contract staff as a result of which there was significant "management and staff churn" [ibid].
- CEC appointed Mr C Smith as the SRO for the project [CEC01889838, page 0002].
- Mr C Smith was also appointed as an independent certifier. In that role he was called upon to resolve any disputes that other meetings had not resolved, before escalation of those disputes to the Joint Project Forum.
- CEC established a structured hierarchy of regular meetings to address strategic and operational matters for the project. At the top of the hierarchy was the Joint Project Forum & Principals Forum, a monthly meeting chaired by CEC's Chief Executive and attended by representatives from CEC and the consortium, with principals from the consortium being invited to attend quarterly meetings. Its purpose was "[t]o provide clear strategic leadership and direction to the project", and to resolve issues escalated to it [TRS00019622, page 0012]. Immediately below the Joint Project Forum was the Project Delivery Group, the purpose of which was to manage the operational delivery of the project and to report on progress against programme and budget. It was chaired by Mr Emery. The Vice Chair of the Project Forum was Mr C Smith (the project SRO and independent certifier). Apart from Mr Emery and Mr Smith, the attendees were CEC's Director of City Development, lower-ranking CEC officials, a representative of Turner & Townsend and representatives of BBS. The next level down in the meeting hierarchy consisted of regular operational control meetings, each focused on a particular topic. Once again, these were attended by representatives of both CEC and the consortium. Mr C Smith had an important role in chairing these meetings [CEC01891096, pages 0030–0036 inclusive]. These regular meetings addressed such matters as: programme and risk; testing and commissioning; design, consents and commercial; construction and utilities; and communications and control. If issues could not be resolved at the control meetings, they were escalated to the Project Delivery Group.

- There were also twice-weekly senior management team meetings. One of these was the Tram Briefing meeting, chaired by the CEC Chief Executive (Dame Sue Bruce). The attendees included senior CEC officials involved in the project, Turner & Townsend and representatives of Transport Scotland. The purpose of these meetings was to provide clear operational oversight of the project to CEC as client, to provide challenge on issues and change requests, and to be the client sign-off point for change requests. The other weekly meeting of the senior management oversaw communication and stakeholder issues.
- Councillors exercised political oversight, via a monthly All-Party Oversight Group meeting, and a quarterly Audit Committee meeting. A regular meeting was set up for councillors representing city-centre wards, to keep them informed of progress and provide a formal channel for issues to be raised. In due course, tram supervision came under the remit of CEC's new Governance Risk and Best Value Committee, set up in 2012 to be a more powerful scrutinising committee. Tram supervision also took place before the Finance and Resource Committee and the Policy and Strategy Committee [Mr Maclean [TR100000055_C](#), pages 0060–0061, paragraphs 179–180].
- Transport Scotland was represented at all levels of the project.

20.36 Subsequent to January 2012 it appears that there were changes to the governance structure as will be illustrated in Figures 20.1 and 20.2. The most significant change appears to be the disappearance of the Project Delivery Group as an entity. The governance arrangements following CEC's assumption of direct control of the project were intended to reflect OGC guidance and PProjects IN Controlled Environments ("PRINCE2") project management principles [[CEC02044271](#), page 0015, paragraph 3.84]. The removal of the Project Delivery Group did not detract from CEC's careful monitoring of the project and should be seen as the evolution of the governance structure, which did not have any adverse effect upon the management of the project to its completion.

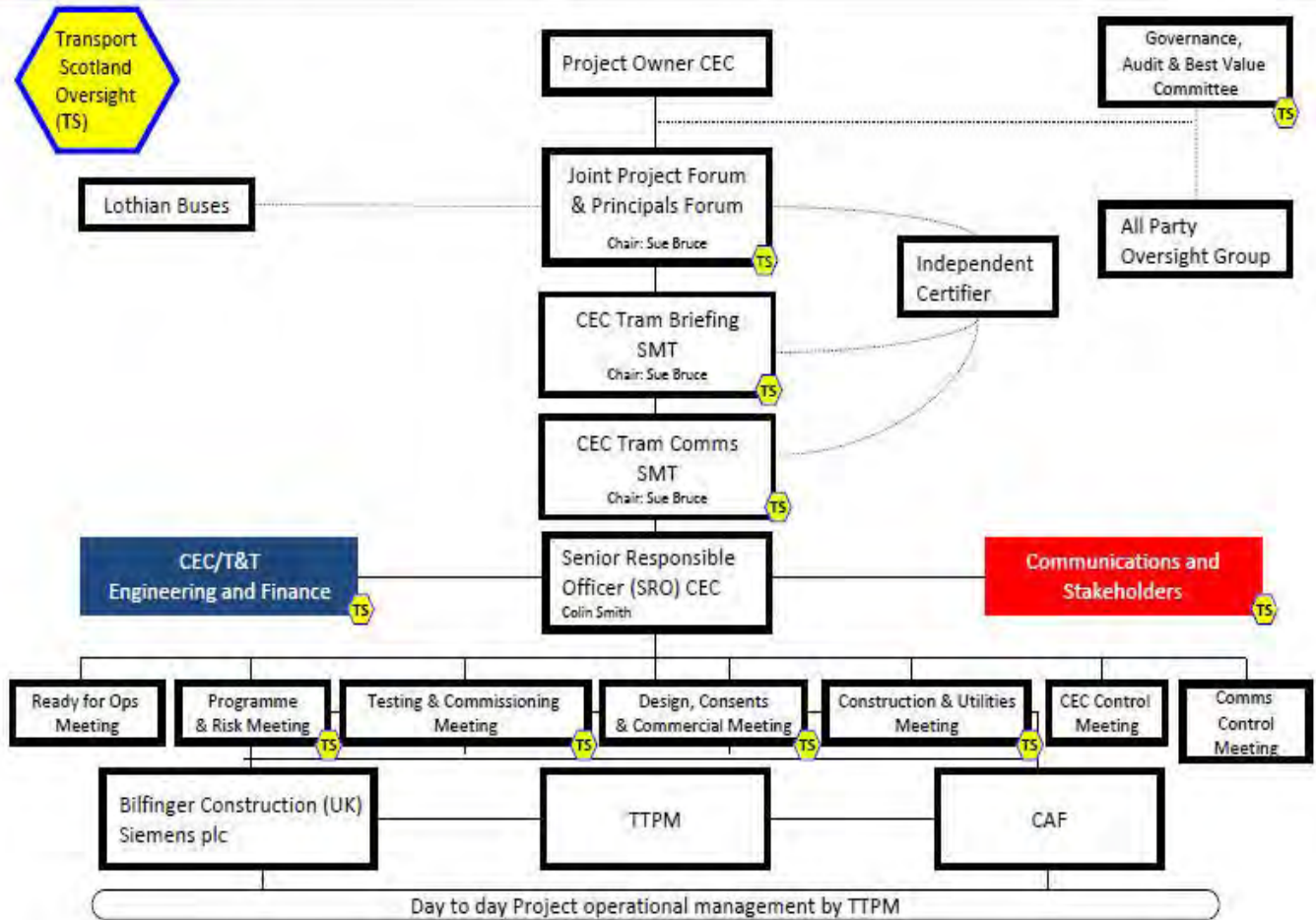
Figure 20.1: Project governance structure as agreed by CEC on 25 August and 2 September 2011



Source: Report by Chief Executive (Dame Sue Bruce) on Tram Project Update to the Audit Committee of CEC on 26 January 2012 [TRS00019622, page 0007]

Figure 20.2: Project governance structure as at 27 March 2013

Governance Structure



Source: Joint Project Forum and Principals Quarterly Meeting, 27 March 2013 [CEC01891096, page 0022]

Discussion

- 20.37** The revised governance arrangements introduced in 2011 were, in my view, a very significant improvement on what had existed previously. Although the mediation had resulted in a resolution that meant that the project should be easier to administer than it had been, nonetheless, a substantial amount of construction work remained to be done and the improved governance arrangements were an important factor in that work's being completed within the revised timetable. A number of features of the revised governance arrangements contributed to that outcome.
- 20.38** Firstly, the governance arrangements were simpler and clearer than those prior to Mar Hall and were easy to understand. That was in stark contrast to the previous arrangements which, as I have noted in Chapter 22 (Governance), were complicated, bureaucratic and ineffective. They lacked clear accountability and scrutiny and were not conducive to clear decision making. This view was shared by Mr Maclean. Although the previous governance arrangements pre-dated his involvement in the project, Mr Maclean had considered them in the context of the structure illustrated in the Interim Report by Audit Scotland in February 2011 [ADS00046, Part 2, page 0036]. He had concluded that it was "a convoluted corporate structure that was not conducive to clear decision making" and for that reason the governance structure was changed [TRI00000055_C, page 0052, paragraph 146].

- 20.39** Secondly, as promoter of the project, CEC took responsibility for, and direct control of, governance. That is most clearly demonstrated by the involvement of CEC's Chief Executive (Dame Sue Bruce). She chaired the meeting at the apex of the governance hierarchy – the Joint Project Forum – and gave regular briefings to councillors as well as occasionally to Ministers [[TR10000084](#), page 0046, paragraph 148]. It is also demonstrated by the involvement of CEC officials throughout the meeting hierarchy. Mr Eickhorn, of Siemens, said that
- “[t]he personnel engagement and the openness displayed by Sue Bruce, Colin Smith, and generally by CEC staff was central to the project turnaround” [[TR100000171](#), pages 0086–0087, paragraph 216.4].
- 20.40** Thirdly, CEC invested a large measure of responsibility for the project in the hands of a single person, Mr C Smith, as the SRO. Unlike Mr Renilson, Mr Smith was aware of his appointment as SRO, understood his responsibilities in that regard and he in fact performed that role. Mr Foerder considered that this was the biggest difference from the position prior to the mediation, and introduced a level of co-ordination that had not previously existed [[TR100000095_C](#), page 0104, paragraph 305].
- 20.41** Fourthly, forums for meaningful, informed and focused discussion between client and contractor were embedded into the governance structure. These meetings were appreciated by both employer and contractor. The aim was for issues to be aired in these meetings rather than in formal correspondence, thereby reducing project correspondence but perhaps more significantly, enabling matters to be raised, discussed and resolved face to face [Mr Foerder [ibid](#), page 0097, paragraph 286(b)]. Mr C Smith used these meetings to deal with contract changes (of which there were a significant number even after settlement). These were discussed by the relevant people, who had the benefit of advice from Turner & Townsend as well as officials from Transport Scotland who were in attendance. Agreement could be reached and the decision endorsed at the next meeting, enabling progress to be made [[TR100000143_C](#), page 0072, question 284(B)]. It seems to me that such an arrangement is preferable to engaging in protracted correspondence, particularly in circumstances outlined by Mr Weatherley where the interaction between the diversion of utilities and Infraco was critical and the handover of sites was changing rapidly [[PHT00000046](#), pages 96–97].
- 20.42** Fifthly, the meetings in the governance structure each had a clearly defined purpose, and the attendees were those with relevant expertise and responsibilities.
- 20.43** Sixthly, open and frank discussion of issues at these meetings was encouraged and took place, allowing solutions to be found to particular problems that arose from time to time [[TR100000095_C](#), pages 0096–0097 and 0103, paragraphs 286 and 303].
- 20.44** Seventhly, there were short reporting lines and a clear and quick escalation route for disputes [Mr McLaughlin [TR100000061_C](#), page 0048, paragraph 138]. Any issues that could not be resolved through the control meetings would be escalated, first, to the Project Delivery Group and, if it was unable to resolve the matter, to the Independent Certifier. If either party did not accept the Independent Certifier's decision, the matter was to be referred to the Joint Project Forum. In the event, only a handful of matters were referred to the independent certifier for a formal decision and no issues had to go beyond him. The contract dispute resolution mechanism remained in place but was not needed after Mar Hall [Mr Foerder [TR100000095_C](#), page 0097, paragraph 286(d)–(e)].

- 20.45** Eighthly, whereas before mediation CEC officials involved with the project had other responsibilities and divided their time between the project and their other duties, the project became a dedicated project for certain officials within CEC and was no longer "a bolt on for them" [Dame Sue Bruce [TR100000084](#), pages 0013–0014, paragraph 42; Mr Maclean [TR100000055_C](#), page 0054, paragraph 152].
- 20.46** Ninthly, a separate forum was created, dedicated to political oversight of the project, with politicians being removed from the operational management of the project. It was described by Dame Sue Bruce as a "safe space" for open and frank discussion among councillors about the project [[TR100000084](#), page 0039, paragraph 123]. Councillors respected the confidential nature of the briefings [*ibid.*, pages 0059–0060, paragraph 191].
- 20.47** The smooth operation of the governance structures in this period was not solely attributable to their design. An important factor was the commitment made by the main protagonists to avoid the acrimony of before. It was in their mutual interest to ensure that the restricted project was delivered. As Mr David Anderson pointed out,
- "[f]ollowing mediation it was clear that both parties had a huge amount of reputational capital resting on delivering the project within the terms of the agreement" [[TR100000108_C](#), page 0114, paragraph 151(b)].
- 20.48** Dame Sue Bruce gave evidence to a similar effect [[TR100000084](#), page 0047, paragraph 152].
- 20.49** In the closing submissions on its behalf, BB identified the removal of **tie** from project governance as the key to the project's success post mediation [[TR100000292](#) page 0276, paragraph 474]. This reflects the evidence of their project director, Mr Foerder, who described **tie**'s behaviour as not being compatible with the management of such a project [[TR100000095_C](#), pages 0111–0112, paragraphs 331–332]. Indeed, he said that, in his 20 years' experience of complex, international infrastructure projects, he had "never worked with people as unreasonable as the people we had to deal with at TIE" [*ibid.*, page 0112, paragraph 334]. In its closing submission to the inquiry, Siemens said that:
- "TIE was incapable of providing stakeholders with the objective financial assessment essential for good decision making. TIE's consistently adversarial contract strategy, lack of objectivity and its outright hostility towards Infraco had merely served to delay agreement, at considerable cost to the City of Edinburgh." [[TR100000290_C](#), page 0010, paragraph 17.]
- 20.50** It is correct that the disputes were only resolved once CEC took over decision making from **tie**. It is also correct that, by the end of 2010, relations between **tie** and BSC had almost completely broken down. However, it must be kept in mind that CEC was only able to settle the dispute because it greatly increased its budget for the project. That option was not so readily available to **tie**. **tie** had been tasked with delivering the project inside a budget which, certainly by the time of the mediation and arguably from the date of signature of the Infraco contract, was insufficient. Attempting to work within an inadequate budget inevitably increased the likelihood of disagreement with the contractors on the operation of the contract. **tie** might perhaps have managed the project differently, and achieved better relations with the contractors, if it had had the larger budget to work with. I prefer, therefore, to take the view that the resolution of the dispute by CEC agreeing to pay BSC substantially more funds than had been available to **tie**, and the parties' commitment to avoiding any more acrimony, were more significant factors in the smooth running of the project after mediation than the removal of **tie**.

- 20.51** Apart from the increased budget available for the partial completion of the project and the changes in governance after Mar Hall, I also consider that the subsequent amendments to clause 80 of the Infraco contract assisted in resolving the impasse that had existed before mediation. They enabled work to continue pending agreement about the estimated cost of any change notification. Although the outcome of the Murrayfield underpass adjudication disclosed that **tie** had failed to understand clause 80 and, at least to that extent, supported Mr Foerder's assertion that **tie** did not understand the contract, I consider that it is unreasonable to attribute all the responsibility for the earlier difficulties to **tie**. BSC's submission of high value estimates for construction work that was the subject of disputed change notifications should also be seen as a contributory factor in the difficulties in the relationship between them.
- 20.52** The removal of **tie** did, however, bring CEC closer to the project, and that had benefits. This was acknowledged by Dame Sue Bruce, who explained the rationale for removing **tie** as follows:

"The Council was carrying the risk and I strongly believed that they needed to have more control over what was happening in order to manage that risk."
[PHT00000054, page 6.]

and Dame Sue Bruce recognised that CEC was the project owner, and was therefore accountable for its delivery, whereas **tie** was responsible for its delivery. She considered that the link between responsibility and accountability had been broken [TR100000084, pages 0006–0007, paragraph 21]. I agree with that view. The removal of **tie** meant that CEC had both responsibility for delivery of the project and accountability. It resulted in shorter reporting lines and enabled decisions to be taken directly by the project owner, resulting in more efficient management of the project. For completeness I should note the evidence of Mr Maclean about CEC's Corporate Programme Office ("CPO") [TR100000055_C, pages 0052 and 0058–0059, paragraphs 147 and 173–175]. Following his appointment as Director of Corporate Governance in 2011, in 2012 Mr Maclean established the CPO in response to failings in various projects including the Tram project. Its purpose was to supervise major projects, and ensure that they were governed properly and completed on time and to budget. Although the Tram project was excluded from the CPO's remit because it was perceived as needing its own "intensive care", it reflects the lack of adequate oversight by CEC of major projects at that time, including the Tram project, for which it was accountable. Mr Maclean observed that if the CPO had been established and if CEC had been running the Tram project "it would have noticed the poor management/governance issues that arose" [ibid, page 0059, paragraph 175]. Before the establishment of the CPO he explained that "CEC was, in many ways only overseeing the project". **tie** was running and project managing the project but there were issues within CEC relating to internal control and its failure to take more control over **tie**. This evidence clearly recognises that it is over-simplistic to place all responsibility for the failure of the project upon **tie** and that CEC bears much of that responsibility because of its failures mentioned by Mr Maclean.

Independent certifier

20.53 At the Mar Hall mediation, BBS had sought the involvement of an independent certifier to determine disputed issues of principle and quantum under the contract. In his evidence to the Inquiry, Mr Eickhorn, of Siemens, stated:

"I believe an Independent Certifier was needed as there had been so many disputes in respect of payment falling due and the agreement of Estimates. It was thought that it would assist to have an impartial view to avoid such disputes happening in the future." [TR100000171, page 0065, paragraph 144.]

20.54 Mr C Smith was appointed as the independent certifier, first in relation to the prioritised works carried out under MoV4, and later for the remainder of the project. His appointment as the independent certifier when he was the SRO raises an issue about the appropriateness of such an appointment when one might expect an independent certifier to be seen to be independent of all parties involved in the project. It is not clear why the consortium considered Mr Smith to be sufficiently independent of CEC or impartial: he had come into the project as an adviser to Dame Sue Bruce, and had a prior history of working with her. Furthermore, he held the position of SRO on behalf of CEC from at least August 2011. It was unusual for someone in that position to fulfil the role of an independent certifier [Mr David Anderson PHT00000043, page 194]. Nonetheless, it is clear that the consortium trusted Mr Smith, and appreciated his contribution to the project. In that regard Mr Eickhorn observed:

"Colin Smith who was appointed as the Independent Certifier managed to hold together many loose ends and did an effective job of managing the stakeholders and maintaining control of the project." [TR100000171, page 0093, paragraph 237.2.]

20.55 The above comment does not seem to me to distinguish clearly between Mr Smith's role as Independent Certifier and his role as SRO. Mr Smith himself did not make much distinction between the two roles and he did not consider that any decisions he was called upon to take as independent certifier were in conflict with CEC or his SRO role [PHT00000053, pages 147–152]. However, as SRO, Mr Smith owed duties solely to CEC, while, as independent certifier, he owed duties both to CEC and to the consortium companies and was obliged to act independently and impartially as between them [BFB00005677, pages 0005–0006, clause 3]. BBS's payment applications were submitted to Turner & Townsend on behalf of CEC and to the independent certifier at least seven days before the valuation date. Thereafter a meeting was to be held to discuss the application for payment, following which the independent certifier was to issue a valuation certificate [*ibid.*, page 0007, clause 5]. In the event of any difference of opinion between Turner & Townsend and BBS that had not been resolved, as independent certifier Mr Smith would be called upon to adjudicate and to make his own assessment [Mr Weatherley TR100000103, pages 0044–0045, paragraph A82].

20.56 Mr Emery said that he had concerns that Mr Smith's dual role involved a conflict of interest, and that he had made these concerns known to Mr Maclean and Dame Sue Bruce. According to Mr Emery,

"[their] answer was: well, he is proven to be very good at what he does. He can be independent. He is the SRO. We needed to have someone to hold Turner & Townsend to account, but also to facilitate any disputes that were going on between the project group and the contractor. So there was a great deal of confidence placed in the independent certifier." [PHT00000052, pages 112–113.]

- 20.57** This response confirms the need for an independent certifier to help resolve any disputes about payment as quickly as possible. However, it fails to address the apparent conflict of interest between Mr Smith acting on behalf of CEC as SRO and adjudicating in disputes about applications for payment between BBS and CEC's project managers. As is noted below, the conflict of interest could have resulted in a disadvantage to either party, including CEC.
- 20.58** Mr Emery thought that if Mr Smith had reached a decision that, viewed objectively, was not in the interests of CEC, probably no one else at CEC would have challenged it, although others within the governance structure might have done [*ibid*, page 115]. Mr Emery cited instances where the advice of Turner & Townsend was overruled by CEC's executive, based on the view of the independent certifier (although he did not say that either CEC's executive or Mr Smith were wrong in what they did) [*ibid*, page 117]. His assessment that nobody at CEC would have challenged Mr Smith's decision as the independent certifier is consistent with the confidence that members of the executive, particularly the Chief Executive, had in Mr Smith and with the impression that they were anxious to bring the partial project to a completion following mediation. Viewed objectively, Mr Smith's dual role as SRO and independent certifier did not give the appearance that CEC had taken all necessary steps to protect its interests as well as the public purse.
- 20.59** Under questioning, Mr Smith came to accept that his dual role gave rise to a potential perception of conflict of interest, although he pointed to the fact that there were no complaints about his performance [*PHT00000053*, page 149]. In determining whether there was a conflict of interest, actual or perceived, it is irrelevant whether there had been any complaints about his performance. In its closing submissions, CEC acknowledged that in an ideal world it was not best practice for the SRO also to be an independent certifier. The explanations tendered in the submissions for the departure from best practice were that Mr Smith himself thought that nobody would have been reluctant to challenge his decisions if they disagreed with them or that all parties were happy with the arrangement and that it did not cause any problems or any increase in cost [*TR100000287_C*, page 0514, paragraph 21.22]. These explanations fail to acknowledge the potential for such consequences arising from the dual appointment. Having regard to the care and attention that parties gave to reforming the poor governance structure of the project that had existed prior to mediation, it is surprising that they failed to appreciate that having the same person performing the roles of SRO for one of the parties and independent certifier was itself an indication of poor governance.
- 20.60** Although several witnesses were complimentary about Mr Smith's work and considered him a positive influence on the project [see, eg, Mr Gough *TR100000295*, page 0005, paragraphs 32–34; Mr Eickhorn *TR100000171*, pages 0086–0087, paragraph 216.4; Dr Keysberg *TR100000050_C*, page 0033, answer 37(a); Mr Weatherley *PHT00000046*, page 75], the impression that I gained from the evidence on this matter was that it was the change in governance and the involvement of Dame Sue Bruce as well as Mr Smith that turned the project around. It was also apparent that there was a consensus that the appointment of an independent certifier had been an advantage, but I was unsure whether parties had given any consideration to an independent person undertaking that role. If that had occurred, the advantages of having an independent certifier would have been achieved without the potential disadvantages associated with Mr Smith fulfilling that role. I have come to the view that it was inappropriate for Mr Smith to hold both roles. It is not possible, as a matter of principle, simultaneously to perform fully, on the one hand, a role that

requires one to act in the interests of all parties and, on the other hand, a role that requires one to act in the interests of one of them. This would most obviously present a risk of decision-making against the interests of the consortium. However, they were experienced commercial entities who were obviously happy with Mr Smith's work. If they had been aggrieved by his decisions, they could (and no doubt would) have challenged them, but they did not do so.

- 20.61** The conflict might equally, however, have operated to the disadvantage of CEC. The most obvious situation in which this might arise is one in which the certifier has adjudicated on a disagreement between the parties. Having done so, he could not thereafter form the view that his decision wrongly favoured the consortium. It is possible that a person engaged to act for both parties would prioritise the avoidance of dispute over cost control, which might be in the interest of the employer alone. My concern is that, within CEC, there might have been insufficient potential for challenge to Mr Smith's decisions as independent certifier. That would create the risk that, on matters of commercial disagreement between the consortium and CEC, some resolutions might be too favourable to the consortium. That risk is all the greater where the project's history made CEC keen to avoid disputes.
- 20.62** Mr Smith explained in evidence that none of his decisions as independent certifier was challenged. On one view, that is a good thing, indicating consensus-based progress of the project. In my view, however, it is not surprising that CEC's executive did not challenge Mr Smith's decisions, given that he also held the role of SRO. Mr Smith's response was that there were a number of people on CEC's side of the project who could have taken issue with his decisions. These included Mr Sim, Mr McCafferty, Mr Coyle, Mr Maclean, officials from Transport Scotland and Turner & Townsend [PHT0000053, page 150]. None of these, however, had the combination of professional expertise and seniority on the project that Mr Smith had. Mr Smith pointed to Mr Easton and Mr M Mackenzie from Turner & Townsend as being able to articulate in detail any nuance that he had overlooked [ibid, page 151]. That is no doubt correct. However, the reality is that they would have articulated a position for CEC on a matter before Mr Smith took his decision on it as independent certifier. It is also true that, higher up the governance structure, decision-making responsibility lay with Dame Sue Bruce. She was not, however, a construction professional and had herself brought Mr Smith into the project so that she could benefit from his technical expertise. I find it difficult to accept that she would have been likely to challenge his decisions.
- 20.63** Mr Smith explained that it was not his style to issue decisions with a warning, implicit or explicit, not to challenge him [ibid, page 152]. I am perfectly willing to accept that this was not his style, but that is beside the point. The fact that he held the dual roles of SRO and independent certifier meant that there was a risk that the protection of CEC's interests on commercial aspects of the project was diminished.

Political oversight

- 20.64** The post-Mar Hall governance arrangements drew a clear demarcation between execution of the project and political oversight. Councillors were briefed about the project, and given the opportunity to scrutinise it, in forums specifically designed for that purpose. They were not involved in project execution or operational decisions, in relation to which CEC's functions were carried out by officials and professionals appointed to act on their behalf. That stands in contrast to the arrangements prior to the settlement, under which some councillors were members of the Tram Project Board and sat as directors of **tie** and TEL.

- 20.65** In his evidence to the Inquiry Mr Emery said that it was never appropriate to have political representatives on the project boards for projects of this type. As he put it, "I think the politics should be done at a different arena, not on a project delivery arrangement" [PHT0000052, page 117]. He cited the problems of political disagreements causing delay in the running of the project, and of leaks to the media of information that should have stayed within the client organisation.
- 20.66** Mr David Anderson said that in all the other construction projects that he had been involved in, there had been a much clearer separation between the strategic role performed by political representatives and the project delivery function of officials than there was on the Tram project prior to the Mar Hall mediation [TR100000108_C, page 0129, paragraph 162]. He also noted that, in other projects that he had worked on, there had been political consensus about the need for investment [ibid].
- 20.67** Mr McGougan said that political consensus was important for long-term infrastructure projects. In view of the duration of infrastructure projects such as the Tram project he suggested the development of a national infrastructure plan, and that the support of all political parties for its contents be secured so far as possible. He referred to a non-political infrastructure commission having been set up in England and suggested that a similar body could be considered in Scotland [TR100000060_C, page 0150, paragraph 390]. The UK National Infrastructure Commission was established in 2015. In 2019, following the conclusion of the evidential hearings, the Scottish Ministers established the Infrastructure Commission for Scotland ("the Commission"). The work of the Commission will assist the Government in formulating a long-term infrastructure strategy to meet the country's needs.
- 20.68** Councillor G Mackenzie, a former convenor of the Transport, Infrastructure and Environment Committee and member of the TPB, doubted that, as a public forum, a council was the right body in which to discuss such things as strategy or tactics in relation to disputes, or figures. Discussions about such matters would disclose information that would be of value to the contractor and detrimental to the Council's interests. In that regard he identified a tension between the democratic nature of a local authority and the proper management of a project that required engagement with a commercial entity. Commenting on the changes in the involvement of councillors after mediation, he observed:
- "Later on, after the mediation, CEC officers effectively took Councillors out of the loop. Councillors got a very restricted update on what was happening and from the point of view of running it on a commercial basis that seemed far better, in my opinion, although from a democratic point of view it was not." [TR100000086_C, page 0126, paragraph 385.]
- 20.69** The reference to councillors getting a "very restricted update on what was happening" contrasts with the evidence of Mr Maclean, mentioned in paragraph 20.70. Councillor G Mackenzie's reference to the arrangement being unsatisfactory from a democratic point of view might suggest that he still fails to appreciate the distinction between councillors requiring sufficient information to enable them to take strategic decisions and officials taking executive decisions to implement the strategy. It is unnecessary for councillors to know the details of such executive decisions as long as such decisions comply with the strategy and the project is on time and within the budget approved by councillors.
- 20.70** Mr Maclean explained that, after the settlement, tram reports went to a range of executive committees of the Council, namely the Finance and Resources Committee, the Policy and Strategy Committee, and the Governance, Risk and Best Value

Committee ("GRBV"). GRBV considered an update on the progress of the project every two months and was given "full detail as to costings". The reporting to these committees was clear and regular, and allowed better scrutiny than had been possible with ad hoc reports to the Full Council [[TR10000055_C](#), pages 0060–0061, paragraphs 178–180].

- 20.71** In my view, there is a clear, and generally recognised, distinction between the proper roles of councillors and officials. The role of politicians, for which they are accountable to the electorate, is to set policy and to take strategic decisions. In general, it is not a proper part of their remit to manage, implement or operate a project. That is the role to be carried out by the officials themselves or through the engagement of suitably qualified third parties or a combination of these two options. It is unlikely to be helpful for councillors to participate in those activities. Doing so would risk almost certain conflict with the proper exercise of their political functions. Councillors must, of course, be kept informed about the project, so that they can scrutinise the implementation of their policy and set new policy objectives if that is appropriate. In my view, the way in which the post-Mar Hall governance structure provided for political oversight of the Tram project was a sensible way to do this and was much improved from the way in which it had been done before. I reject Councillor G Mackenzie's suggestion that it was unsatisfactory from a democratic viewpoint.
- 20.72** I add that it is likely to be disruptive to the smooth running of a major project if the policy behind it remains, or becomes, controversial after contractual commitments have been made. Policy divisions among politicians are liable to undermine stable management of the project. There will be a tension between the democratic imperative to debate policy divisions in public, and the commercial imperative to keep one's negotiating objectives and tactics private. Sometimes, the eruption of policy divisions mid-project will be unavoidable: circumstances may change in unexpected ways and policy may have to be revisited in response. Nonetheless, the aspiration should clearly be, so far as possible, to fix the policy objectives before any contractual commitments are made. The involvement of the Commission in informing policy might assist in achieving political consensus about proceeding with the scheme before the commitment of substantial amounts of public expenditure.
- 20.73** Furthermore, the need for a stable policy foundation points to the need for the politicians making the policy commitment to be given a clear and transparent basis for doing so. If their policy commitment rests on an inadequate assessment of the risks, for example, the scene will be set for a destabilising policy debate as and when those risks transpire once the project is under way.

Transport Scotland involvement

- 20.74** The new governance structure provided for the involvement of Transport Scotland at all levels [[CEC01891096](#), page 0022]. Its re-engagement was a response to the decision of CEC's councillors, in August 2011, against their officials' recommendation, to stop the line at Haymarket [[TR10000061_C](#), page 0029, paragraph 77]. It also followed Audit Scotland's suggestion, in February 2011, that the Scottish Ministers consider whether Transport Scotland should become more actively involved in assisting the project [[ADS00046](#), Part 1, page 0009].
- 20.75** CEC and the Scottish Ministers entered into an agreement setting out the terms for Transport Scotland's re-involvement [[TRS00014693](#)]. It provided for Transport Scotland to give advice and direction to assist CEC in delivery of the project, with the involvement of Transport Scotland officials. The level of Transport Scotland's

involvement is illustrated by the terms of the agreement. Ministers were to be represented by Transport Scotland's Director of Major Infrastructure Projects or such other person as Ministers may nominate as a Project Director who was to be assumed into the governance arrangements at a position to be determined by Ministers in consultation with CEC. Ministers could also deploy other Transport Scotland officials throughout the governance arrangements at positions to be determined by Ministers in consultation with CEC and CEC was obliged to assume these officials into the governance arrangements. The Project Director was entitled to employ external consultants to support Transport Scotland officials and to give directions to CEC, which CEC had to implement unless they would cause CEC or **tie** to be in breach of contractual or statutory duties. The cost of the involvement of Transport Scotland, including the costs of its officials and any external consultants, was to be met by CEC.

20.76 Mr McLaughlin was the project director appointed by Scottish Ministers and was part of the senior management team for the project. He was supported by a senior project manager/engineer with a small team of about three from Transport Scotland who worked alongside CEC. He described Transport Scotland's involvement as "collaborative", helping CEC where it could. He referred in particular to "adding some Ministerial weight to getting cooperation with the service and utilities companies" [[TR100000061_C](#), page 0029, paragraph 78, see also pages 0041–0042, paragraph 117]. For example, Mr McLaughlin and Mr Neil (the Cabinet Secretary for Infrastructure and Capital Investment) met utility company heads to seek their further co-operation with the Tram project [[CEC01889528](#), page 0003]. Mr McLaughlin also said that Transport Scotland provided help with the management of contractual risk and the interface with its works at the Edinburgh Gateway station at Gogar [[TR100000061_C](#), page 0030, paragraph 81]. The involvement of Transport Scotland facilitated access by CEC to Ministers [Mr Maclean [TR100000055_C](#), page 0064, paragraph 191].

20.77 Witnesses were generally complimentary about Transport Scotland's involvement. For example:

- In a report to Council dated 25 October 2012, Dame Sue Bruce described the involvement of Transport Scotland in the project as "extremely positive" [[CEC01891499](#), page 0002, paragraph 2.2.1].
- Mr C Smith considered it to be a "sounding board", and that it brought gravitas. Its involvement helped with discussions with Network Rail in relation to construction near the railway line and with Scottish Environment Protection Agency about its concerns of possible contaminated material in stockpiles taken from railway embankments [[PHT00000053](#), pages 176–177].
- Mr Maclean described Transport Scotland's role as "primarily observing", and thought "there was no discernible difference following TS's increased involvement" [[TR100000055_C](#), pages 0063–0064, paragraphs 189–190]. This was in contrast to the views expressed by the Scottish Ministers or the media. Nevertheless, broadly, he thought that it was good to have it involved [*ibid*, page 0064, paragraph 191]. He considered that its removal from the project in 2007 had been a tactical error [*ibid*, page 0051, paragraph 144].
- Mr David Anderson said that Mr McLaughlin's contribution was "exceptionally helpful throughout" [[PHT00000043](#), page 209].
- Mr Emery thought that Transport Scotland assisted the project, and that it brought good advice on project management to the Project Delivery Group that he chaired. In addition, its involvement in the construction of the interchange at

Edinburgh Gateway, to enable an easy transfer of passengers from the Fife rail line to the tram at Gogar, meant that there was a mutual interest there between CEC and Transport Scotland [PHT00000052, page 121].

- Mr McLaughlin agreed that Transport Scotland's involvement was positive, and that it brought knowledge and client expertise to the project [PHT00000011, pages 204, 206, and 227].
- Dr Keysberg said that "Transport Scotland once they became involved were extremely professional and helpful" [TR100000050_C, page 0033, paragraph 38(b)].

20.78 The positive comments mentioned in paragraph 20.77 about the renewed involvement of Transport Scotland in the project after mediation should be seen from the perspective of those involved in the completion of the curtailed project within the revised budget and timescale agreed after Mar Hall. When one considers that involvement from the perspective of Scottish Ministers and Transport Scotland, the terms of the agreement mentioned in paragraph 20.75 above illustrate that Ministers intended Transport Scotland to take an active role in the governance of the project and gave it powers of direction that CEC had to implement unless it would result in CEC or **tie** breaching contractual or statutory duties. The nature of Transport Scotland's involvement, including its powers of direction, and its apparent success in securing the completion of the curtailed project on time and ostensibly within the budget of £776 million, reinforce my views, expressed in Chapter 3 (Involvement of the Scottish Ministers), that it was a serious error of judgement to withdraw Transport Scotland from the project following the parliamentary rejection of Ministers' proposal to abandon the project. Had that error of judgement not occurred it is probable that the Infraco contract would not have been signed in 2008 and there would not have been the level of wasted public expenditure that ultimately occurred.

20.79 I consider that the experience of the project illustrates the need for Ministers to give serious consideration to the active involvement of Transport Scotland in the governance of any future light rail projects at the construction stage to the same extent and with the same powers of direction as it had after Mar Hall, as well as in the earlier stages leading to the conclusion of the construction contract. Such an involvement is undoubtedly necessary where the Scottish Ministers are the principal funders of the project and wish to protect the public purse and to ensure that their investment delivers the promised benefits of the project on time and within budget. However, even where such projects are funded by a local authority without any direct grants from the Scottish Ministers, there may be merit in the involvement of Transport Scotland to the same extent. In the latter case the local authority would have access to the public-sector experience and expertise within Transport Scotland.

Stakeholder forum

20.80 The revised governance structure after Mar Hall included a stakeholder forum or the External Stakeholder Group. It was intended to allow CEC, as project promoter, together with the contractors, to manage key relationships with stakeholders directly impacted by the project, including Edinburgh Airport, Henderson Global Investors (the promoters of the redevelopment of the St James Centre), business groups such as Edinburgh Business Forum, the Federation of Small Businesses and the Edinburgh Chamber of Commerce, as well as representatives of local communities [CEC02044271, pages 0016 and 0025–0026, paragraph 3.91 and appendix 2]. However, as will be discussed more fully in Chapter 24 on the consequences of the project being curtailed, delayed and over budget, the initial proposals were inadequate.

Surplus tram vehicles

- 20.81** As will be discussed in Chapter 24 on the consequences of the failures in the project, unnecessary public expenditure was incurred in the purchase of an excessive number of tram vehicles (27), assessed in the evidence of Mr C Smith and in the closing submissions on behalf of CEC as being between seven and ten [[PHT00000053](#), page 177; [TR100000287_C](#), page 0305, paragraph 7.47], although a report to CEC in 2011 estimated the excess at between six and ten [[CEC01914650](#), page 0009, paragraph 3.20]. The vehicles had been purchased on the basis that it was intended to construct a line between the Airport and Newhaven but were more than was required to serve the truncated line between the Airport and York Place. The subsequent construction of the line from York Place to Newhaven enabling the surplus trams to operate as originally intended will mitigate the wasted expenditure but will not eliminate it (see paragraph 24.76). Although this issue will be considered in Chapter 24 on consequences in the context of unnecessary expenditure, it is appropriate to recognise the steps taken by CEC to mitigate the level of unnecessary expenditure.
- 20.82** Retaining the surplus vehicles was the least-favoured option: while it allowed the system's total mileage to be spread across a larger fleet, provided spare capacity and was a source of spare parts, the costs (financing, depreciation, insurance and maintenance) were said to be greater than the project needed to incur [[CEC01890999](#), page 0059]. The possibility of using the vehicles for early-morning freight deliveries was considered in November 2011 by the Joint Project Forum but required further investigation [[CEC01890994](#), page 0007].
- 20.83** CEC investigated what, if anything, could be done to realise value from the surplus vehicles. Those investigations did not lead to any value being realised. The steps taken included:
- making an unsuccessful bid with CAF to lease the vehicles to Transport for London for the Croydon Tramlink [[CEC01914650](#), page 0009, paragraph 3.21].
 - investigating leasing the trams out via Rolling Stock Operating Companies, but concluding that demand was not likely to exist [[libid](#), page 0073, paragraph 3.41 onwards].
 - assessing potential demand for the Edinburgh vehicles from other tram systems elsewhere in the UK, in Turkey and in Norway, but concluding that funding for the UK systems was uncertain, the extent of opportunities in Turkey was unknown, and the Norwegian option would have required extensive modification works to the trams for only a short period of use [[libid](#), page 0074].
 - an inquiry for the tram vehicles from Australia was considered, as was their use on the new Borders rail line [[CEC01890068](#), page 0006, item 5; [CEC01891352](#), page 0001, item 1].
 - Mr C Smith asked CAF whether it would buy the trams back. CAF made an offer in relation to ten trams, but nothing came of that initiative [[CEC01891088](#), page 0014; [PHT00000053](#), page 177; [TR100000143_C](#), page 0103, paragraph 345].

Completion and final costs

20.84 Following the Mar Hall mediation, CEC set a revised project budget of £776 million [TRS00011725, page 0003, paragraph 3.13; see TR100000153, page 0019, Appendix 5, for a breakdown]. A statement to the Inquiry by Mr Connarty, a qualified accountant and senior manager in CEC reporting to the Head of Finance, noted that, as at September 2017, the cost of those items that had been included in the £776 million budget stood at £776.7 million [ibid, pages 0007 and 0021–0023, paragraph 8.2 and Appendix 6]. These headline figures demonstrate that the project came in slightly above the post-Mar Hall budget. The underlying figures reveal, in some categories, significant variances between the budgeted costs and the actual costs [ibid, pages 0007 and 0065, paragraph 7.1 and Appendix 17].

20.85 The greatest increases over the post-Mar Hall budget were as follows:

- infrastructure (Infraco): £402.1 million to £419.8 million (+ £17.7 million, or + 4.4 per cent);
- utilities (post-mediation): £2.9 million to £20.5 million (+ £17.6 million, or + 606 per cent);
- project management: £83.1 million to £90.2 million (+ £7.1 million, or + 8.5 per cent).

These increases were offset by savings from the budgeted costs in other areas, including the “Readiness for Operations” and “Land, Property and Other Costs” categories. The main impact of the cost increases, however, was that the contingency allowance, £34 million out of the £776 million budget, was spent in full [ibid, page 0065, Appendix 17].

20.86 Furthermore, additional costs were incurred in relation to the Tram project, beyond those accounted for as part of the £776 million budget. A full understanding of the cost of the project requires that these also be taken into account. Mr Connarty explained that certain matters were outstanding but that he did not anticipate a material change in the final reported cost [ibid, page 0003, paragraph 5.4]. As will be discussed in more detail in Chapter 24 on the consequences of the delays to, restricted scope of and increased costs of the project, the additional costs of resolving outstanding matters amounted to £4.456 million, resulting in a reported cost of £781.118 million. However, apart from the additional costs of resolving disputes further additional costs were detailed by Mr Connarty and discussed in Chapter 24, which resulted in the project’s total cost being £852.591 million after discounting future borrowing costs to a net present value. To gain a fuller understanding of the project cost the following paragraphs consider the composition of the reported cost of £776 million and thereafter compare the figures for the component parts with their equivalent figures at financial close.

Costs within the £776 million Tram project budget

Infraco contract works, including changes

20.87 The post-mediation budget for the Infraco works was £402.06 million [ibid, page 0019, Appendix 5]. This was made up of:

- £360.06 million for the off-street works;
- £38.8 million for the on-street works; and
- £3.2 million for maintenance, mobilisation and spare parts. [WED00000092, page 0003, which is Turner & Townsend’s commercial summary in its final Infraco Cost Report; Mr Easton TR100000034_C, page 0031, paragraph 99.]

- 20.88** The post-mediation contract price for the Infraco works was £413,102,911.41 [[WED00000101](#), page 0004, which is Turner & Townsend's Infraco Final Account; Mr Easton [TR10000034_C](#), page 0031, paragraph 99]. That was made up of £362,500,000.39 for the off-street works; £47,384,510.07 for the on-street works; £2,205,310.95 for maintenance mobilisation; and £1,013,090 for spare parts [[WED00000101](#), page 0004].
- 20.89** The budgeted costs of the on-street and off-street works were therefore lower than the contract prices. In the case of the off-street works price, the difference is that the budget took into account the de-scoping of certain works in the Forth Ports area, which was subsequently implemented by a contract change [[CEC02086442](#), page 0001; [WED00000101](#), page 0005, tCO528]. In the case of the on-street works, the budgeted price appears to have assumed that certain value engineering opportunities would be achieved [[CEC02086442](#), page 0001].
- 20.90** The total cost of the work by BB and Siemens under the Infraco contract was £427,206,309.52 exclusive of VAT [[WED00000101](#), page 0003; Mr Connarty [TR100000153](#), page 0028]. The price had increased from the post-mediation contract price because of changes: a net increase of £4,295,156.90 due to changes under schedule 45, being the schedule that concerned the on-street works, and a net increase of £9,808,241.21 due to changes under clause 80, which applied to the other contract works [[WED00000101](#), page 0004; on the distinction between clause 80 and schedule 45, see Mr Foerder [TR100000095_C](#), pages 0095–0096]. The total net value of these changes was £14,103,398.11.
- 20.91** Notable, or significant, post-settlement agreement changes included the following.
- The increase of £4.541 million attributable to the delay caused by the Council's decision in August 2011 (reversed in September 2011) not to approve the recommended option of a line to York Place.
 - The increase of £6.460 million attributable to the creation of the 22-week "time bank".
 - An increase of £3.263 million for the construction of the Edinburgh Gateway, as part of Transport Scotland's project for an interchange for trains travelling from Fife. This was funded by a separate Transport Scotland grant [[TR100000153](#), page 0024, Appendix 7].
 - A deduction of £2.433 million for the omission of works in the Forth Ports area.
 - A deduction of £2.156 million for the omission of work at St Andrew Square and St David Street.
 - A deduction of £1.1 million for cancelled trackwork materials relating to the stretch between York Place and Newhaven.
- 20.92** Of the £427,206,309.52 total, £7.4 million was funded by contributions: for example, from Transport Scotland in relation to the Edinburgh Gateway, and from the Royal Bank of Scotland in respect of the RBS tram stop as well as from other CEC budgets for public realm works. Hence the outturn cost reported by CEC against its tram budget was £7.4 million lower than the actual expenditure, at £419.8 million instead of £427.2 million [[libid](#), pages 0028, 0024 and 0065, Appendices 9, 7 and 17]. In my opinion it was correct to deduct the contributions from Transport Scotland from the actual total expenditure because they relate to work undertaken on behalf of Transport Scotland for its project at the interchange at Gogar. That project was not part of the Tram project although it was of benefit to it as it enabled passengers

alighting from trains from Fife to board trams at that location. It was also appropriate to deduct contributions from third parties in respect of particular items of expenditure. Some, but not all, of the expenditure on public realm works funded from other CEC budgets was included in the additional costs of the project discussed in Chapter 24 on the consequences of the delays to, restricted scope of and increased costs of the project. However, it was appropriate to deduct some of the public realm works not directly related to the Tram project.

Utilities

- 20.93** The post-mediation budget for utilities works was £2.91 million, of which £1.1 million was for legacy utility work on Leith Walk [TR100000153, page 0065, Appendix 17; WED00000092, page 0001]. In spring 2011, **tie** had indicated to Mr C Smith that a provision of £1.9 million would be sufficient for the remaining utilities works [PHT00000053, page 130]. He considered that a joint report to CEC in October 2010 by the Director of City Development (Mr David Anderson) and the Director of Finance (Mr McGougan) had been inaccurate in stating that utility diversions at that stage were 95 per cent complete *ibid.*, page 129; CEC02083124, page 0005, paragraph 2.29].
- 20.94** Mr Smith considered that the information that **tie** provided to him about the project in 2011, including the utilities work, was unreliable. In the post-Mar Hall budget £5 million was allocated to utilities risks [TR100000153, page 0020, Appendix 5a]. It is not clear whether that reflected Mr Smith's scepticism about the information that **tie** had given him. However, his instincts were correct: the utility works in the post-mediation period were more extensive, and expensive, than forecast in the budget. Utilities work that had apparently been completed prior to mediation was defective: for example, fire hydrants that had been replaced were not to the appropriate British standard and had to be replaced [PHT00000053, pages 130–133]. On the basis of the figures provided by Mr Connarty, the outturn cost for utility works for that period of the project alone was £20.5 million, which was more than ten times the estimate of £1.81 million [TR100000153, page 0065, Appendix 17]. The equivalent figure in Turner & Townsend's final cost report is £21.1 million [WED00000092, pages 0031–0033]. I have not been able to reconcile these figures but have used the lower figure as that was used by Mr Connarty in determining that the total cost of the project was £776.7 million. Further, the outturn cost for utility works did not include the £6.459 million cost of the 22-week time bank, which was largely used up in accommodating delays relating to utility diversions. That figure was included in the cost of the Infraco contract works.
- 20.95** These costs and delays were successfully managed in the post-mediation period, and did not cause overall cost overruns or delay on the project. They are, however, another indication of the difficulties encountered in accurately estimating the time and cost of diverting utilities in a city centre and of the need for proper management and supervision of the works to avoid the additional expense of remedying defective work, as occurred with Scottish Water assets.

Project management

20.96 The post-Mar Hall budget of £776 million included estimated project management costs of £83.1 million compared with an estimated £54.1 million in the budget at financial close. The actual costs incurred for project management were estimated at £90.2 million [TR100000153, page 0065, Appendix 17]. Included within the latter figure were the total **tie** project management costs of £67,762,176 [TR100000153, page 0021, Appendix 6].

CAF

20.97 The original contract price for the tram vehicles, at contract close, was £58,057,440, broken down as follows:

- £55,041,624.88 for the tram vehicles themselves;
- £740,009.03 for related depot equipment;
- £2,275,806 for tram maintenance mobilisation. [USB00000032, pages 0003–0004, clause 2.5; BFB00053258, page 0032.]

20.98 In Chapter 24 on the consequences of the failure of CEC to deliver the project on time, within budget and to the extent projected, I have calculated wasted expenditure on the basis of the original price of £55,041,624 for the tram vehicles included within the total sum of £58,057,440 at contract close mentioned in paragraph 20.97. However, the final sum paid to CAF exceeded that latter price. It was £64,693,443 – an increase of £6,636,003. Of that increase, the majority appears to be attributable to delay. My conclusion in that regard is drawn from Mr Connarty's statement [TR100000153, pages 0025–0026] and CAF's contribution to the Project Phoenix Price Proposal [BFB00053258, pages 0030–0032]. Mr Connarty's statement is clear about the value attached to changes. These include a total of c. £339,000 for "Modification 1" and "Modification 2". He attributes sums of £682,531 and £4,429,775 to "Phoenix and Prioritised Works". It is reasonable in my view to infer that these latter costs relate to delay. CAF's Project Phoenix Price proposal was largely concerned with claiming payment for delay: it sought over €9 million in delay costs, more than a third of which related to charges for the storage, security and maintenance of tram vehicles in Spain, which CAF was unable to deliver because of delays in the completion of the depot at Gogar [BFB00053258, page 0031; see also TR100000290_C, pages 0086–0087, paragraphs 246–250]. Further, CAF only included about £333,000 for change. That claim for change, being labelled as "TSA Change 1" and "TSA Change 2" in CAF's Phoenix proposal, appears to correlate to the £339,000 that CAF was paid for Modifications 1 and 2. The remainder of CAF's Phoenix claim was wholly concerned with delay; and from that I infer that the payments labelled by Mr Connarty as relating to "Phoenix and Prioritised Works" also therefore relate to delay.

Final costs compared with financial close budget

20.99 At the Inquiry's request, Mr Connarty compared the estimated outturn costs of £776.7 million against the budget of £515.2 million fixed at financial close [TR100000153, page 0065, Appendix 17]. The following table is a simplified version of Mr Connarty's, and shows the areas in which, and the extent to which, the financial close budget was exceeded. This comparison does not include the additional costs listed in Table 24.1 in Chapter 24 on the consequences of the failure to deliver the project on time, within budget and to the extent projected. The categories are listed in Table 20.1 in order of their impact on the project budget, starting with the largest.

Table 20.1: Comparison between Financial Close Budget and Estimated Final Expenditure

Category of expenditure	Financial close budget (June 2008)	Estimated final expenditure	Excess/shortfall of expenditure over budget (% increase/reduction over original budget)
Infraco*	£238.5m	£419.8m	£181.3m (+76%)
Utilities	£48.6m	£103.5m	£54.9m (+113%)
Project management	£54.1m	£90.2m	£36.1m (+67%)
Off-street infrastructure (other)	£10.3m	£21.5m	£11.2m (+109%)
Tram vehicles	£58.1m	£64.7m	£6.6m (+11%)
Land, property and other costs	£28.8m	£31.3m	£2.5m (+9%)
Legal	£5.8m	£8.1m	£2.3m (+40%)
Communications and stakeholder	£2.5m	£3.3m	£0.8m (+32%)
Design*	£27.1m	£26.7m	- £0.4m (-1.5%)
Readiness for operations	£11.1m	£7.8m	- £3.3m (-30%)

* Approximately £6.032 million of design-related costs were paid to the consortium after the SDS contract was novated to it. These costs form part of the Infraco costs [PHT00000048, pages 10–12 and 47; TR100000248]. The table above reflects that treatment. If these costs are instead included in the "design" line in the table, the final expenditure on design totals £32.7 million, and the increase over the original budget is £5.6 million (+21 per cent). Reducing the "Infraco" line by a similar amount reduces the increase over the original budget to £175.2 million (+73 per cent).

Chapter 21

Risk and Optimism Bias

- 21.1** It is not unusual to hear of construction projects that have gone dramatically over budget. Risk – or the danger that there will be events that result in delay or in costs increasing – is a fact of life well known to those involved in such projects, including the personnel at **tie** Limited ("**tie**"). A number of measures may be taken in response, which can be grouped into the following four categories.
- (1) Elimination of risk
 - (2) Transfer of risk
 - (3) Minimisation/control of risk
 - (4) Quantification of risk
- 21.2** In the Tram project **tie** had a risk policy and advisers were engaged to assist in management of risk [Mr Bourke [PHT0000022](#), pages 3 and 5]. **tie** set out to use measures falling into each of the categories above to some extent, but it is apparent that ultimately it was not successful, and it is necessary to consider why that was.
- 21.3** Before doing so, for completeness, I should note two areas of risk management that I do not consider further in this chapter. The first is that, in addition to measures from the four categories above, **tie** had put in place insurance in respect of risks arising from liability as employers or owners of property. However, as this does not address the costs of the works as such, I do not consider it further. The second area is the legal structure required of the parties in order to undertake the work. From the outset, it was part of the procurement strategy that the various broad components of the works (design, infrastructure and tram vehicles) should be procured individually. The view was that this would encourage more competitive pricing and ensure the lowest possible cost. However, having the various elements of the works under different contracts gave rise to a risk that, if there was delay or defective performance under one contract, the party to one or more of the others would claim that it affected their ability to carry out the works or would result in additional cost under their contract. Ensuring that each contract was properly managed so that it delivered the required outcome at the correct time was therefore critical. There was, to some extent, an inevitable trade-off between getting the best price and accepting risk. The intention was that this could be addressed by requiring that the parties undertaking the infrastructure works and supplying the trams do so as a consortium. The advantage of this is that each member of it would be liable for any failure, whether it was by it or a consortium partner. This approach was taken further in the intent that the design contract be novated to the consortium. This legal device had the effect that all the rights and obligations as between **tie** and Parsons Brinckerhoff ("**PB**") would be transferred to be between the consortium and **PB** and that all the work that had been undertaken by **PB** prior to the novation would be deemed to have been done under the replacement contract between **PB** and the consortium. The intention of this was that **tie** would be able to look to the consortium in the event that there were problems with the design, leaving the consortium to seek redress from **PB**. In fact, the design was so far behind schedule that it made it difficult for **tie** to gain the benefit of novation to Bilfinger Berger, Siemens and CAF ("**BSC**"). Also, because the design was not finished at the time that the novation took place, it meant that if **PB** made a change to the design, it would constitute a Notified Departure in terms of the infrastructure contract ("**Infraco** contract"), which would entitle the

members of the consortium to additional payment. It also resulted in the situation in which BSC was responsible for managing PB while being in the position of getting additional money if there was a design change.

- 21.4** Mr Bourke, a risk manager who was employed by **tie** from 2003 to 2007, explained that previous tram projects had been studied and an attempt had been made to identify the lessons that could be learned from them [**ibid**, page 20]. This gave rise to a number of strategies aimed at eliminating risk. Perhaps the most significant measures to come from this were the original intent that the design for the infrastructure works would be fully complete by the time that a price for those works was agreed, and that the works to divert utilities would be carried out under a different contract and would be complete before the Infraco works got under way [see draft Final Business Case ("FBC"), November 2006, **CECo1821403**, pages 0017–0018, 0085 and 0090, paragraphs 1.80, 7.53 and 7.77]. Mr Bourke agreed that in these respects the strategy hinged on achieving the right design at the right time [**PHT00000022**, pages 9–10]. Although these were seen as important elements of the procurement strategy, it is apparent that they were not implemented, and that is the simple answer to why this element of the strategy was not successful in removing risks. I have considered these matters earlier in this Report (see, e.g., 5.86; 6.118–6.123; 12.54).
- 21.5** As the risks had not been removed, the next issue was whether they could be transferred to the contractors. This was the intention within **tie** in relation to the risk arising from the incomplete design, and it was this that led to the discussions in Wiesbaden. However, as was noted in Chapter 12 (Contract Close), both the written agreements that followed those discussions, namely the "Agreement for contract price for phase 1A" [**CECo2085660**, Parts 1–2] and "Schedule Part 4 – Pricing" ("SP4") [**USB00000032**] left substantially the entire risk with **tie**, as it was the intended purpose, as well as the effect, of each of the pricing assumptions in SP4 to allocate to **tie** the risk in the event that the circumstances were not as assumed. Of those assumptions, the most relevant were that:
- the delivery of design would be aligned with the Infraco construction delivery programme [**ibid**, page 0006, clause 3.4.2].
 - the design delivery programme under the System Design Services ("SDS") Agreement was the same as the programme contained in Schedule 15 to the Infraco contract [**ibid**, page 0006, clause 3.4.4].
 - no additional earthworks would be required and the consortium would not encounter any below-ground obstructions, voids, contamination or soft material [**ibid**, pages 0006–0007, clause 3.4.11].
 - the works required in relation to the road structures in Princes Street, Shandwick Place, Haymarket junction and St Andrew Square would not extend to full-depth reconstruction [**ibid**, page 0007, clause 3.4.12].
 - the diversion of utilities would be complete in accordance with the programme, save for ones that had been specified in the Infraco contract as being the responsibility of the consortium [**ibid**, page 0008, clause 3.4.24].
- 21.6** I consider some of these assumptions further in paragraph 21.9 below, in the context of quantification of risk. For present purposes what is relevant is that, as was the position with elimination of risk, the strategy underlying the assumptions was of no effect because it was not implemented.

- 21.7** Turning to efforts to minimise and control the retained risk and to quantify it, the measures that were put into effect can conveniently be examined together. The first stage was to identify each risk and to consider the consequence for the Edinburgh Tram project (the "Tram project") if it materialised. Initially, assessment of risk fell within the services that were to be provided by PB under the SDS contract but, following concerns about its performance, the matter was taken from it [Mr Bourke [PHT00000022](#), pages 5–12; [TR100000110](#), pages 0039–0040, 0042–0043 and 0057–0058, paragraphs 41, 46 and 65 and 'Brief on Proceedings of cost review' – [CEC01629344](#), page 0005]. It was considered that PB was not providing **tie** with the deliverables required under the contract. Initially, after the work was taken from PB it was carried out by Technical Support Services ("TSS"), which had originally been engaged to review the work done by PB. Once TSS assumed the primary role, the review function was provided within the **tie** team [[PHT00000022](#), pages 12–13]. Later, Mr Hamill succeeded Mr Bourke and took on the primary role, with TSS returning to its reviewing role. Mr Bourke explained that the issues with the performance of the contract by PB meant that procurement of the Multi-Utilities Diversion Framework Agreement ("MUDFA") works and the early stages of the Infracore procurement were carried out when risk management was not performing as intended [[ibid.](#), pages 15–17]. However, he was of the view that, by working together with TSS, **tie** was able to recover and that it did not affect the risks of controlling and managing procurement [[ibid.](#), pages 15–16].
- 21.8** Within **tie**, assessment of risk was carried out by a team that would consist of the person to whom the risk in question had been assigned, a cost manager (who would be a quantity surveyor) and the project manager, and they would seek to reach a consensus view on the risk issues [[ibid.](#), pages 27–28; Mr Hamill [PHT00000023](#), pages 7–8]. In addition, on occasions when it was appropriate, the team might include a commercial manager and/or a planning manager. As is usual, the information resulting from these exercises was compiled into a risk register. This was initially carried out in a spreadsheet that was later held in specialist risk management software [[PHT00000022](#), page 6]. Once the risks were identified, the manager for each risk would seek to identify mitigation measures that would reduce the likelihood of the risk occurring and/or limit the adverse consequences if it did. The measures, and the view as to their efficacy, were recorded in the risk register and were the subject of internal review [[ibid.](#), pages 22–24]. The contents of the register were reviewed over time, including whether further risks required to be added and whether the proposed mitigation was effective. The most important or critical risks were included in the primary risk register and were periodically presented to the Tram Project Board ("TPB") [[ibid.](#), pages 31–33].
- 21.9** In order to quantify the risks that existed from time to time, a quantitative risk analysis ("QRA") was undertaken. It is a standard method for evaluating the cumulative impact of risks [[TR100000110](#), page 0008, paragraph 9]. This requires that in relation to each risk an assessment is made of the residual risk after mitigation measures have been considered [[PHT00000022](#), page 27]. A view was taken as to the percentage likelihood of each risk materialising and its minimum, maximum and most likely cost impact [Mr Hamill [TR100000042_C](#), pages 0004–0005; Mr McGarrity [TR100000059_C](#), page 0014]. This data was then processed in a Monte Carlo simulation – a recognised analysis technique in which the possible outcomes and their probabilities are assessed. As both the occurrence of the risk event and its consequences are inherently uncertain, it is necessary to take account of probabilities so that, rather than produce a single figure for risk, it provides a range of possible distribution of outcomes. It means that an assessment can be done to determine the likelihood

of various outcomes. A probability can be selected and it will be possible to obtain a figure as to the risk allowance that should be made in order to have the desired degree of confidence that the budget will not be exceeded. If a selection is made that there should be only a 50 per cent probability that the budget is not exceeded, one allowance for risk will be indicated. However if, say, it is necessary to have a figure for which there is an 80 per cent confidence that it will not be exceeded, the allowance will be higher. As the degree of confidence sought rises, the increases in the allowance that must be made gets correspondingly greater as it is necessary to take account of risks which are remote but which might have large consequences if they occur [Professor Flyvbjerg [PHT0000057](#), pages 3–4 and 8–15].

Risk in the FBC

- 21.10** Although, for reasons of commercial sensitivity, the precise figures were not published in the FBC, at the time it was issued, an allowance of just under £49 million was made for risk [[CEC01423172](#); [CEC01423173](#)]. The FBC notes that the cost estimate included a risk allowance of 15 per cent [[CEC01395434](#), Part 1, page 0017, paragraph 1.73 and Part 9, page 0178, paragraph 11.41]. This, and all the quantification up to that date, made the assessment on a P90 basis, which meant that there was a 90 per cent probability that the allowance would not be exceeded. This is more cautious than would be the case in most construction contract situations, where the probability required would not normally exceed 80 per cent. On that basis, it can be said that the allowance made in December 2007 was cautious. A report from the Office of Government Commerce (“OGC”) Readiness Review Team sent to City of Edinburgh Council (“CEC”) on 15 October 2007 endorsed the risk allowance that had been made, but appears to have conflated the issue with the availability of funding when it referred to “overall headroom” [[CEC01496784](#), pages 0003–0004]. The FBC brought out a total cost of £498 million, including the allowance for risk, and noted that the available funding from both Transport Scotland and CEC was £545 million. The difference between these two sums – £47 million – was the “headroom” and it was distinct from and in addition to the risk allowance [[CEC01395434](#), Part 1, page 0017, paragraph 1.73].
- 21.11** The risk allowance made at the time of the FBC (and all the allowances before it) assumed that the procurement strategy would be implemented such that design and utility diversions would be substantially completed prior to the award of the Infraco contract [Mr McGarrity [TR10000059_C](#), pages 0049–0050]. However, even the first version of the FBC [[CEC01649235](#)], published in October 2007,³¹ noted that the assumption that the overall design work would be completed to detailed design stage when the Infraco contract was signed would no longer be true [[CEC01649235](#), Part 5, page 0104, paragraph 7.53]. It also noted that MUDFA works would not be completed until winter 2008 but said that “potential conflicts between the utilities and infrastructure works will be minimised” [*ibid*, Part 5, page 0108, paragraph 7.77]. It is important to note, however, that this was on the basis that, at that time, the work was expected to be completed on cost and programme. Although this was not wholly unrealistic in December 2007, it was nonetheless an assumption but in the early months of 2008 it became increasingly obvious that it was unlikely to be true.

³¹ The header of this document includes a date of 3 October 2006 but the title page and witnesses confirmed that it was the draft of October 2007.

- 21.12** The completion of design works before the Infracore contract was let and the completion of MUDFA works before the infrastructure works got under way were both key parts of the procurement strategy that were intended to control or mitigate risk. As Mr McGarrity said, the intention was that all risks other than the costs of utility diversions or changes to design made by CEC post-contract award would be borne by the contractors [TR100000059_C, page 0005]. Even at the stage of the initial draft of the FBC, it was apparent that these elements of the strategy would not be attained. In relation to completion of the design, Mr Bell noted that by autumn 2007 it was clear that the design would not be complete and that the bidders would not provide a fixed price by taking all the risk of change [PHT00000024, pages 140–141], and he accepted that there had been slippage in all versions of the design programme [ibid, pages 149–150]. As this meant that it was clear it would not be possible to adhere to the procurement strategy, this should have been disclosed clearly to CEC, together with an indication that it changed the project risk profile. It called for an examination of what level of risk would result. Consideration of whether there would be sufficient funding and whether the project represented a good use of public money (the Benefit to Cost Ratio) should also have been reviewed. Instead of this, it is apparent from the FBC that the principal focus and the main direction of energies was getting the project over the line to have contracts concluded on the basis of unverified assumptions that all would be well.
- 21.13** As was noted in Chapter 10 (Events between October and December 2007), even when the December draft of the FBC was issued – and therefore when the risk allowance was determined – there was still no finalised agreement with the infrastructure contractors as to the price for their works. Significantly, there was also no agreement as to how the issue of the incomplete design was to be addressed as between the parties and who would bear any additional costs arising from the completion of the designs. This led to the negotiations in Wiesbaden during December and the follow-up agreement also discussed in Chapter 10. As I note there, these agreements did not have the effect of transferring the risk of those additional costs. It is apparent, however, that this was not understood by anyone in **tie** at the time, and the view was that the agreement had removed the risk of design development from **tie** [Mr McGarrity TR100000059_C, pages 0095–0096, answer 101 and page 0098, answer 104]. It is therefore not surprising that there was no specific mention or quantification of the additional risk *at this stage*. It is also not surprising that the suggestion from Mr Fraser that there be an additional contingency of £25 million to cater for changes between the preliminary designs and the final designs was not considered necessary and provoked Mr McGarrity's comment "ALARM BELLS ALL OVER THE PLACE, WHAT ADDITIONAL £25 M???" [CEC01383999; CEC01384000]. This incident is mentioned in Chapter 13 (CEC: Events during 2006 and 2007) in the context of the report to CEC on 20 December 2007.
- 21.14** Mr Hamill was asked whether the risk that the contractual arrangements were effective should itself have been the subject of quantification for inclusion in the risk allowance, but he did not consider that the function of the risk allowance was to deal with the contracts not being sufficient to achieve the stated objective [TR100000042_C, page 0019, answer 40]. This makes sense. It is apparent that the risk allowance is intended to address construction risks and not legal risks that, in any event, could not be assessed without input from legal advisers. The task of those advisers on risk management was to take steps to bring about a situation in which the risk was allocated as intended, rather than to quantify the possibility that the contract did not do as it was said to do. The failure *at this stage* to quantify the risk

relating to the effectiveness of the contractual arrangements was part of the failures in relation to negotiation of the contract rather than any failure in risk management.

- 21.15** Within **tie** there was, understandably, a view that risk was managed in an appropriate way [Mr Bourke [PHT0000022](#), pages 2–3; Mr Hamill [PHT0000023](#), pages 2–3]. More significantly, although the OGC noted in its report of the review carried out in September and October 2007 that the actions of the TPB to respond to risks did not always reflect identified risks, it concluded that the processes for risk monitoring in **tie** were “impressive” [[CEC01562064](#), page 0007, paragraph 10]. Professor Flyvbjerg was of the view that the work undertaken to understand risk was similar to that for other projects [[TRI00000265](#), page 0027].³²
- 21.16** Although these views address the procedures that were used to provide the risk allowance for the FBC, there was evidence of concerns in relation to the amount of the allowance that was made. In its review of the draft FBC, Transport Scotland had expressed a concern that the allowance of just 12 per cent for risk was too little, and it considered that the assessment should be made at P80 and P50 levels of confidence in addition to P90. The response from **tie** was that the figure had been derived from the QRA and had been agreed as appropriate in autumn 2006 by Transport Scotland advisers [[CEC01631559](#), pages 0005 and 0007]. Professor Flyvbjerg considered that the estimate of risk was so low that it raised concerns about the quality of the work undertaken [[TRI00000265](#), page 0025]. Although Mr Coyle expressed the view that the risk allowance did not seem adequate [[TRI00000144_C](#), page 0013, paragraph 47] and Ms Andrew considered it to be low [[TRI0000023_C](#), page 0012, paragraph 4, pages 0018–0019 and elsewhere], I am not inclined to place any weight on their concerns as they are highly subjective and are not supported by any analysis or evidence. However, it is apparent that, in some instances, the allowance made was wholly inadequate. The best example of this concerns the MUDFA works. In the budget at FBC in December 2007, the price for these was noted as being approximately £51.5 million and the risk allowance for them was just under £11.5 million. At financial close these figures were reduced to approximately £48.5 million and £8.5 million respectively. [[CEC01423173](#)]. At the time that he left the project, Mr McGarrity thought that the cost of utility diversions was about £70 million and work was continuing. After some reluctance to answer the question he agreed that the risk assessment made for utility diversions was inadequate; in fact, the cost overrun was approximately £50 million [Mr McGarrity [PHT0000047](#), pages 123–126]. The reasons for the increase are considered in Chapter 8 (Utilities), but for present purposes the point is that even the application of a suitable process will not necessarily produce an accurate result.
- 21.17** Professor Flyvbjerg noted that although the method of analysis and the use of the Monte Carlo simulation give the impression of mathematical certainty, the information obtained from the exercise is only as good as the information put into it [[PHT0000057](#), pages 32–33], and Ms Andrew made the same point [[TRI0000023_C](#), page 0007, paragraph 4]. The inputs to the QRA are an exercise of judgement at the initial stage. The facts that a number of people provide input and that they are experienced should assist in obtaining accurate figures, but this is not always the case. Sometimes they may simply be wrong or have failed to anticipate a risk. More generally, the problem is that the initial determination of the values to be put on the individual risks and their consequences will be affected by optimism bias [[PHT0000057](#), pages 5–6]. I consider this concept in more detail in paragraphs 21.54–21.97 below.

³² See paragraph 21.54 below for the designation of Professor Flyvbjerg.

Changes in the risk allowance after FBC

21.18 Both in the choice of the P90 basis to assess risk and in relation to the process that had been undertaken to identify and quantify risks at the stage of the FBC, I do not consider that any criticism can be levelled at **tie**. Although some risks were understated, even in those instances I do not consider that this alone invites any criticism of the people involved and the issue is better addressed as one of recognising the fallibility of the analysis process, which I consider further below, in the context of optimism bias. However, although the way in which the allowance was derived at this stage was appropriate, the way in which it was handled between then and May 2008 is a cause for concern. There are three parts to this aspect which can be considered in turn.

(i) Reduction in risk allowance in February 2008

21.19 As a starting point, it is useful to have in mind why it might be desirable to reduce the risk allowance. Although it represents costs that may be incurred rather than those that it is planned will be incurred, the risk allowance is included as part of the overall anticipated cost of the project, and there must be funding available for the whole amount before the project proceeds. The intention is to avoid a situation in which the party paying for the works finds itself with a liability for which it does not have funds or, at least, does not have funds set aside. If the risk allowance increases, the estimate of cost will rise also and the requirement for funding will increase accordingly. On the other hand, if it was considered that risks had been reduced or eliminated such that the allowance could be reduced, the reduction in risk allowance could be set against any increases in the budget arising from other factors or the overall budget cost could be reduced.

21.20 It was always likely that some changes would be made to the allowance for risk between the FBC and signature of the contracts. Some of the risks that were included in the analysis were matters that might arise in the conclusion of the contracts. Once the contracts were in place, it could be said that that particular risk no longer existed and no allowance would have to be made for it. The "saving" that arises could be used to offset any additional cost arising as the contracts moved to conclusion. Moreover, negotiations prior to the conclusion of the contract might result in the transfer of risk from the client to the contractor, in which case there would be a transfer of funds from the risk allowance to the contract price [Mr Hamill [PHT0000023](#), page 38]. A concrete example of this can be found in the fact that the additional costs arising from the Wiesbaden Agreement were met within the budget by a reduction in the risk allowance. The problem was not that this was done but that the risk had not in fact been transferred, so there was no justification for reduction of the risk allowance. As I considered in Chapter 10 (Events between October and December 2007), the written agreement in December 2007 that followed the Wiesbaden discussions did not transfer risk to Infracore. It should have been apparent from the correspondence from Infracore, which led to the agreement, that it did not intend to accept the risk. The problem lies not in the intention to exchange risk for an increase in price but in the fact that there was no transfer of risk, which was not appreciated.

21.21 The first example of adjustment of the risk allowance after the FBC arose on 11 February 2008, when Mr McGarrity emailed Mr Hamill with a spreadsheet specifying modifications to the risk allowance [[CEC01423172](#)]. The attachment is reproduced in Table 21.1.

Table 21.1: Proposed modification to risk allowance in February 2008

PHASE 1A - BUDGET AT FINANCIAL CLOSE

		AFC P11 Report	Restate to FBC	FBC	Infraco Award	Tramco Award	Other Costs	FIN CLOSE
11 - 07/08 FORECAST THIS PERIOD								
TT01	Total Project management	63,864,719	1,495,253	65,359,972	0	0	783,870	66,143,842
TT02	Total other resources	7,243,365	-864,307	6,379,058	0	0	700,000	7,079,058
TT03	Total design	23,683,185	0	23,683,185	0	0	500,000	24,183,185
TT04	Total traffic management and modelling	2,323,215	0	2,323,215	0	0	0	2,323,215
TT05	Total 3rd party interfaces	316,664	0	316,664	0	0	0	316,664
TT06	Total land and other compensation claims	20,643,290	0	20,643,290	0	0	0	20,643,290
TT07	Total Insurance	4,507,468	0	4,507,468	0	0	0	4,507,468
TT08	Total MUDFA / Utilities	51,500,049	27,287	51,527,336	-3,000,000	0	0	48,527,336
TT09	Total Infrastructure & Maintenance	223,633,677	-658,233	222,975,444	14,406,653	0	0	237,382,097
TT10	Total Tram Supply & Maintenance	51,370,226	0	51,370,226	0	5,259,501	0	56,629,727
T44	Total Risk	48,974,000	0	48,974,000	-11,406,653	-5,259,501	-1,983,870	30,323,976
T999	Total	498,059,858	0	498,059,858	0	0	0	498,059,858

Risk Allowance Analysis:

Infraco / Tramco Procurement
 Infraco Delivery
 Design & Consents
 Tramco Delivery
 MUDFA
 General Programme Delay
 Land compensation
 TROs
 Network Rail
 Other
 Unspecified Risks (Contingency)

17,526,000	-11,406,653	-5,259,501	-859,846	0
3,169,000				3,169,000
4,313,000			-1,124,024	3,188,976
861,000				861,000
11,447,000			-3,000,000	8,447,000
3,131,000			3,000,000	6,131,000
4,296,000				4,296,000
3,208,000				3,208,000
624,000				624,000
399,000				399,000
				0
48,974,000	-11,406,653	-5,259,501	-1,983,870	30,323,976

Source: Phase 1A - Budget at Financial Close, CEC01423173.xls, Summary P11 [CEC01423173, Summary P11]

21.22 As was explained by Mr Hamill, the column headed "AFC" referred to the anticipated final cost at period 11; "FBC" referred to the Final Business Case; and the column headed "FIN CLOSE", showed the anticipated position at financial close [PHT0000023, pages 46–48]. The smaller table to the lower part of Table 21.1 indicates in red the reductions that were proposed. It can be seen that between FBC and financial close:

- (1) the cost increases, totalling approximately £21.65 million, were identified (rows beginning TT01 – £783,870; TT02 – £700,000; TT03 – £500,000; TT09 – £14,406,653; and TT10 – £5,259,501) and the costs of MUDFA/Utilities (row beginning TT08) decreased by £3 million, giving rise to a net increase in costs (under these headings) of £18.65 million;
- (2) the total cost (the row beginning T999) does not change;
- (3) between FBC and financial close the allowance to be made for risk is reduced from just under £49 million to £30.32 million; and
- (4) the change is principally accounted for by reducing the Infraco/Tramco

Procurement risk allowance to zero, with lesser reductions in the allowances for MUDFA and Design & Consents, and an increase of £3 million in the allowance for General Programme Delay. This had the effect that there was no increase in estimated costs despite the increase in sums that it was recognised would have to be paid to the contractors, and the end result was that the estimated costs for final close remained exactly the same as that in the FBC despite the Rutland Square Agreement.

21.23 The email from Mr McGarrity noted that the figures represented the latest negotiation with Bilfinger Berger Siemens ("BBS") that had concluded the previous week but also noted that an update to the risk allocation was required, "based on risk allocation at Fin Close". Mr Hamill's reply of the same day [[CEC01489953](#)] was copied to Mr Bell and was in the following terms:

"The sheet which is titled 'Summary P11' contains information relating to the risk allowance which I am not aware of.

"You are more involved in the negotiations than me therefore I assume that where you have reduced the risk allowance you are content or have been assured that this is correct? I reviewed those risks which are included in the QRA on Friday and input will be required from others before we can amend these risks.

"I've attached the QRA with my comments and you'll notice at the end a number of queries regarding potential 'new risks'. Again, I would prefer someone to let me know if these issues need to be catered for in the risk allowance.

"Stewart, my main concerns here are that (a) we are reducing the risk allowance while the risk has not actually been transferred or closed and (b) the new risk allocation is not sufficient for the risks which **tie** will retain. I cannot overstate how anxious I am to ensure that the final QRA truly reflects the actual risk profile at financial close.

"Perhaps you have the information required to deal with the points raised above – if you want to meet to discuss then please let me know. I believe you, Steven and I (as a minimum) must fully understand what we are entering into at financial close."

21.24 Mr Hamill accepted that he was very concerned when he sent this email [[PHT00000023](#), page 40]. He felt that significant reductions had been made without any explanation or evidence [[ibid](#), page 48]. As was noted in paragraph 21.20 above, he accepted that at contract award there can be situations in which risk is transferred to a contractor in return for an increase in the contract price, and that where this happens money will be transferred from the risk allowance to the price, but he said that he had sent his reply in these terms because, as risk manager, he was concerned that the risk allowance was being reduced in the absence of any justification. He said that he had no idea where the reductions had come from and he considered that the result was that the risk allowance did not reflect the risk profile [[ibid](#), pages 40–41]. He stated that when he raised it with Mr McGarrity he became angry. Mr Hamill had also raised his concerns with Mr Gilbert but he was "frustrated" at being challenged.

21.25 Mr McGarrity said that the changes were agreed by senior members of the project team and reflected the reduction in risk as a result of the Wiesbaden and Rutland Square Agreements [[TR100000059_C](#), pages 0123–0124, paragraphs 32 and 35]. The Inquiry has not identified any written record of a meeting of the project team to make these changes. In view of the value of the change being made, I would have expected it to be the subject of formal consideration and that a record would be kept. In addition, it is not apparent how the changes could be said to be merited by

the Wiesbaden and Rutland Square Agreements. The written agreement concluded following the discussions in Wiesbaden [CEC02085660, Parts 1–2] primarily dealt with the contract price and recorded what was – or was not – included within it. The Rutland Square Agreement [CEC01284179] increased the price and, among other things, put back the completion date, said that unforeseen risks would be shared 50/50, noted that the costs of changes arising from the newest version of the Employer's Requirements was more than **tie** could afford, and set out the date by which the contracts were to be concluded. It is not apparent that either agreement could provide a justification for reductions to the risk in respect of either design or MUDFA. Although it is true that once the contract was in place it could be said that the risks of procurement could not arise, at that time the conclusion of the contract was still some time away and, until its terms were finalised, the risks of procurement were still live such that there was no justification for reducing the risk to zero. It appears that the real driver for the reduction was an attempt to present the price as being within budget despite the increase in price brought about by each agreement.

21.26 Mr McGarrity said that he did not recall any altercation with Mr Hamill when he raised his concerns in person and that he would have remembered it had it occurred [PHT00000047, pages 108–109]. Although, by implication, Mr McGarrity's evidence might be construed as a denial of Mr Hamill's version of events, it is also possible that with the passage of time he has forgotten the incident. In either case I accept the account given by Mr Hamill. If Mr McGarrity's evidence is construed as a denial of the incident I prefer the evidence of Mr Hamill. Not only does it fit with the contemporaneous emails but I had the impression that he was truthful in his oral evidence about this matter and, indeed, was embarrassed by what had taken place. If Mr McGarrity has simply forgotten about the incident, that does not contradict the positive evidence given by Mr Hamill about it.

(ii) Manual changes to the QRA

21.27 Adjustments to risk continued even after the contracts had been signed. At the last minute before contract signature, both BBS and PB demanded additional payments. The demands were met in part, and the negotiations in relation to this are considered in paragraphs 11.125–11.130 of Chapter 11 (Contract Negotiations). This in turn gave rise to an issue as to how these increases in the price could be accommodated in the budget that had been approved. As I have noted in Chapter 12 (Contract Close), there was an increase in budget of £4 million at the last minute to accommodate them, and a statement as to why this was done was contained in the Financial Close Process and Record of Recent Events [CEC01338847]. The increase in the Infracore price was £4.8 million (four payments of £1.2 million). The view was that there was a reduction in exposure to risk of £4.6 million. Of this, £0.5 million arose from the capping of liability in respect of a risk already included in the QRA, and it was considered that a corresponding reduction could be made in the QRA figure. The paper recognised that, in relation to the other £4.1 million of "exposures" that were said to have been removed, the position was more "judgemental". It considered that a sum equal to one-third of the aggregate value of the "risk improvement" that it had noted – or £1.3 million – could be deducted from the risk allowance. Despite this, it is not immediately apparent that the matters identified could be considered to be removal of risks that had previously been valued in the QRA. At the same time it was recommended that an increase in risk allowance of £1 million should be made in order to provide a "cushion". On 15 May 2008, the day after the contracts were signed, Mr Bissett emailed Mr Bell, Mr Hamill and others, saying that there was a need to "arrive at a final form [sic] settled base cost and risk contingency" [CEC01295328].

Four days later, on 19 May, Mr McGarrity sent a reply that referred to a meeting that had taken place that day, and attached a spreadsheet that, as he put it, "lays out a simple recon of how I think we get from the last reported estimate (£508m) to our final control budget (£512m)" [ibid]. The email stated that the risk allowance was to be reduced by £1.1 million "to fund the SDS increases". The attachment [CEC01295329] is reproduced in Table 21.2.

Table 21.2: Proposed modification to risk allowance at Financial Close

PHASE 1A – BUDGET AT FINANCIAL CLOSE

		Cumulative	AFC P1	PCB	Deltas	Deltas Analysis	
		00/01/00				Infraco	SDS
FORECAST THIS PERIOD							
TT01	Total Project management	65,884,280	65,884,280	65,884,280	0		
TT02	Total other resources	6,856,832	6,856,832	6,856,832	0		
TT03	Total design	24,371,614	24,371,614	26,827,519	2,455,905		2,455,905
TT04	Total traffic management	2,631,262	2,631,262	2,631,262	0		
TT05	Total 3rd party interfaces	444,843	444,843	444,843	0		
TT06	Total land and other comp	20,581,175	20,581,175	20,581,175	0		
TT07	Total Insurance	4,507,469	4,507,469	4,507,469	0		
TT08	Total MUDFA / Utilities	48,542,706	48,542,706	48,542,706	0		
TT09	Total Infraco	242,711,549	243,809,301	247,259,301	3,450,000	4,800,000	-1,350,000
TT10	Total Tramco	58,039,910	58,039,910	58,039,910	0		
	Total Base Costs		475,669,391	481,575,296	5,905,905	4,800,000	1,105,905
T44	Total Risk	32,347,616	32,347,616	30,441,711	-1,905,905	-800,000	-1,105,905
					0		
	Total Ph1a	508,017,007	508,017,007	512,017,007	4,000,000	4,000,000	0
Risk Allowance Analysis:							
	Infraco/Tramco Delivery		6,872,314	6,872,314	0		
	Design & Consents		3,301,992	3,301,992	0		
	MUDFA		8,644,277	8,644,277	0		
	General Programme Delay		6,653,659	5,353,659	-1,300,000	-1,300,000	
	Land compensation		1,087,563	1,087,563	0		
	TROs		935,765	935,765	0		
	Network Rail		318,058	318,058	0		
	Other		124,220	124,220	0		
	QRA Total		27,937,847	26,637,848	-1,300,000	-1,300,000	0
	Non-delivery of VE included in Infraco price		2,000,000	2,000,000	0		
	Extent of Road Reinstatement		2,000,000	1,500,000	-500,000	-500,000	
	Unspecified Risks (Contingency)		409,769	303,864	-105,905	1,000,000	-1,105,905
			32,347,616	30,441,712	-1,905,905	-800,000	-1,105,905

21.28 The column headed "AFC" gives the assumed final costs that were in place prior to the last-minute demands. The column headed "PCB" provided the Project Control Budget. The increase of £4 million in the total costs for phase 1a from approximately £508 million to approximately £512 million is apparent. It is also apparent that the design cost has risen by £2.455 million and the Infraco costs by a net sum of £3.45 million, resulting in an aggregate increase of £5.905 million. This has been accommodated within the PCB of £512 million by reducing risk by £1.9 million in total (£800,000 in respect of Infraco and £1.1 million in respect of SDS). In relation to Infraco, the adjustments made in this table appear to be the same as those considered in paragraph 21.27 above. The net reduction in risk of £800,000 noted in the upper part of the table (Row T44) is the effect of reducing risk by £1.8 million (the £0.5 million and the £1.3 million) and then increasing it by £1 million. The reduction of £105,905 was not explained. The reduction of one-third of the assumed value of the "improvements" identified in the Financial Close Process and Record of Recent Events [CEC01338847] has been made entirely from General Programme Delay. This is hard to understand as, even on the basis of the description in that document, only one of them could be said to relate to programme delay, and that fact immediately casts doubt on the bona fides of the reduction. Nevertheless the changes proposed by Mr McGarrity reflected the recommendation by tie contained in that document.

- 21.29** In response to questions from me, Mr Hamill appeared to acknowledge that Mr McGarrity's email was indicating an intention to use a reduction in the QRA figure to ensure that the project could be delivered within the agreed budget [PHT00000023, page 53]. Mr Hamill did not recall being provided with any information to justify such a reduction and was surprised that the change was being made. Despite the fact that the allocation of a risk was a live issue in the contract negotiations and those negotiations went on into April, Mr Bell and Mr McGarrity said that the QRA was not updated after 1 March 2008 [PHT00000025, pages 12–15; PHT00000047, page 36], so a revision to it could not be the justification for the change to the risk allowance. Mr Hamill was surprised that any change to the risk allowance was being made shortly after the contract was signed. His understanding was that the allowance of £32,347,616 for total risk in column AFC P1 in Table 21.2 was the risk allowance for the project [PHT00000023, page 56]. He replied to Mr McGarrity's email forwarding a copy of the QRA and seeking a chance to discuss the changes [TIE00352326; TIE00352327]. In his oral evidence he explained that his concerns were that the way that the QRA was put together meant that it was not possible simply to change a single figure, that he was again being asked to make a change without there being evidence to justify it, and that the existing figures had been agreed with CEC and the change would "put us back to square 1" [PHT00000023, pages 56–59]. He said that he explained his concern to Mr McGarrity but in response he was told to make the change as it was what had been agreed [*ibid.*, pages 60]. Whatever information was available to others about the reasons for the changes to the QRA it is apparent from the terms of his email that Mr Hamill was unaware of the justification for the changes and of any connection between these changes and the Financial Close Process and Record of Recent Events [CEC01338847]. As risk manager he ought to have been given evidence that satisfied him of the justification for the proposed change but as with the change in February, discussed in paragraphs 21.21 to 21.26 above, that was not done. He ought not to have made the changes in February and May 2008 until he was satisfied on the basis of evidence presented to him that there was justification for such changes. In making the changes to the QRA in May 2008 he sought to avoid the scrutiny of them by CEC officials.
- 21.30** Mr Hamill made the change as he had been directed. He sent an email to Mr McGarrity, Mr Bell and others on 27 May in the following terms:
- "All,
- "Please see attached spreadsheet which I have updated following our meeting last week. As agreed, Risk ID 343 which allows for delays has been reduced by £1300k which means we now have £5187k against this risk and, accordingly, the overall risk allocation has reduced by £1300k to £26637k.
- "One thing which we all need to be aware of is that it is not possible to reduce the value of one risk in the QRA without affecting all the others. This is because the P80 allocation is driven by the total mean sum. Therefore, in order to get round this problem, I have basically 'pockled' the spreadsheet and hard-entered some values. This solves the problem and helps us get the final result past CEC as I doubt they will notice what I have done.
- "I will revert to normal practise [sic] for future QRAs however in this instance I think this is the best way to do it in order to avoid unnecessary scrutiny from our 'colleagues' at CEC.
- "Please confirm you are content with this approach or otherwise by close of play Friday 30th May. I will take no response as acceptance." [CEC01288043]

- 21.31** He explained in his evidence that a change to one cell would have affected the remainder, so he had replaced the formulas on some cells with fixed numbers and reduced the entry for Risk 343 [PHT00000023, pages 61–62]. I questioned him on his use of the word “pockled”, which implies minor dishonesty. He said that there were two elements to this: the reduction in risk, and the way in which it was achieved [ibid, page 63]. He said that as far as the decision to reduce risk was concerned, he had been told that there had been a transfer of risk in the contracts as they were concluded. He did not consider that the explanation that he had been given was satisfactory, but as it came from his superiors it was an answer that he had to accept [ibid, page 64]. The second element was how the change was to be represented, and this was a switch to manual entries as the changes could not be accommodated within a QRA. It is clear that this was a way to effect the reduction that he had been instructed to make. The extent of the changes to cell entries is apparent by comparing the original Excel files for the spreadsheet containing the QRA from February 2007 [CECo1489954] to the one attached to his email [CECo1288044]. In the more recent one, all the entries for “P80 Risk Allocation” are fixed numbers rather than the formulae in the earlier version. This is not readily apparent on an examination of the printout or the pdf version.
- 21.32** It is revealing that in the email Mr Hamill said that the purpose of the change he had made was to “get the final result past CEC” [CECo1288043] and that he used inverted commas when describing the CEC employees as colleagues. He said that this reflected the atmosphere and mood between **tie** and CEC and that they were not aligned [PHT00000023, page 62]. This was indicative of a poor working relationship in which CEC officials were viewed as adversaries rather than as representatives of the entity for which **tie** was providing a service. More fundamentally, it indicates an intention that CEC should not be aware of what had been done. This issue and the working relationship between CEC and **tie** are considered further in Chapter 13 (CEC: Events during 2006 and 2007), Chapter 14 (CEC: January–May 2008), and Chapter 18 (CEC: May 2008 –2010).
- 21.33** Mr McGarrity denied that he told Mr Hamill just to get on with it and make the change [PHT00000047, page 77], but I accept Mr Hamill’s account as being consistent with the contemporaneous documents and the other events I have referred to. Mr McGarrity said that the email was “unfortunate” [ibid, page 76] and said he would not have “pockled” anything. He was not concerned at the manual adjustment and did not worry about the whole QRA not being re-run. He considered that the language used in Mr Hamill’s email should not have been used and accepted that it suggested deception. In response to a question from me about whether he had an obligation to deal with the matter in view of the suggestion of deception, he merely stated that he had no recollection of having had a concern about the language used “given the materiality of the amounts involved” [ibid, page 78]. As to the means by which the change was made, he said:
- “I would have been happy with a manual adjustment to the QRA, but also I would have wanted to make sure that Council officers knew that that’s exactly what had been done.” [ibid, page 76.]
- 21.34** Despite this, Mr Hamill sent the altered spreadsheet to Mr Coyle of CEC, attached to an email of 11 June 2008 [TIE00352465], and no mention was made of what had been done. Mr McGarrity’s suggestion that perhaps the matter had been discussed with Mr Coyle was, as he himself recognised, clutching at straws [PHT00000047, page 83]. When I asked him later whether he had drawn what had been done to the attention of the CEC Director of Finance, he said “I don’t remember having any specific

discussions with my finance colleagues about this item" [libid](#), page 78]. I did not consider that Mr McGarrity was giving truthful evidence about this incident. He was clearly aware of the significance of the language used in Mr Hamill's email but sought to distance himself from any suggestion of his awareness of the deception played upon CEC officials. He claimed that he did not remember whether he had discussions with officials in CEC's Department of Finance when it was patently obvious, from his demeanour and from the surrounding circumstances, that he had not. He speculated about the possibility of Mr Hamill having explained to Mr Coyle what had been done, although it was apparent that no such discussion occurred or was likely to have occurred in view of Mr Hamill's reference to unnecessary scrutiny by officials in CEC.

21.35 Mr McGarrity was not the only one who was aware of what was happening and was content with it. Mr Bell stated that the

"intent was clearly to make that adjustment identified against delay so that was traceable, not to mislead anybody in relation to QRA" [PHT00000025](#), pages 24].

but this is entirely at odds with the statement in Mr Hamill's email that his action "helps us get the final result past CEC as I doubt they will notice what I have done" [CEC01288043](#). The intention was quite the opposite of what Mr Bell claimed. As to the means by which the change was made, Mr Bell's suggestions that it was a "transparent adjustment" [PHT00000025](#), page 27] and there was "no subterfuge" [libid](#), page 90] are wholly unsupported by the evidence and I have no hesitation in rejecting them.

21.36 Mr Bell attempted to justify the reduction in the sum allowed for general delay by suggesting that the four payments of £1.2 million each, which it had been agreed in the Kingdom Agreement would be paid to BSC to meet its late demands, were an incentive that would reduce general programme delay [libid](#), pages 85–88]. I doubt that this view could genuinely have been held by him; it certainly does not stand up to any scrutiny. The payments are not linked to reaching milestones by a particular date and therefore provide no incentive for early completion. Mr McGarrity even recognised that the payments did not manage risk at all, as they would be made irrespective of when the milestones were reached [PHT00000047](#), page 70]. To suggest that this would reduce delay with the result that risk allowance could be reduced appears to be an attempt to justify the reduction in risk allowance that had to be made to control the effect of the later concession. I therefore reject this proffered explanation.

21.37 Although the effect of the change may not have been material in the context of the project as a whole, the concern is not just that the change was made and the QRA was not rerun; it was that the representations to CEC were that the figures were the result of the QRA exercise that had been ongoing for some time when they were not [see "Close Report" [CEC01338853](#), page 0028]. Mr McGarrity's approach discloses an acceptance that statements that were untrue could be made to CEC if they were what it took to get the project under way. Although the sum may not have been material, the existence of this attitude within **tie** is highly material. Mr McGarrity accepted that, as the client, the Council needed to be properly informed [PHT00000047](#), page 80], and I do not see how he can reconcile that with his views that what Mr Hamill said was happening, was not material. This is particularly true in light of the fact that he recognised that there was scope for conflict of interest arising out of the desire within **tie** to lower the overall budget. It is manifest that the intention was one of concealment and that the recipients of Mr Hamill's email were aware of this. I consider this in Chapters 14 and 18 relating to events between January 2008 and 2010 from CEC's perspective.

(iii) Change to basis of assessment

- 21.38** Until February 2007, the QRA had been calculated to a P90 probability [CEC01489954] – in other words, as explained in paragraph 21.10 above, there was a 90 per cent probability that the additional cost would not exceed the output from the model. On the other hand, even before the manual changes mentioned in the immediately preceding section, the QRA in the spreadsheet attached to Mr Hamill's email was expressed to a P80 probability, which means that there was only an 80 per cent probability that the costs would not be exceeded. Where the probability threshold is reduced, the allowance that must be made for risk is reduced, which in turn reduces the overall budget cost. Despite this, nothing was said to draw attention to the change that had been made, to explain the effect that it would have had on the total risk allowance or to justify it.
- 21.39** Mr Hamill said that he could not recall the reason for the change, but he did not think that it was unusual to quantify risk as a P80 level of confidence rather than P90 [PHT00000023, pages 57–58]. That view was supported by Professor Flyvbjerg and the OGC. Transport Scotland had expressed the view that figures should have been given for the P50 and P80 levels. If, at the outset, the assessment had been carried out at a P80 level there could have been no complaint. The concern is that a change was being made at a late stage after CEC had given approval, that there does not appear to be a proper basis for it, and that it was not made in a transparent manner.
- 21.40** The issue of which probability level should be used had been raised earlier in 2008, in an email from Mr Hamill to Mr McGarrity on 28 February 2008 [TIE00351419]. This email shows the difference that is made by adopting the different degrees of confidence. At the P90 level, risk for phase 1a was £31 million, whereas at the P80 level the risk was £28 million. In this email, Mr Hamill observed that changing to P80 would require **tie** to convince CEC that the lower confidence level was satisfactory, but he thought that CEC “would be uncomfortable about essentially becoming 10 per cent less confident about delivering to budget”. Although he recognised that a figure of P80 from the outset of a project would be accepted by most people, he considered that a change from P90 to P80 at that stage would be hard to justify. The email said that that the only justification would be if **tie** was so confident that it had secured a fixed-price deal that minimised risk to the extent that the extra allowance was not required. In his oral evidence, however, he acknowledged that, at the date of his email, negotiations were ongoing and it would not have been possible to rely on that justification [PHT00000023, pages 69–70]. The email continued:
- “I fully appreciate the need to reduce costs where possible in order to get the deal done however, given that we have reduced the figure by a considerable amount so far, I recommend manipulating the current information to an acceptable P90 figure rather than go through the hassle of trying to persuade CEC of the 'benefits' of a P80 figure.” [TIE00351419]
- 21.41** He explained that his reference to “manipulating” the information was referring to the fact that, as noted above, changes had already been made on 11 February and that there should not also be changes to the confidence level. Despite this, it is clear that the change in the confidence level from P90 to P80 was made in the Risk Allocation Report for the period ending 1 March 2008 [TIE00352327].
- 21.42** Mr McGarrity said that although the change from P90 to P80 was an idea that appeared to have originated within **tie**, he could not remember why the change came about. He said it would not have been done simply in order to be able to reduce the budget estimate but he could not think of any other reason why it would have

been done [PHT00000047, pages 41–47]. He accepted that there was a collective responsibility within **tie** for it [ibid, page 48]. He said that it would not have happened without CEC officials being aware but could not recall having told them [ibid, page 43; TR100000059_C, page 0129, paragraph 46]. I agree with Mr Hamill's assessment at the time, mentioned in paragraph 21.40 above, that **tie** would need to convince CEC officials that the lower confidence level about delivering the project within budget was acceptable. In light of the importance of this issue to CEC I also agree with his assessment that they would be uncomfortable with such a change and would take a lot of persuasion that it should be made. In that situation the mere inclusion of P80 on spreadsheets issued by **tie** to CEC after March 2008 was not adequate. These spreadsheets were similar to earlier ones in which the calculations had been based upon P90. Before any decision was taken to make the change, I would have expected to see documentary evidence such as emails or minutes of meetings recording discussions with CEC officials about the proposed change and the outcome of that debate. I do not accept Mr McGarrity's assurance that CEC officials were told about this change. There is no written record of the change and its effect being drawn to their attention and, as I note at paragraph 21.37 above, in other respects, there was a desire to conceal matters from CEC. It would have been the natural thing to have included mention of it in the Close Report, but that was not done. Had the information been provided, it would have been appropriate and necessary that it be in writing and that a written response was obtained acknowledging the change and its effect. Mr McGarrity's bland assertion that there was no manipulation [TR100000059_C, page 0129, paragraph 48] cannot sit with the facts.

- 21.43** Mr McGarrity pointed out that the changes that were made were not all reductions to the risk allowance, that at times new risks were added to the risk register, that risks for delay and consents and approvals were augmented and that a figure of £2 million was added for road improvements [PHT00000047, page 59]. As I noted in paragraph 21.29 above, the last run of the QRA was at the start of March, but it is correct to say that some new risks were added. However, in my view this does little to mitigate the use of risk allowance as a means to ensure that the costs estimate "fits" within the budget figure previously identified. The sums in question are not material when compared with the cost overrun of the project as a whole. The concern is that they demonstrate an attitude – in relation to both communication with CEC and whether it was prudent to proceed – which, in my view, did make a material contribution to the cost overrun.

Representation of risk at contract close

- 21.44** In paragraph 21.13 above, I express the view that it was not surprising that no allowance was made at the stage of the FBC for the costs arising from the difference between the preliminary designs on which the prices had first been given and the final design because the **tie** personnel did not appreciate that the risk had not been passed to BSC. By the time of contract signature, after more than four months of negotiations, the position was different. By then it was known that it had not been done, or at the very least that there was a material possibility that it had not been done. Despite this, Mr McGarrity said that, at contract signature, the view was that the only risks arising from design that would be borne by **tie** were those arising from getting consents and approvals [TR100000059_C, page 0126, paragraph 40]. He said that he asked within **tie** what development of design might occur from the preliminary designs that would be at **tie**'s risk in terms of the Wiesbaden Agreement, but he was not told of anything [PHT00000047, pages 152–153]. He thought that the risk had been transferred and consciously decided that no further provision was required. The view that he took, however, is entirely unjustified in view of what had

taken place in the negotiations of SP4. BSC had made it clear that it would not accept the risk of design development and SP4 contained an express acknowledgement that not all the pricing assumptions held true even at the date of contract signature. Mr Bell confirmed that he was aware that significant change in design was at **tie**'s risk and was aware that after contract signature there would be Notified Departures [PHT00000025, pages 60–65]. I am not in a position to assess whether Mr McGarrity made the request of his colleagues that he says he did and, if so, why he was not made aware of the problems, but the number of persons involved in negotiation of the contract meant that the appreciation of the risk was sufficiently widespread that it should have been picked up. On any view, however, within **tie** there had been a debate about the issue as the decision had been made to press ahead with the conclusion of the contract and to fight claims "tooth and nail". It is quite clear that there was an awareness of risk.

21.45 By the time of contract signature, it should have been apparent that the issues with the design were not the only factor that might lead to additional cost. Pricing Assumption 24 was to the effect that utility works would be completed in accordance with the programme, apart from utility diversions to be undertaken by Infraco as part of the provisional sums included within the Infraco works and specified in Appendix B [USB00000032, page 0008], yet it was apparent from various reports in the two months before signature that progress with the diversion of utilities was behind programme. The Project Director's report to the meeting of the TPB on 12 March 2008 noted that at that date progress was three weeks behind programme [CEC01246825, page 0013]. His report to the TPB meeting on 9 April 2008 noted that there had been no recovery of the previously reported slippage and that cumulatively there was a delay of approximately six weeks [CEC00114831, Part 1, page 0013]. The presentation for the meeting of the TPB on 7 May 2008 also noted that there was further slippage in the programme and that the delay to the critical path remained at two weeks [CEC01282186, page 0015]. Even at this stage, it should have been apparent that this would generate a Notified Departure and that the ability of BSC to carry out works would be affected. Despite this, it was clear from the evidence of Mr McGarrity that although a general allowance had been made for delay, there was no distinct allowance for delay caused to the Infraco works as a result of MUDFA delay [PHT00000049, page 79]. It appears from the various progress reports on the MUDFA works that the delay was attributable to several reasons, including the discovery of unexpected obstructions and a larger number of utilities in terms of lineage and chambers than anticipated. In that situation one might have expected **tie** to identify the risk of that occurring on other sections of the route, as ultimately occurred, and to have assessed and allowed for consequent delay to the Infraco works.

21.46 Mr Bell said that **tie** was not in a position to calculate how many Notified Departures there were likely to be and what the total value would be [PHT00000024, pages 117–119]. I find that surprising when regard is had to the work that was done to consider risk generally. It cannot be reconciled with other evidence that Mr Bell gave. He said that estimates had been made of the exposure to risk where it was considered that there was a danger that a pricing assumption would not hold, with the result that there would be a Notified Departure [*ibid*, pages 110–112]. When he was asked whether he had reviewed the risk allowance with reference to the assumptions in SP4 he answered:

"I reviewed the Pricing Assumptions and the items I considered were – had the potential to have a Notified Departure impact, and satisfied myself that I considered the total risk allowance was adequate." [PHT00000025, page 0005.]

- 21.47** He said that he did this early in May [\[ibid\]](#) but, as I note in paragraph 21.29 above, the QRA was not run after 1 March 2008. If Mr Bell did a review it must mean that it did not identify a single requirement for a change, and I cannot see how that was a realistic possibility on the known position. Even if it was the case that **tie** could not calculate the total value of Notified Departures, clear notice of that fact should have been given to CEC.
- 21.48** Mr Bell said that the expectation that pricing assumptions would fall was disclosed by the letter of advice from DLA Piper Scotland LLP ("DLA") [\[CEC01033532\]](#). I do not agree with this view of the letter. Under the heading "RISK", it stated:
- "Following on from our letter of 12 March, we would observe that delay caused by SDS design production and CEC consenting process has resulted in BBS requiring contractual protection and a set of assumptions surrounding programme and pricing.
- "**tie** are prepared for the BBS request for an immediate contractual variation to accommodate a new construction programme needed as a consequence of the SDS Consents Programme which will eventuate, as well as for the management of contractual Notified Departures when (and if) any of the programme related pricing assumptions fall." [\[ibid\]](#), page 0003.)
- 21.49** It was noted in questioning of Mr Bell by Counsel for DLA that, within the Risk Allocation Matrix referred to in the letter, it was recorded that the definition of "Compensation Event" included execution of utilities works or MUDFA works [\[PHT00000025\]](#), pages 67–72; [\[CEC01347795\]](#), page 0022]. In terms of the Infraco contract, a compensation event could give rise to a liability for additional payment. In that questioning it was also noted that, in the text quoted above, there is reference to "Notified Departures" in the plural. Nonetheless, the issue is whether, taken as a whole, the letter gives notice of the risks that were known at the time. My view is that it clearly does not. Whatever may have been in the minds of Mr Fitchie and/or Mr Bell, it is clear to me that the intended readers of the letter would have no idea of the scope of the exposure to risk that was being undertaken as a result of the failure to adhere to the procurement strategy.
- 21.50** In a consideration of the evaluation of risk it is appropriate to emphasise that it is a process that seeks to put an identified value on something that is inherently uncertain. It is necessary also to have in mind the meaning of the confidence thresholds. If the budget makes an allowance for risk calculated at 50 per cent probability, it means that there is as much chance that the final cost will exceed the budget figure as there is that it will come within the budget [Professor Flyvbjerg, [\[PHT00000057\]](#), page 9]. Even if the probability is increased to 80 per cent, it means that there is a one-in-five chance that the budget cost will be exceeded. Whichever degree of probability is selected, it considers only the chance that the figure will be exceeded and provides no information at all as to the *extent* by which the budget figure may be exceeded [\[ibid\]](#), page 10]. It appears to me that there was a lack of understanding of the position when decisions were taken by CEC in relation to the project. The confidence level chosen for the Tram project, when read with the references to a fixed-price contract, could easily give an impression that this was a figure that would not be exceeded. That was never the case with the Tram project: there was always a recognised chance that the budget would be exceeded although, in giving the go-ahead, the Councillors may not have been aware of this.

- 21.51** I have indicated above where I consider that the presentation and management of risk were not appropriate. The issue arises as to whether the outcome would have been any different had the matters that I note not taken place. In that situation the estimate of risk would still not have been anything like sufficient to accommodate the cost overrun that occurred. Nonetheless, if there had been an appreciation of the increased risk that was being accepted by CEC it could have made some difference. For instance, it might have been the case that additional controls and checks were put in place to evaluate the contractual position. A decision might have been taken to revisit the contract and accept a higher initial price in return for a different balance of risk. The scope of the project might have been restricted. These are only possibilities and, clearly, it is speculation to imagine what might have been done with full knowledge. However, there would at least have been an opportunity to take action and to make decisions that were fully informed. That is part of the function of assessment of risk, and what was done by **tie** failed in this objective.
- 21.52** Another consequence that arises from the appreciation that risk assessments always contain the possibility of an overrun is that some consideration should be given to the ability of the party undertaking the project to meet that additional cost. Professor Flyvbjerg noted that a body that undertakes a portfolio of large projects is likely to be better able to tolerate the risk than one that undertakes only one large project. This is because there is a larger overall budget within which to contain the overrun, because there will be more experience of managing such projects and because the organisation will have the necessary skills and expertise to deliver the project [ibid.](#), page 20). This reinforces the view that I express in Chapter 22 (Governance) that there were pitfalls in having the project conducted by a single-purpose vehicle company with no prior experience of delivering similar projects. When one is considering the funding of certain major public-sector projects from the public purse, including where that funding is provided by a local authority, there may be advantages in including them within the portfolio of projects undertaken by the Scottish Ministers even although they are wholly within the geographical boundaries of a single local authority. Reaching a concluded view on this is beyond the scope of this Inquiry but it is an issue that it would be of benefit to have explored by a working group consisting of representatives of the Scottish Government and the Convention of Scottish Local Authorities in the interests of protecting the public purse and maximising the benefits from public expenditure on major projects.
- 21.53** It may be commented that the Inquiry has focused on the matters that went “wrong” for **tie** and does not consider all the risks that did not arise, which were mitigated successfully or which were accurately quantified. This is correct, but it is necessary to take this approach. The purpose of assessment and quantification of risk is to control the costs. When that is the objective, it does not matter if 99 per cent of the risks are controlled if the 1 per cent remaining leads to a huge escalation in costs. If that occurs it can be said that overall the process has failed. When considering the reasons for the increase in costs, it is the risks that were not identified, controlled and priced that have to be considered.

Optimism bias

21.54 The Inquiry heard evidence and had a report from Professor Flyvbjerg. He is BT Professor and inaugural Chair of Major Programme Management at the Saïd Business School, Oxford University, and a Professorial Fellow of St Anne's College, Oxford. He is a leading author on the subject of optimism bias. In his report, he described optimism bias as follows:

"a cognitive predisposition found with most people to judge future events in a more positive light than is warranted by actual experience. Clearly an optimistic budget is a low budget, and cost overrun follows." [TR100000265, page 0006.]

21.55 As this description indicates, it is a concept that originated in the field of psychology, in the works of Professor Kahneman, but over the years has come to be applied in many sectors including major construction projects.

21.56 I have noted at 21.9 above the process that is undertaken to produce a QRA. This consists of judgements being exercised by a team of people. Professor Flyvbjerg noted that the fact that a number of people are involved in the exercise gives a broader view of what the risks might be. However, the major problem with it is that it relies on the subjective evaluation by team members. That means that the outcome will be distorted by optimism bias, resulting in an underestimate of the negative aspects of the project, such as the cost and risks, and an overestimate of its positive aspects, such as the benefits and opportunities. Optimism bias affects the identification of risks, the evaluation of their probabilities and consequences and the effectiveness of measures taken to mitigate them [PHT00000057, pages 5–7 and 25–27].

21.57 The bias is addressed in projects by recognising that the estimates as to how much a project will cost and how long it will take are likely to be understated. Therefore, for the purposes of budget planning and assessing whether a project is worthwhile or which project should be allocated finite resources, an allowance is made for the extent to which the bias is likely to have distorted the prediction of the outcome. Allowances for risk are built up internally by means of persons engaged on the project considering where risks arise, how likely they are to materialise, what their consequences might be and how they can be mitigated. As the people within the project will be affected by the bias it is necessary that the allowance be determined by a process using external data. The one that is used is known as reference class forecasting. In this method, the likely overrun is determined by looking at the average overrun that has occurred in a series of projects (the reference class) of a similar nature. The rationale for this is that consideration of what has actually transpired in past projects is a more accurate predictor than attempting to anticipate what will happen in future in the project in question. As Professor Flyvbjerg put it:

"the assumption is that the best estimate you can get is what already happened to previous projects historically, and you can't better that by thinking that you are clever enough to figure out what is actually going to happen to this specific project that you are looking at.

"You will not be better at predicting the future than the historical data for the project [sic] that have already happened. That's the – that's – a body of research that has been done that has proven that, and that is therefore – that is the result that you take into this methodology." [ibid, pages 27–28.]

21.58 By using the reference class the intention is that subjective judgement with its inherent bias is removed or at least reduced.

- 21.59** The adherence to the reference class need not be slavish as account can be taken of circumstances in individual projects, but Professor Flyvbjerg was at pains to emphasise that any adjustment must be based on empirical data rather than judgement if reintroduction of the bias is to be avoided. He cited, as an example of where an adjustment might be made, a situation in which the team responsible for delivering the project has a documented record of achieving results better than the average over a period of time, although he had not come across a situation in which ultimately it was found that an adjustment was justified. Although evidence of a documented record of a project team being consistently better than average might justify adjustment of the average ascertained from a review of the reference class, mere belief that the team was good or had a novel approach to procurement that would avoid the problems would not suffice [libid](#), pages 45–46].
- 21.60** Professor Flyvbjerg considered that it remained appropriate to undertake a conventional QRA with a risk register identifying and quantifying risk and seeking to reduce it. These are all relevant to the day-to-day management of the project and provide a useful overview, but it is necessary to adjust the conventional QRA by applying an optimism bias uplift based upon empirical data from the reference class [libid](#), pages 31–32].
- 21.61** If an allowance is made for optimism bias the estimated cost of the project is increased, and that might be considered unattractive by promoters of the project when arguing for its viability and seeking to attract finite funding resources. Professor Flyvbjerg explained that it could nonetheless have a beneficial effect on the outcome of the project. As he put it:
- “if you don't stay within budget, you have political scandal, you'll be on the front page of the media, and all of a sudden the project team that is supposed to deliver the project will be preoccupied by putting out fires in the media, and applying for more funding or raising more funding for the project, because they don't have enough money now evidently because there's an overrun. And that will distract them from what they are supposed to do, which is deliver the project, and the quality of delivery would therefore suffer, which in itself will affect the cost and we see this vicious cycle happening with projects once that starts. So it actually may affect the outcome of the project in that way.” [libid](#), pages 12–13.]
- 21.62** It is apparent that several of the consequences of likely overspend that he identified existed in the Tram project.
- 21.63** In common with the allowance for risk, Professor Flyvbjerg recognised that there is a danger that if an allowance is made for optimism bias, the costs will rise to use it. As he put it, “if the money is there, it's going to be spent” [libid](#), pages 15 and 100]. He considered that measures could be put in place to avoid it, and one possibility is to make it difficult to draw down on the contingency funds. He said that this is done by the UK Government for its major projects [libid](#), page 17]. He said, however, that the most efficient way of avoiding use of the allowance is to have a contract structure that provides incentives to a contractor not to go over budget [libid](#), pages 15–16]. This might take the form of incentives payable to the contractor if it completes the work below budget or on budget, as well as a requirement that the contractor and the employer share the cost of any expenditure in excess of the budget. Several standard forms of contract provide such an incentivised structure. They are not always popular in the public sector, where the view can be taken that if the project can be done for less money it should be done that way and the contractor should not be entitled to additional payment for achieving this. In my view resistance to an

incentivised structure that shares savings and increased expenditure between the contractor and employer is unrealistic and short-sighted.

21.64 Because such contracts contain terms that recognise that the price may change, they are often considered not to be fixed price. However, Professor Flyvbjerg considered that what may be termed a fixed-price contract means that the contractor lacks any incentive to reduce costs [*ibid.*, page 18]. Instead where issues arise under the contract there is an incentive on the contractor to pass the blame to the employers to avoid penalties being imposed or to make additional claims and this generates conflict. As he put it:

"I would actually say in general, in the vast majority of cases, the notion of a fixed price contract is a theory. It's an illusion that doesn't materialise in reality.

"It's called a fixed price contract, but it never ends up being fixed price or almost never ends up being fixed price. There are variations, and other things that happen on big and complex projects like what we are talking about. It's impossible to predict everything that can happen, and therefore everything is not in the contract.

"So situations will arise where things happen where it becomes an open question. Who is going to pay for this? And a builder will say: it's not us; and maybe the owner will say: it's not us; and then you have a conflict, and often arbitration or even going to court." [*ibid.*, page 19.]

21.65 A false confidence in a "fixed price" and the inevitable increase in cost which follows seem to me to encapsulate what happened with the Tram project. If this situation is to be avoided, it is necessary either to have contracts in which there is no scope for any additional payments or to move away from the desire for a fixed price and have an arrangement where all parties share a common interest in keeping the cost down. Contracts of both types have been used in Scotland for civil engineering projects. The pursuit of the chimera of a "fixed price" contract was attractive in political terms to get the project approved but planted the seeds of the problems that were to grow to bedevil the project.

Government guidance on optimism bias

21.66 A number of Government publications have given guidance on the application of optimism bias in contracts:

- Mott MacDonald's Review of Large Public Procurement in the UK, carried out for HM Treasury in July 2002 [[CEC02084689](#)]
- HM Treasury's 2003 Green Book [[CEC02084256](#), Parts 1–2]
- Supplementary Green Book Guidance [[CEC02084818](#)]
- the Department for Transport's June 2004 Guidance on "Procedures for Dealing with Optimism Bias in Transport Planning" [[CEC02084257](#)]
- the Scottish Transport Appraisal Guidance ("STAG") issued by the Scottish Ministers in 2003 (updated 2005) [[CEC02084489](#)]
- the Department for Transport's, Transport Analysis Guidance on "The Estimation and Treatment of Scheme Costs" issued in September 2006 [[CEC02084255](#)]

21.67 It is not necessary to examine the content of each of these in great detail but it is useful to look at some of the main issues that arise to assist in evaluating what was done by **tie** and to set out the basis for my recommendations in this regard.

Mott MacDonald's Review (2002)

- 21.68** Professor Flyvbjerg explained that this was important as it was the first piece of Government guidance, but it was out of date even by 2003 or 2004 because by then better data was available [PHT00000057, pages 47–48]. It said that the persons calculating optimism bias “should apply a degree of best judgement” and, as Professor Flyvbjerg explained, while that might have been appropriate on the rudimentary data that was available then, it was not appropriate even by 2004 when better data was available [ibid, pages 49–50]. It also suggested that the figures it gave were an upper boundary reflecting the position where there was no effective risk management and bad scope definition and in any project where that was not the case the figures could be reduced [ibid, pages 51–54]. Apart from the fact that, as a component of human psychology, the bias would be present in processes of risk management, this invited an exercise of subjective judgement that was precisely what the allowance was intended to counteract and undermined the purpose of reference class forecasting [ibid, page 54]. Mr Bourke’s practical application of the guidance in the review had that effect. Risk owners exercised their judgement in relation to mitigation factors for each risk and determined the extent to which they had addressed the risk, as a result of which the provision for optimism bias was reduced. Mr Bourke was engaged in the project between 2003 and 2007, and his role included developing the process to estimate optimism bias and to produce and maintain, in association with others, a project risk register [PHT00000022, pages 52–53].
- 21.69** The review contained a table of indicative figures for optimism bias. It had “upper bound” and “lower bound” percentages to be applied to the cost of the project. It stated that the “lower bound values” for optimism bias allowances should be aimed for in projects with effective risk management. In non-standard civil engineering contracts, the lower bound allowance was 6 per cent of the cost of the project [CECo2084689, page 0040]. Professor Flyvbjerg noted that the evidence available to the authors of the review was very much less than that available now but he said that the lower bound values were far too low [PHT00000057, page 98]. In addition, the impression is given that once risk management is in place it is possible to reduce the optimism bias allowance to that lower bound – and this, too, is unjustified.

HM Treasury's Green Book (2003)

- 21.70** This had the same shortcoming as the Mott MacDonald review of 2002 in that it invited the user to make adjustments to the allowance to reflect “the unique characteristics of the project in hand” [ibid, pages 57–59] but contained two further elements that undermine its utility. The first is that it suggests that the optimism bias allowance can be reduced as the QRA is built up [ibid, pages 59–60]. The two forecasting tools address different matters, and there can be optimism bias in the assessment of risk so one is not a substitute for the other. The other element is that it suggests that the optimism bias allowance can be reduced according to the confidence in capital cost estimates [ibid, pages 61–62]. That confidence will always be distorted by bias.

The Department for Transport's Guidance (2004)

- 21.71** Professor Flyvbjerg was one of the authors of this Guidance. It makes a number of advances on the previous guidance, which, Professor Flyvbjerg said, reflected the additional data that was available by then. It gave different allowances to reflect the different probability levels, which meant that an allowance could be selected according to the user’s appetite or ability to tolerate risk. It also provided more

detailed classes so that instead of having to select the general classes of standard civil engineering or non-standard civil engineering projects there were also distinct classes for road, for rail, for fixed links such as bridges and tunnels and for building projects [CECo2084257, pages 0005–0006]. The Guidance recognised that the level of uncertainty reduces as the project progresses, with the result that the uplifts should be less as the project proceeds. The Guidance suggests that that might be done by adhering to a simple rule that the uplift is reduced by a percentage equivalent to the percentage of the budget that has been spent at that time [ibid, pages 0035–0036]. So, if 30 per cent of the budget has been spent, the optimism bias allowance can be reduced by 30 per cent. Although this is in some ways quite arbitrary, Professor Flyvbjerg considered that it was preferable to making a subjective assessment of what the reduction in allowance should be, as that would itself open the door to optimism bias [PHT00000057, page 81]. If the method suggested in the Guidance is used, the result is that there will still be some allowance to be made for optimism bias right up to the end of the project when the last of the budgeted funds are spent. This is quite deliberate as Professor Flyvbjerg considered that as long as there was a future in the project, there would be optimism about it [ibid, page 84]. As an alternative to this mechanistic rule, the Guidance says that any downwards adjustments should be made only on the basis of empirical evidence.

- 21.72** This Guidance still contained a flaw in that the user was entitled to exercise their judgement to determine an appropriate point in the reference class at which to place their project. Professor Flyvbjerg acknowledged that this step was prone to bias. Nonetheless, he was of the view that once this Guidance was made available by the Department for Transport (“DfT”) it was appropriate to use it in preference to the guidance that had preceded it.

Scottish Ministers’ STAG guidance, 2003 (updated 2005)

- 21.73** This was first issued prior to the DfT Guidance of 2004 and refers back to the Mott MacDonald Report and the Green Book. As these were considered by Professor Flyvbjerg not to be the most up to date and reliable, the same is true of this Guidance [ibid, page 92]. Although it said that it was anticipated that further work would be carried out by the Scottish Executive (as it then was) and other bodies to refine the figures for transport projects [CECo2084489, page 0004, paragraph 12.4.3], Professor Flyvbjerg said that he was not aware of any further Scottish Government guidance after this.
- 21.74** The Guidance contains a number of elements from the earlier guidance that would undermine an objective approach. It repeats the comments from the Green Book that adjustments should be made to reflect the “unique characteristics of the project in hand” [ibid]. It states that allowances for optimism may be reduced as more reliable estimates of relevant costs are built up, risks are explicitly assessed and quantified, and work to minimise project-specific risk is undertaken [ibid, pages 0004–0005, paragraph 12.4.4]. This removes the element of objectivity that is necessary to avoid the re-emergence of optimism, and results in adjustments that are too low [PHT00000057, pages 92–96]. When asked about this advice, Professor Flyvbjerg said:
- “I would say that this advice is problematic in the sense that it – it’s counter productive in the sense that it would – it might defeat the very purpose of what the exercise is about, which is rooting out bias and this is reintroducing.” [ibid, page 95.]
- 21.75** I asked whether it would be appropriate to rely on this Guidance for, say, a project costing more than £100 million, and Professor Flyvbjerg said that it was not adequate and that he strongly recommended that it be updated [ibid, pages 112–113].

The Department for Transport's, Transport Analysis Guidance ("TAG") on "The Estimation and Treatment of Scheme Costs", September 2006

- 21.76** For the first time, this Guidance indicated uplifts that should be made, which depended on the stage at which the project had reached. These uplifts get smaller as the project progresses. As an example, for rail projects the uplift falls from 66 per cent at the earliest stage to just 6 per cent at the later stages [*ibid*, page 105]. These are the same figures as represented the upper and lower bounds of adjustment in the Mott MacDonald Review, but Professor Flyvbjerg was not able to say whether this was or was not mere coincidence [*ibid*, pages 105–107]. Nonetheless, he considered that 6 per cent was too small an allowance even at the later stage, although he had the benefit of hindsight informed by much more data and experience. In light of that he considered that very rarely were the risks "single digit". Leaving that aside, it was striking that what had been considered a target in the Mott MacDonald review – and one which Professor Flyvbjerg considered unreasonably low – had been elevated to an assumption in the TAG [*ibid*, pages 108–109].
- 21.77** Although the Guidance envisages that the allowance for optimism bias would decrease over time it required the promoter to provide "reasoning and justification" for any reduction. Professor Flyvbjerg considered that this is an improvement on purely subjective reductions, but is not the same as empirical evidence for the reduction and still leaves the way open for subjective judgement [*ibid*, pages 103–104].

Overall

- 21.78** It will be apparent from the foregoing that there are areas of conflict between the different pieces of advice and points on which the content of the guidance does not reflect what is, now at least, understood as the appropriate way to deal with this issue. As Professor Flyvbjerg put it:

"The existing set of guidances are confusing on some points. They are not up to date, and they have these traps that will lead planners back into reintroducing optimism into the planning process." [*ibid*, page 101.]

- 21.79** Professor Flyvbjerg said that to keep the recommended uplift figures current, they should be updated, say, every ten years [*ibid*, page 38] and also that organisations exist that provide the information. This would mean also that the Guidance that is provided by Government should also be reviewed. Ideally this should be done continuously but it should be done as a minimum every ten years and preferably every five [*ibid*, pages 41–42].

Use of optimism bias in the project

21.80 Having looked at the treatment of optimism bias in the published guidance, it is appropriate to see how it was managed in relation to the Tram project. This was not consistent over time.

Preliminary Financial Case

21.81 This was published shortly after the first Guidance on using optimism bias in the context of estimates of costs of construction projects. The approach was taken that the percentage figure brought out as the risk contingency could be deducted from the percentage that was to be allowed for optimism bias in terms of the guidance [Mr Bourke [PHT0000022](#), pages 49–51]. This was not an appropriate way to present matters but may reflect the novelty of allowances for optimism bias and the lack of experience of working with it.

Draft Interim Outline Business Case (2005)

21.82 This relied on the Mott MacDonald review for the purposes of optimism bias rather than the DfT 2004 Guidance that was then available. This is very surprising as the review by Arup and Partners of the business case for the Project in 2004 [[CEC01799560](#), page 0030] took account of the more up-to-date Guidance, and Mr Bourke said that he had reviewed it [[TR100000110](#), pages 0016–0017, paragraph 23]. It is revealing in this context both that Mr Bourke noted that the 2004 Guidance required firm empirical evidence to reduce the optimism bias uplifts whereas the earlier Treasury Guidance did not [[PHT0000022](#), pages 58–59] and that the Arup review considered that the justification for reductions to the uplifts was weak [[CEC01799560](#), page 0030, paragraph 8.8]. Despite this, the view taken by Mr Bourke was that the starting values for uplifts in the Treasury Guidance were high, due to eight factors, and could be reduced with the application of procurement and project and risk management best practice [[TR100000110](#), pages 0031–0036, paragraph 37]. The practice within **tie** was that mitigation of risk was reported by each risk owner, “using their individual judgement in relation to individual mitigation factors for each risk” [*ibid*, page 0026, paragraph 32]. This would appear to introduce a subjective element affected by optimism bias. They would be averaged across each risk area and reductions made to the appropriate part of the optimism bias allowance. Although it is clear from the Mott MacDonald Review that some deductions were allowed, the approach taken by **tie** would have the effect that no realistic allowance would be made for the effects of optimism.

21.83 In deciding which uplift to apply, the draft Interim Outline Business Case (“IOBC”) classified the project as “Standard Civil Engineering” and it stated that this categorisation had been made on the basis of advice from the authors of the Mott MacDonald Review [[CEC01875336](#), Part 5, page 0090, paragraph 6.4.3]. Professor Flyvbjerg considered that this was incorrect as the projects that made up that category were all roads projects [[PHT0000057](#), page 113] and that the correct category was “non-standard civil engineering” [*ibid*, page 51]. In his report he said that to treat the risk as similar to road projects “casts doubt about whether the true risks of the project were understood” [[TR100000265](#), page 0022]. Moreover, Professor Flyvbjerg noted that **tie** assumed that at contract award the allowance for optimism bias would be 0 per cent, meaning that at that time all risks would be fully known because of the ongoing refinements of its risk register and its risk analysis as well as its commercial strategy. He considered that such a conclusion indicated that **tie**’s risk management team did not understand the nature of optimism bias, with the result that the team and the project would be particularly prone to such bias [*ibid*, page 0026; [PHT0000057](#), pages 119–120].

- 21.84** Mr Bourke said that the categorisation of the project as "standard civil engineering" had also been the result of discussions with persons from Transport Scotland, and he named Mr Sharp as one of the people to whom he had spoken [PHT00000022, page 42]. Mr Sharp denied having had any input in relation to optimism bias. Revealingly, Mr Bourke said that the allowance that would have been made had it been a non-standard project "would just compromise the deliverability of the system" or alarm funders [ibid, pages 43 and 45]. This highlights one of the concerns noted by Professor Flyvbjerg; that there is an incentive on the persons involved in the project to underreport the costs and risk [TR100000265, pages 0030–0031]. It seems that this was a particularly acute factor in view of the political controversies surrounding the project and created an environment in which there was a motivation not to report anything that would be seen as bad news.
- 21.85** Mr McGarrity also said that Transport Scotland had agreed with the approach taken. At first he said that it had "agreed" it but, in response to a question from me, he said that it was not an agreement "as such" but that it had accepted the position by December 2006 [PHT00000047, page 10]. He said that the person he dealt with in Transport Scotland was Mr Ramsay. It is of note that Mr Ramsay said that Transport Scotland was not in complete agreement with **tie**'s treatment of risk and optimism bias [TR100000065_C, pages 0010, 0012 and 0030–0032]. Its agreement on **tie**'s approach would not sit well with the concern expressed by Mr Ramsay in January 2007 that Transport Scotland wanted a higher figure to be used for uplift. As Mr Ramsay's view is consistent with this and with a letter that he sent to Mr McGarrity on 22 April 2005 [TRS00008519], I accept his evidence. On any view, Mr McGarrity accepted that the basis on which optimism bias would not be needed was that the design risk had been transferred and the utility works were complete, and by May 2008 it had become clear that this would not be the case.
- 21.86** The draft IOBC said that the uplift of 44 per cent that was required for a standard civil engineering project in terms of the Mott MacDonald Review could be accommodated within the available "headroom" – that is, the amount by which available funding exceeded the anticipated cost. If, however, the project had been recognised as non-standard civil engineering, the uplift required would have been 66 per cent, and this would have exceeded the available headroom. Had **tie** used the 2004 Guidance which was then available, and adopted the 80 per cent percentile confidence level for the category of Rail (which includes light rail), the uplift would have been 57 per cent and this would still have exceeded the headroom [PHT00000057, pages 113–114]. This would have served as a warning at this early stage that there was a significant danger that the project could not be delivered within budget. It is also of note that using the 80 per cent percentile figure would mean that there was a 20 per cent chance that the cost of the project would exceed the budget. This represented four times the risk of cost overrun that was presented by the statements by **tie** that there was 95 per cent certainty that it could deliver the project within the budget envelope. In other words, **tie** had assumed that there was only a 5 per cent risk of overrun [ibid, page 115]. If each of these matters had been appreciated by **tie** and reported to CEC it might have created awareness of the possibility of problems and given rise to a culture in which more care was taken before approval was sought and given.

Final Business Case (2007)

21.87 In relation to optimism bias, the FBC stated:

“**tie** continued to comply with the HM Treasury recommendations for the estimation of potential OB and had determined, in consultation with TS, that no allowances for OB were required in addition to the 12% risk allowance above.”
[CEC01395434, Part 8, page 0161, paragraph 10.14.]

21.88 Two issues arise from this. The first is that Professor Flyvbjerg expressed the opinion that, when viewed against the background of the Guidance that was available, the allowance of 12 per cent for risk was low and itself indicated that it was “simply unrealistic” [PHT00000057, pages 116–117]. This was not a matter of being wise after the event as he said that it should have rung alarm bells at the time. The decision to use only a modified version of the QRA and eschew an uplift for optimism bias resulted in a situation in which the assessment of adverse consequences rested purely on internal assessment with no external checks, which was the whole point of reference class forecasting.

21.89 It may be noted that optimism bias tends to be at its greatest early on in the life of a project, and the approval given in December 2007 was at a later stage than might be the case in many projects in that, by that time, tenders had at least been received. However, I have noted above that by the time of the FBC and then contract signature it was apparent that the design was late and the utilities works would not be complete before the infrastructure works got under way. These had been two key elements of the procurement strategy and the basis for the claim that **tie** was de-risking the project in a way that had not been done by other contracts [Mr Bourke PHT00000022, page 58]. Professor Flyvbjerg considered that these failures to achieve the goals intended were:

“typical early warning signs that not only has risk not been properly understood, but also that risks are going to be increasing from now on and you need to deal with it quickly.” [PHT00000057, page 124.]

21.90 He said that the appropriate things to do in response would be to address the problem without delay and to re-adjust risk assessment and risk management in light of it. Any external check of the project should also have been live to these problems and their significance, but it is apparent that this was not the case.

21.91 By the time even of the draft FBC, a decision had been made that there should be no allowance for optimism bias [Mr Bourke PHT00000022, pages 38–39]. There were two apparent bases for this. The first was that it was considered that the risk evaluation process was so robust and was done later in the project than many evaluations, such that optimism had been eliminated. As Mr Bourke said:

“the confidence we had at the time because of the degree of huge investment we’d made to understand and engage with a full supply chain, all team members to understand and manage these risks, we were in belief that this was the best approach.” *ibid*, page 40.]

21.92 As Professor Flyvbjerg pointed out, this is precisely the sort of optimism that it is necessary to guard against. The second basis was that the decision to make an allowance for risk on a P90 basis was more onerous than adopting the more common P80 basis for risk assessment and adding an allowance for optimism bias. It was said that agreement had been reached with Transport Scotland that this was an appropriate way to proceed. The Inquiry has found no formal record of approval and the evidence

from Mr Sharp who had been in Transport Scotland at the time was that although there had been discussions about the approach to optimism bias, **tie** had decided that there should be no additional uplift in respect of it, and Transport Scotland had not endorsed that view [TR100000085_C, page 0047, paragraph 108]. In the absence of any record of approval by Transport Scotland, I accept Mr Sharp's evidence and must therefore conclude that the business case was misleading when it said that the matter had been approved. Apart from the question of approval, it is apparent that the approach taken by **tie** was unsound. Calculating risk to a higher standard cannot eliminate optimism bias because assessment of risk will itself be distorted by bias and, as Professor Flyvbjerg explained, it was simply wrong to state that it was more onerous to proceed as **tie** had done [TR100000265, pages 0025–0026].

- 21.93** The uplifts were reduced over time from the IOBC to the FBC on the basis of a judgement on the extent to which work on risk meant it was no longer necessary. Professor Flyvbjerg considered that this was not an appropriate approach as it resulted in an assessment of risk that was "way too optimistic" [PHT00000057, pages 82–83].
- 21.94** Professor Flyvbjerg considered that the assessment that no allowance for optimism bias was required indicated that the risk management team did not understand the concept and, as a result, it "would have been particularly prone" to it [TR100000265, page 0026]. There was no explanation for **tie**'s failure to use the most up-to-date guidance and, taking into account what was done in relation to risk, I have the impression that there was a desire not to make allowance for optimism bias because of the effect that it would have on the estimated costs for the scheme. If that is so, it was very short-sighted as it meant that the opportunity was lost to be aware of problems, to decide whether the risk was acceptable and, if so, to manage it.
- 21.95** That said, I accept what Professor Flyvbjerg said that the Guidance available at the time was itself imperfect and a natural reading of it could lead to inappropriate reductions being made to the allowance. It is also the case that the data that is available now is better than that available in 2007, although it may be noted that **tie** did not use the most up-to-date information available to it. In view of the shortcomings with the Guidance and given that it remains the Guidance available, I recommend that it be revisited and revised. In carrying out this exercise, it would be appropriate to draw on more up-to-date data to update the reference classes and the uplifts that are suggested.
- 21.96** As relevant data about major projects will continue to become available upon completion of such projects and the increased database contains more empirical evidence, Guidance should be reviewed and amended, as appropriate, in light of all available data at least every five years.
- 21.97** Apart from the need for action by the United Kingdom and Scottish Governments for their respective interests in respect of the issues mentioned in paragraphs 21.44, 21.78 and 21.79 above, the experience of the Tram project, with its extremely large cost overrun, provides lessons for the identification and management of risk in all major public-sector projects. Professor Flyvbjerg made a number of recommendations in that regard [*ibid*, pages 0030–0031]. They should be an integral part of the governance of all major public-sector contracts in future. In summary these are as follows.
- Probabilistic forecasts rather than single-point forecasts should be used to take account of the risk appetite of funders and project sponsors.

- Funders, sponsors and project managers should be cautious when adjusting uplifts and there should be critical review of claims that mitigation measures have reduced project risk.
- Effective governance needs to provide constant challenge and control of the project, including recording of where the project is compared with its baseline, and reacting quickly to get the project back on track, whenever there are signs that it is veering off course. This necessitates providing senior decision-makers with "data-driven reports on project performance and forecasts combined with reports by the management team and independent audits".
- In reporting to governance bodies there should be special emphasis on detecting early warning signs that the cost, schedule and benefit risks may be materialising so that damage to the project can be prevented. If early warning signs do emerge, the project should revisit assumptions and reassess risk and optimism bias forecasts.
- The quality of evidence rather than process is the key to providing effective oversight and validation.

Chapter 22

Governance

Project-specific governance structures

22.1 The governance structures put in place for the Edinburgh Tram project (“the Tram project”) from time to time were complicated and confusing. Perhaps unsurprisingly, at times they were not adhered to. This means that it is not possible to give a concise and comprehensive statement of what was intended and what was in fact done. I have, however, attempted to identify the principal bodies involved and applicable guidance, and have prepared a timeline summary as to how matters developed. Identifying these makes it possible to evaluate what was done. There were two principal bodies – Transport Initiatives Edinburgh Limited (“**tie**”) and Transport Edinburgh Limited (“TEL”) – and I turn to consider them first.

Transport Initiatives Edinburgh Limited

22.2 On 18 October 2001, the City of Edinburgh Council (“CEC”) resolved in principle to set up an “arm’s-length company” to develop and deliver the New Transport Initiative [[USB00000228](#)].³³ It would be regulated by the memorandum and articles of association and a shareholders’ agreement. Individuals from the private sector were to be approached to join the board of the company, which would also comprise: councillors, including those from Opposition parties; the Executive Member for Transport; and the Executive Member for Finance. It was established by May 2002 under the name “Transport Initiatives Edinburgh Limited”. Its name was changed to **tie** Limited on 24 August 2004 and to CEC Recovery Limited on 13 May 2013. It is referred to in this Report generally as “**tie**”. It is important to note that this company was established with a view to its being the body to implement the whole of CEC’s New Transport Initiative. This included a proposal to instruct a road charging scheme, together with a programme of transport improvements including improvements to the bus network, improvements to the rail network, a ring of “park and ride” schemes and a network of pedestrian routes [[USB00000228](#), pages 0011 and 0033–0034]. The Tram project was just one of those improvements.

22.3 In common with other local authorities, CEC already had experience of undertaking activities through companies wholly or principally owned by it [Dame Sue Bruce [PHT00000054](#), page 5]. These examples included Lothian Buses (“LB”), the Edinburgh International Conference Centre, Edinburgh Leisure and companies engaged in property development. The list of the major companies at that time appears in Appendix 2 to the report prepared by the Chief Executive of CEC, dated 13 December 2001 for the Council meeting on 18 December [[CEC02084490](#)]. However, the ambiguity as to the precise meaning of the expression “arm’s-length company” and the consequences that it had for the management of the project provide the basis for many of the difficulties in management that were to follow. I consider these difficulties below.

³³ There are a number of differing approaches in the documents and statements as to whether there should be an apostrophe in this term and, if so, where it falls and whether it should be hyphenated. It seems to me that “arm’s” with a hyphen is correct. Others may differ.

- 22.4** It was anticipated that an operating agreement would be concluded between the company and CEC to regulate its activities [[USB00000232](#), Parts 1–6]. An unsigned draft of the operating agreement concluded between **tie** and CEC in 2002 [[CEC02086416](#)] stated that the services to be provided were to develop, procure and implement integrated transport projects that were part of the Integrated Transport Initiative. This 2002 agreement was superseded by a further version in September 2005 (the “2005 Agreement”) [[CEC00478603](#)]. This extended the company's services to include third-party projects in the South East of Scotland Transport Partnership area approved by CEC. Again, it was not specific to trams.
- 22.5** The later agreement made provision for the appointment by CEC of a monitoring officer in relation to the company. Such an appointment was in accord with CEC policy to monitor the company to ensure that CEC's interests were safeguarded. The detailed obligations of the monitoring officer are set out in Appendix 1 section C to the Chief Executive's report entitled “A Framework for the Governance of Council Companies”, approved by CEC in December 2001 [[CEC02084490](#)]. All new and existing companies were required to adopt the code. Included in his obligations was the duty to ensure that the company adhered to best practice at all times, particularly in relation to corporate governance, to achieve its objectives. The appointment of a monitoring officer was clearly intended to oversee the company's activities and governance to safeguard CEC's interests. The company monitoring officer is distinct from the Tram Monitoring Officer (“TMO”), whose role I consider below.

Transport Edinburgh Limited

- 22.6** The first major addition to the governance structure was TEL, which was established in summer 2004 [[CEC01875550](#)] to enable integration of bus and tram services in a single entity and to promote transport policy generally [Mr Aitchison [TR100000022_C](#), pages 0106–0107, paragraph 327]. It appears that there was both a positive and a negative aspect to the creation of TEL. The positive was that, at the time that the Tram project was being considered, Edinburgh had the benefit of a very popular and successful bus company: LB. CEC owned 91 per cent of the shares in this company, with the balance being owned by West Lothian Council, Midlothian Council and East Lothian Council. When TEL was established, LB had no role in the development or operation of the trams because the latter role had been awarded to Transdev Edinburgh Tram Limited (“Transdev”), an experienced operating company whose expertise was considered invaluable in the development and procurement of the project. Nonetheless, it clearly made sense that the new tram service should work with the existing bus service rather than against it. **tie** and CEC were advised that, in order to avoid falling foul of rules of competition law on concerted practices, it was necessary that the activities to be integrated be carried on by a single economic entity. If the positive aspect of creation of TEL was the opportunity to integrate with an existing and flourishing service, the negative aspect arose out of the concerns as to the attitude of LB to the Tram project and its ability and willingness to act to the detriment of the project.

- 22.7** There was mixed evidence as to the extent that LB was opposed to the Tram project. Initially it was opposed to the project because it was seen as a threat [Mr Mackay [TR100000113_C](#), pages 0004–0005, paragraph 10]. Mr Holmes said that it was a constant struggle to get LB to stop conspiring against the project [[TR100000046_C](#), page 0120, paragraphs 447–448]. Mr Howell noted that Mr Renilson, Chief Executive Officer (“CEO”) at LB, had displayed “hostility” to the Tram project when he was not in charge [[PHT00000011](#), page 33], that it was not possible to have a trusting relationship with him [[ibid](#), page 29] and that he had been an influential early opponent of the scheme [[TR100000129](#), page 0006, paragraph 16]. He noted that LB was against the scheme and he described its conduct as disruptive. Mr Renilson disputed this and it is, perhaps, to some extent contradicted by Mr Gallagher, who said that Mr Renilson’s input was invaluable [[TR100000037_C](#), page 0058, paragraph 193]. Mr Mackay said that the decision to bring Mr Renilson to sit on TEL was a deliberate tactic to bring him on board [[TR100000113_C](#), page 0023, paragraph 78]. As Mr Holmes put it, the purpose was “to ensure he was inside the tent” [[TR100000046_C](#), pages 0120–0121, paragraph 449].
- 22.8** There was, however, consensus, that it was necessary to avoid competition between the bus and tram services [Mr Gallagher [TR100000037_C](#), page 0058, paragraph 193; Councillor Donald Anderson [TR100000117_C](#), pages 0098–0099, paragraph 250]. Apart from the general observation of Councillor Donald Anderson that other authorities had lost money because of such competition, there was a sound basis for concerns as to competition from LB, because, in the past, that company had acted to frustrate council-sponsored transport projects that LB considered were not in its interests. Although the Central Edinburgh Rapid Transport (“CERT”) project had pre-dated his time on the board of LB, Mr Renilson explained that once the contract to operate the buses on the CERT route was awarded to a rival bus operator, LB decided to saturate the route with high-frequency services with the intention of taking custom away from the rival operator on the CERT route [[PHT000000039](#), pages 188–192]. The party that had been awarded the contract withdrew. In those circumstances, no other operator wished to step in, so the project failed. Mr Renilson thought that the cost to CEC was in the region of £10 million [[ibid](#), page 187]. It was therefore clear that, as well as wielding significant influence, LB wielded considerable power and would use it to undermine even projects promoted by its principal shareholder.
- 22.9** It is perhaps surprising that this matter was not dealt with by CEC directly. In terms of LB’s articles of association, the power of the directors to manage the business was subject to regulations made by the company in general meeting [[TR1000000310](#), pages 0042–0043, article 27.1]. The extent of CEC’s shareholding was such that it would be able to ensure that a vote to make such a regulation was carried, and it could have given directions to the LB board by this means. It is not within the remit of this Inquiry to investigate the reasons for the reluctance on the part of CEC to manage the situation in this way. For present purposes, it is enough to note that LB was seen as a threat to the success of the project and that the way it was dealt with was to put representatives from LB in a position to make decisions on the Tram project at the procurement and construction stage and to ensure that there was integration of the services. While a desire for integration might dictate that LB would work with **tie**, it did not in any way justify LB’s being in a position to make decisions relating to procurement and construction of the project.

22.10 The introduction of TEL with its representation from LB was not welcomed by everyone in the Tram project. Mr Howell recognised that TEL was necessary for integration, but said that he was surprised when TEL was put forward as the lead organisation [[PHT00000011](#), page 29]. Mr Kendall said of the creation of, and passing powers to, TEL:

“it was not just hugely disruptive, it was almost debilitating to my ability to be clear and to direct solutions and outcomes and it changed materially the ability that I had to move this project forward at pace and in 2006. It set up a lot of conflict and the major conflict, as I have already alluded to, the major conflict came between myself and Renilson and also Andy Wood who was the only other person who had built and operated a tram scheme before.” [[TRL00000136](#), page 0190.]

22.11 When considering its role below, it is relevant to have in mind that both the Chief Executive of **tie** and the Project Director were opposed to the interposition of TEL.

22.12 Thereafter, there were a number of developments from time to time, and it is most straightforward to summarise the principal ones in chronological order. Prior to doing so, however, it is useful to consider the guidance that existed at that time in relation to management of projects such as the Tram project.

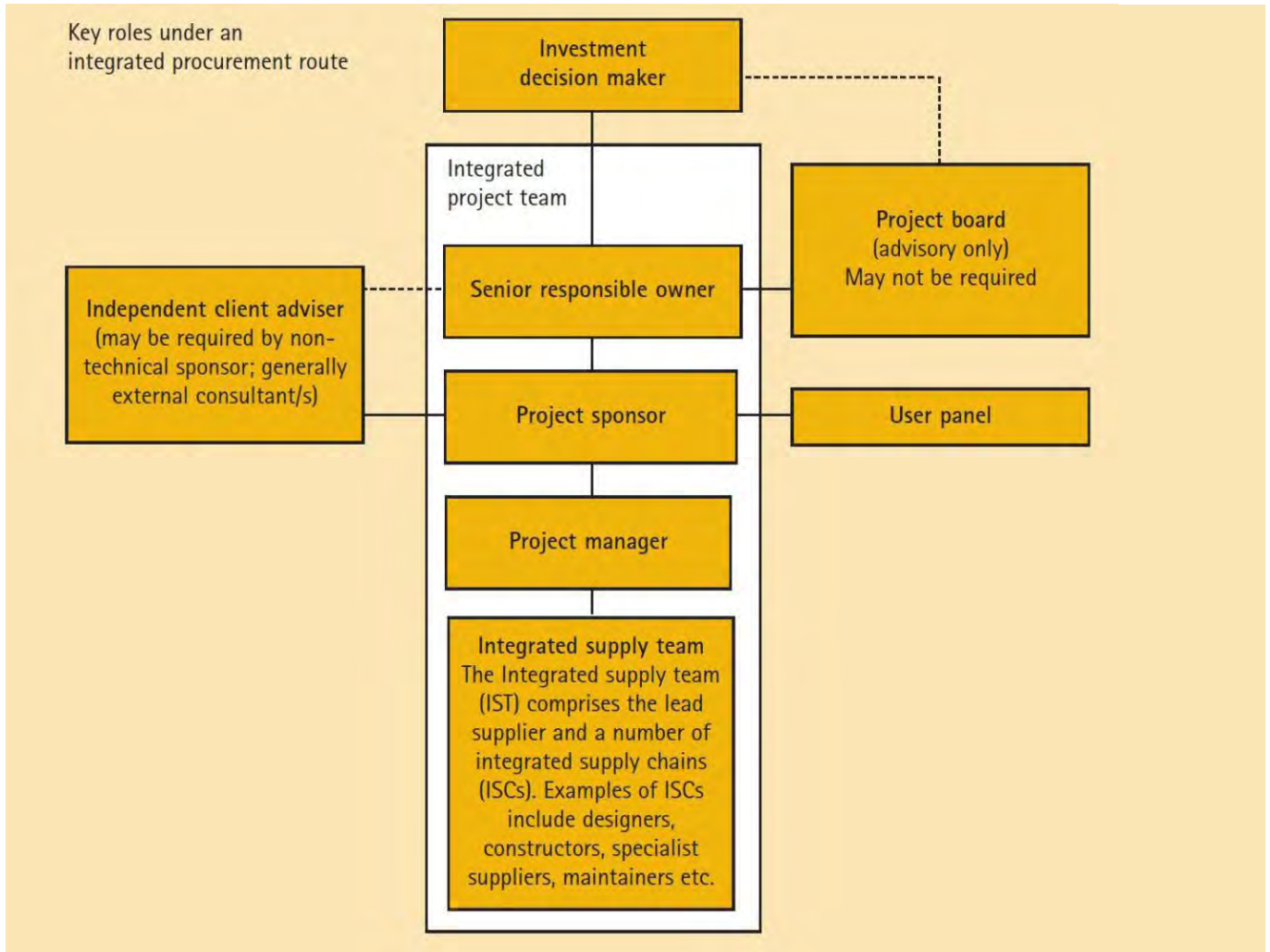
Office of Government Commerce guidance

22.13 Office of Government Commerce (“OGC”) guidance and the OGC reviews of the project will be considered in Chapter 23 (OGC and Audit Scotland), but it is useful to note here the features relevant to the governance structures adopted for the project. The guidance current at the time included a series of booklets, including “Achieving Excellence in Construction, 02 Project Organisation: roles and responsibilities, (2003)” [[CEC02084819](#)]. This guidance was revised and reissued in 2007 [[GOV00000003](#)], but the passages quoted below were not materially changed. It identified the following key roles:

- the investment decision-maker;
- the Senior Responsible Owner;
- the project sponsor; and
- the project manager.

22.14 The Senior Responsible Owner is generally referred to as the “SRO”, and that abbreviation is used in this Report. The guidance stated that the roles and responsibilities of those involved should be clearly defined. It supported a structure with an integrated project team that includes input from the supply team and designers. The guidance noted that this approach would help to encourage innovation and avoid an adversarial culture and would also encourage collective responsibility for a successful outcome. The intention is indicated in a diagram taken from the booklet, which is reproduced in Figure 22.1.

Figure 22.1: Project organisation: the integrated project team



The guidance noted that a traditional project structure was not integrated, as it separated out the responsibilities of each party, and should not be followed unless it demonstrated significantly better value for money than the recommended procurement routes [CEC02084819, page 0010].

22.15 As is apparent, this places considerable importance on the role of the SRO, who should be a senior manager in the business unit that requires the project. Of this role the guidance stated:

“The senior responsible owner is responsible for project success. This named individual should be accessible to key stakeholders within the client organisation and, in order to reinforce commitment to the project, should also be visible to the top management of the partnering organisations involved. The IDM [Investment Decision-Maker] should ensure that the SRO has the authority that matches the responsibilities of the role.

“The SRO defines the scope of the project, is personally responsible for its delivery and should be accessible to stakeholders. The SRO may be assisted by a project board, to ensure that other stakeholders buy in to the project as early as possible. The project board should not have any powers that cut across the accountability and authority of the SRO. Project boards should be advisory only, addressing strategic issues and major points of difficulty. If a major issue cannot be resolved with the SRO, project board members would have recourse to the IDM. The SRO must form part of a clear reporting line from the top of the office to the project sponsor.” *ibid.*, pages 0012–0013.]

22.16 In relation to the role with other entities and persons in the delivery team, the guidance stated:

"The SRO should be committed to encouraging good teamworking practices within the client organisation and with other organisations involved with the project, to ensure that the whole project team really is integrated – client and supply teams working together as an integrated project team. In particular, the SRO should give clear, decisive backing where the client enters into partnering or teamworking arrangements with the integrated supply team (consultants, constructors and specialist suppliers) during the life of the project." [\[ibid, page 0014.\]](#)

22.17 The guidance does not use the term "project director", but does refer to the "Project Manager" as the person who leads the project team on a day-to-day basis. The SRO's role is obviously distinct from that of the Project Manager. It is notable that, in the guidance, the role of the project board is purely an advisory one, assisting, and chaired by, the SRO.

22.18 The Guidance emphasised that lines of reporting and decision-making should be as short as possible and also very clear. It was also stated to be important that delegations and individual responsibilities for decision-taking should be clearly established at the outset of the project and understood by everyone involved in it. It stated that experience had shown that, where these conditions were not met, the likelihood of conflicting, poorly informed or delayed decisions would significantly increase the risk of failure of a project [\[ibid, page 0009\]](#).

PRINCE2

22.19 The OGC also issued guidance on best practice in project management. That advice was called "PProjects IN Controlled Environments" ("PRINCE2") and applied to all projects (ie it was not restricted to construction projects). It was used extensively by the UK Government [\[GOV00000029, page 0002\]](#). Ms Andrew said that this was used on all major CEC projects [\[PHT00000005, page 46; TRI00000023_C, pages 0022–0023, paragraph 20\(2\)\]](#), and Mr Poulton analysed the roles of the various participants in terms of it [\[PHT00000051, pages 61–65\]](#). On the other hand, Mr Heath of OGC said that he did not recall any mention of PRINCE2 in relation to the project [\[PHT00000009, page 22\]](#). On any view, however, it is relevant background against which to consider the arrangements that were put in place.

22.20 As with the OGC guidance considered above, it is a project method that considers more than just the structures used to deliver the project. A key feature of PRINCE2 is the need for independent project assurance. It stated that while the project board was responsible for project assurance, it might find it beneficial to delegate project assurance to others, as members of the board did not work full time on the project and, therefore, placed a great deal of reliance on the project manager. The guidance stated:

"Although they receive regular reports from the Project Manager, there may always be questions at the back of their minds: 'Are things really going as well as we are being told?', 'Are any problems being hidden from us?', 'Is the solution going to be what we want?', 'Are we suddenly going to find that the project is over budget or late?', 'Is the Business Case intact?', 'Will the intended benefits be realised?' ... All of these points mean that there is a need in the project organisation for monitoring all aspects of the project's performance and products independently of the Project Manager. This is the role of Project Assurance." [\[GOV00000029, page 0033.\]](#)

- 22.21** Although this is relevant as background, it is the governance structures that are of concern here. In relation to that, the PRINCE2 method identified three project interests:
- the business;
 - the user; and
 - the supplier.
- 22.22** The business, which may also be seen as the customer, is the interest that decides to proceed with the project and makes available the funds for it. The business interest therefore must take the decision as to whether the benefits of the project are such that it is worth committing expenditure to it. In relation to the Tram project, the business interest is most obviously represented by CEC, although a large part of its responsibilities was delegated, initially at least, to **tie**. As the name suggests, the user is the entity that will make use of whatever is delivered by the project. As matters stood at the start of 2005 and through to August 2009, that was Transdev – the appointed operator. Later, the contract with Transdev was terminated in favour of TEL's becoming operator which meant it would have become the user. The supplier interest, again as the name suggests, consists of the people or entities that will provide the project outputs.
- 22.23** For projects of the size and complexity of the Tram project, the PRINCE2 project management structure below the corporate entities consists of a project board, a project manager and a team manager or managers. The project manager runs the project on a day-to-day basis. The project manager may delegate responsibility for certain elements of the project to particular team managers, just as was done in the Tram project.
- 22.24** The project board should consist of representatives of the three interests in the project. These interests will be represented by the Executive, the Senior User and the Senior Supplier. The Senior User is a person or persons who represent the entity that will make use of the output of the project when it is complete. The function of the Senior User is to ensure that, when complete, the project output will meet the needs of those who will use it. The Senior Supplier will be a person or persons who represent the teams that do most of the work. The function of the Senior Supplier role is to be in a position to commit or acquire resources necessary to complete the project. The Senior Supplier role need not come from the customer organisation and may consist of representatives of external contractors as well as, or in place of, internal managers. Applied to the Tram project, it would be expected that representatives from Bilfinger Berger, Siemens and CAF ("BSC") would be included in the supplier role, as might representatives from Parsons Brinckerhoff ("PB").
- 22.25** The third element of the project board – the Executive – represents the business interest. The Executive is a person rather than a group of people and is ultimately in charge of the project. The guidance is clear that the project board is not intended as a democracy in which decisions are taken by a majority [GOV00000029, pages 0028 and 0052–0053]. The decisions are ultimately those of the Executive, and it is that individual who instructs the project managers. In terms of the PRINCE2 method, the Executive is responsible for appointing the other project board roles and chairs the project board.
- 22.26** I have given only a brief account of the principal elements of the structures identified in these two project management methods. It is clear that there are both similarities and differences in the various roles and workings of the two methods. The purpose of

the Inquiry does not require a detailed evaluation of these. What is appropriate is to have an understanding of the background guidance that was deemed to be of some relevance to the Tram project to provide a framework within which to evaluate what was done.

Timeline (July 2005 – December 2009)

22.27 To state all the various decisions in relation to governance and the papers that lay behind them would be a lengthy process, and could obscure the main elements. Setting out even the main events in the changing governance picture requires a reasonably detailed narration of events between 2005 and 2010. In my view, the main events during that period were as follows:

July 2005

22.28 In July 2005, the Chief Executive's Report to the **tie** Board anticipated that a Tram Project Board ("TPB") and an Edinburgh Airport Rail Link Project Board would be set up in respect of their two principal projects [TRS00008524, page 0015]. This was said to be required as the magnitude and frequency of decisions on the project was increasing [ibid, page 0019]. The precise role of the boards was not stated clearly at the time. The **tie** Board papers said that the project boards would assume responsibility for each project, that they would be the principal decision-making bodies and **tie** would delegate its powers to them. However, it was also stated that the boards "will not have directive power" [ibid, page 0015]. It was envisaged that the boards would report to the **tie** Board. The papers for this meeting also state that "[t]here must be migration of **tie** Board project responsibility to TEL at the appropriate time in a seamless, controlled way" [ibid, page 0019]. As noted above, TEL was envisaged to be the single economic entity that would facilitate service integration. There was no indication of what the "appropriate time" would be. The paper also noted that delegation to the project board of the principal decision-making authority would come by way of delegation from **tie** and later TEL [ibid, page 0019].

22.29 At this time, Mr Bissett was working for **tie** as a consultant and was primarily using his background in finance and business to develop the financial aspects of the business cases. He also had a prime role in developing the governance structures. He said that the intention was that the project boards should be "the primary oversight and challenge body for each of the two projects" or the "primary governance and oversight body" [PHT00000028, page 40]. On the other hand, he said that it was intended that it would replace decision-taking by **tie** [ibid, page 42]. Despite this, he also said that "**tie** would still retain the ultimate responsibility for the activities of the Board" [ibid, page 41]. He was asked whether it might be the role of the project boards to facilitate the implementation of the project rather than to take decisions in respect of it [ibid, page 44]. This is consistent in part with what was said in the board papers and is consistent also with the discussion of project boards in guidance on the PRINCE2 model. It does not accord, however, with the statements that it would be a decision-making body. Although Mr Bissett said that it was envisaged that the boards might have this facilitating role, his descriptions of how they would operate suggested that their role would be an executive one in which each member of the board could seek to determine the decision [ibid, pages 40–45].

22.30 At this stage, no statement was made as to the membership of the project boards. Mr Bissett said that it was intended that they would have representatives from CEC and Transport Scotland and would include all the "main parties" or "all of the main stakeholders" [ibid, page 42]. He thought that this would give the persons in question

more involvement rather than their just being observers. The consequence of this is that it would be these stakeholders who would be taking decisions in relation to delivery of the trams rather than **tie**. Asked why this should be the case, he said that **tie**'s primary purpose was just to get the project through the development stage to be ready for procurement [[libid](#), page 43]. I do not accept this. No such limitation on the remit of **tie** was envisaged when it was established. This was an innovation on what had been intended, and it is notable that it was being brought about within **tie** rather than by CEC.

- 22.31** Even at this stage, when the project boards were first proposed, it is apparent that there was a lack of clear expression of their role and their responsibility. The statement that they would be the principal decision-making bodies is quite inconsistent with the guidance in the PRINCE2 model that they would not have directive power. To say that **tie** would delegate its powers to them indicates that their role would be that previously undertaken by **tie** and was therefore directive or executive. In terms of the guidance on project boards, however, that is not the proper function of a project board. It appears that what is being done is, in essence, regarding each project board as a mini-**tie**, which would focus on the single project. There is a further fundamental inconsistency between the statement that powers would be delegated to the project boards and the comment by Mr Bissett that they would have the function of oversight and challenge. If the statement as to delegation of powers is true, the decisions and actions that they would be overseeing or challenging would be their own. This clearly illustrates **tie**'s lack of understanding for the need for independent review of actions and decisions in any system of governance. It is also a good example of the confusing and ineffective nature of the governance structures that were proposed from time to time. It is also apparent from the OGC and PRINCE2 guidance mentioned above that neither intended the project board to function as an oversight body. Thus, from the inception of the project board, there was confusion and ambiguity and a departure from guidance without any apparent appreciation that this was being done.

August 2005

- 22.32** The papers for the **tie** Board Meeting in August 2005 [[TRS00008528](#), Parts 1–2] stated that a report on governance had been approved at the July board meeting [[libid](#), Part 1, pages 0005 and 0026] and attached a remit for the TPB [[libid](#), Part 1, page 0050]. This was described by its author, Mr Bissett, as “not an easy read” [[libid](#), Part 1, page 0026]. That is an understatement. This remit refers to the board as “a body consisting of the key stakeholders who have influence in facilitating the development and delivery of the Tram Project” [[libid](#), page Part 1, 0050]. This function is also picked up in the requirement that members of the board will seek to resolve within their own organisation any potential obstacles to the project [[libid](#), Part 1, page 0052]. It is of note that the paper indicates that the project board will make only recommendations to the **tie** Board in relation to ongoing governance, project management arrangements and changes to cost and programme. Despite this reference to a facilitative function and the making of only recommendations, the remit envisages that the board will take over most of the authority vested in **tie** by way of delegation [[libid](#), Part 1, pages 0051–0052]. It was noted that these arrangements would change when the **tie** Board handed over formal responsibility to the TEL Board, but Mr Bissett noted that this was to deal with the situation when the service was in place and that **tie** remained the delivery body [[libid](#), pages 0051–0053]. It recognised that the TPB was not a legal entity but nonetheless said that it would have powers delegated to it by the **tie** Board [[libid](#), page 0058]. There is no mention in this paper of any function of

"oversight" in relation to **tie**. The remit was approved at the August meeting of the **tie** Board, which recognised that **tie** could take back the powers and responsibilities of TPB if the latter did not fulfil its remit [[TRSo0008535](#), page 0007].

- 22.33** The reference within the remit paper to the project board's having a "facilitative" role echoes one of the roles suggested in the July paper. This role is perhaps closer to the intended role of a project board that brings together representatives of the various interests necessary to make the project a success and that provides advice to the principal decision-taker rather than being that decision-taker. The statement that the project board would make recommendations rather than taking decisions is also consistent with the guidance. Once again, however, the remit contains the contradictory statement that the project board would take over the authority of the **tie** Board. Although the two functions referred to in the paper (facilitation on the one hand, and taking over authority on the other) appear to be at odds, Mr Bissett considered that it was intended that they should do both [[PHT00000028](#), page 48]. I reject this explanation. Instead, that such mutually exclusive comments are contained in the remit suggests that the **tie** Board participants had not read it or, at the very least, had not taken the trouble to understand it.
- 22.34** At this stage it was intended that the TPB would comprise:
- the Chief Executive and Project Director from **tie**;
 - the Chief Executive and all non-executive directors from TEL;
 - a representative of CEC;
 - a representative of the Scottish Executive (this being before the change of name to the Scottish Government and the creation of Transport Scotland);
 - a representative of Transdev; and
 - Mr Papps from Partnerships UK (a body established by the UK Government to provide advice in relation to management of large construction projects).
- 22.35** The Chairman of the TPB was initially to be Mr Gemmell, a non-executive director of **tie**, but it was noted that "in due course" the Chairman would be the Chairman of TEL or a non-executive director of TEL [[ibid](#), page 51].
- 22.36** The composition of the proposed project board is not consistent with either guidance model. To a large extent, it merely replicates **tie** and TEL or is a cross between them. This is perhaps unsurprising, in that it is being asked to perform the functions previously carried on by the companies. It raises the issue of why it was thought necessary to have a project board when a body or bodies with similar members was or were performing the same role. That question does not appear to have been considered at the time.

September 2005

- 22.37** In September 2005, a progress report was produced by **tie** to the committee of the Scottish Parliament considering the Tram Bills. The report stated that the members of the TPB acted as "champions of the project" within their respective organisations for the progression of necessary permissions and approvals and that the TPB operated under delegated authority from the **tie** Board and, in turn, provided the Tram Project Director ("TPD") with delegated authority to deliver the project [[CEC00380894](#), page 0004, paragraph 1.9]. It is hard to see how the TPB could have played an oversight or governance role while its members were also acting as "champions" of the project. The report did not give a clear statement as to what authorisation had been delegated to the TPB and what the remaining role and responsibilities of the **tie** Board were.

October 2005

- 22.38** The papers for the **tie** Board meeting for October 2005 [[TRSo0008535](#)] again contain statements that are hard to reconcile [[libid](#), pages 0030–0031 and 0043]. The TPB was noted to be the primary decision-making forum and also the oversight body for the project, but nonetheless **tie** retained overall responsibility for the quality of **tie**'s service delivery and for fundamental matters affecting the project [[libid](#), page 0030; Mr Bissett [PHT00000028](#), pages 61–62]. Also, decisions of the TPB were to be reported to the **tie** Board for ratification, and the TPB was to be seen as a committee of the **tie** Board so as to enable the delegation of powers [[TRSo0008535](#), page 0043]. When asked about the number of bodies – CEC, **tie**, TEL and the TPB – Mr Bissett accepted that there was overlap and that having four layers in the hierarchy was “less than efficient” [[PHT00000028](#), pages 62–63].
- 22.39** The same defects in the earlier two papers appear here also. It is hard to see how it was intended to reconcile the notions that:
- the TPB was the decision-maker, but was also providing oversight;
 - the TPB was the decision-maker, but **tie** retained responsibility; or
 - the TPB was the decision-maker, but its decisions would require ratification by **tie**.
- 22.40** It was apparent from the TPB membership suggested in August that most of the members of the TPB were not drawn from **tie**. There was also nothing to suggest that **tie** could change the membership of the TPB. It was also clear that further debate of issues before the **tie** Board would be the exception. This makes it odd that **tie** would retain responsibility for the decisions taken.
- 22.41** The role for the TPB that was being developed in this paper meant that it was not apparent who was to play the role of the executive or the SRO. If the decisions were to be taken by the TPB collectively, the result would be the loss of individual accountability that is a feature in both the OGC guidance and PRINCE2. This was not considered in the review. Having the TPB as the body that would take decisions may be the reason that BSC and PB were not represented on the TPB to represent the supplier interest. It may have been felt that they could not participate in making decisions as to how affairs under the contracts with them should be conducted. That need not have been an issue if the role of the project board had been limited as had been suggested in the guidance.

November 2005

- 22.42** The minutes of the meeting of the TPB in November 2005 (as a sub-committee of the **tie** Board) dealt not with the structures that were to be in place but where the responsibilities lay [[TRSo0002067](#)]. They noted that TEL will “hold the mantle of control and ownership post financial close” [[libid](#), page 0002, paragraph 3.1]. This would obviously be much earlier than taking responsibility once services commenced and would mean that TEL had control during construction. No justification was given for taking responsibility for construction of the tram infrastructure away from **tie** and giving it to TEL. The minutes noted that TEL, **tie** and the TPB would work together. They did not explain how, but noted that the matter was to be considered at a meeting of the TEL Board which it was said would follow on from the TPB meeting. The Inquiry has been unable to find any minutes of such a meeting, but a note of a meeting of the TPB in December 2005 noted that a paper concerning governance was presented to the TEL Board on that date, but no substantive discussion had taken place then or since [[TRSo0002065](#)].

22.43 The attendance list for this meeting of the TPB recorded the presence of representatives of **tie** in addition to the persons who in the previous month had been said would make up the board. This appears to be a further indication of a lack of clarity about the constitution and function of the TPB.

January 2006

22.44 In the minutes of the TPB of 23 January 2006 the merger of the TEL Board and the TPB was recorded, and it was recognised that there had to be clear governance for decisions to be made [[TIE00090588](#), page 0002]. Having created the TPB as a separate body to assist in construction of the Tram project, it is odd both that it was being merged into a board of directors and that the board in question was that of TEL. Mr Bissett, who is recorded as being present at the meeting in January, could not recall why this had been decided. Even if it was now considered that TEL rather than **tie** was delivering the tram infrastructure, the company board and the project board had distinct functions and different membership. This merger shows that this was not properly understood at the time.

February 2006

22.45 A paper entitled 'Proposed Governance Structure' [[TRS00002175](#)] set out proposals that differed from those from November 2005 and were said to incorporate TEL fully into the project and produce governance and a decision-making structure "which reflects clear project roles and responsibilities". These entailed that TEL would undertake to CEC to deliver the tram system integrated with other modes of transport, and **tie** would be responsible to TEL for delivery of the trams. **tie** would deliver services "on behalf of CEC". It assumed that **tie** would enter into the contracts for construction of the tram system and delivery of the tram vehicles, but that these would be novated to TEL once operations commenced. Despite the statement in the January minutes noting the merger of the TPB with the TEL Board, this paper described it as a proposed situation. Amalgamating the two would mean that instead of **tie** delegating responsibilities to the TPB, the TPB would be part of the body that owned **tie** [[PHT00000028](#), page 73]. It noted that the decisions of the merged body would be taken solely by directors of TEL. This meant that, in effect, TEL had been put in charge and **tie** was taken out of the picture [[ibid](#), pages 75–76], and the paper noted that "TEL has effectively stepped into tie's shoes for the tram project". Mr Bissett acknowledged that he could not now see the advantages in this change [[ibid](#), page 75]. Despite the transfer of responsibility, the paper noted that TEL was not to employ a management team other than its CEO.

22.46 At the same time as proposing the merger of the TPB and the TEL Board, this paper proposed that TEL Board meetings should routinely be attended by the TPD, other **tie** operational management, other CEC representatives, Transdev representatives, a representative of the Scottish Executive and Mr Papps. This, in effect, brought it directly into line with attendance at the **tie** Board. This further obscured the point of the changes and blurred the distinction between the various entities. There was still no representation of the supplier interest.

22.47 Although the paper sought to incorporate TEL into the management structures for the project, it provided no justification for this. As was mentioned in paragraph 22.45 above, the paper stated that "TEL has effectively stepped into tie's shoes for the tram project" [[TRS00002175](#), page 0003], but did not say why this was or *should* be the position. As I have noted above, having regard to the purpose for which TEL was created and the expertise of the persons recruited to it, there is no apparent reason why it should take over responsibility for construction works. There

was no explanation of the benefit that would arise from having **tie** enter into all the contracts and provide its services to TEL. It is of note that at this stage almost all the employees were engaged by **tie** and it was **tie** that was in receipt of the monies from CEC, including those that had been provided by Scottish Ministers. That being so, one would have expected a reasoned statement of the rationale for a new body being included in the structure. While it might be expected, it was not given. One is left with the feeling that it was simply an attempt to bring LB into the project to head off potential opposition and difficulty.

March 2006

22.48 Although the February paper entitled 'Proposed Governance Structure' was approved by both the **tie** and TEL Boards that month, a revised version was prepared in March 2006 [TRSo0000330]. The following are the principal changes that it made to the structure that had been agreed the previous month.

- (a) There was no longer express provision that **tie** would be providing its services to TEL, although it was not clear to whom services would be provided.
- (b) In the structure set out in February, **tie** was said to be providing services to TEL on behalf of CEC. This appeared to indicate that TEL stood in the shoes of CEC as the recipient of the services. In the March structure, **tie** was to deliver the project "on behalf of CEC", which appeared to indicate that the services were provided to CEC.
- (c) It recorded that TPB had already been merged with TEL and stated that the TEL Board's authority (and therefore, by necessary implication, the TPB authority) was exercisable by TEL's CEO.
- (d) A sub-committee of the TEL Board was formed to issue guidance to the TPD and individual work stream leaders. This indicated that it was the collective body rather than the individual that was in charge and is the opposite of what is contained in the guidance.
- (e) While **tie** was to remain the counter-party for all contracts until service commencement, the terms of those contracts were to be subject to approval by TEL "in its project Board role". This maintains the odd position that the party that had the ultimate say on decisions was not the one incurring contractual obligations.

May 2006

22.49 A project readiness review carried out by the OGC in May 2006 [CECo1793454] noted that the governance structure was complicated compared with best practice. By way of explanation, the review stated:

"A best practice project governance structure would consist of an empowered project team under the direct control of an empowered and accountable project director. The project director would report to a project board chaired by the Senior Responsible Owner ('SRO') for the project on behalf of the project promoter.

"The project board and the project director would have clear terms of reference in respect of their respective responsibilities delegated from the project stakeholders.

"The OGC describes the role of the SRO as *'the individual responsible for ensuring that a project or programme of change meets its objectives and delivers the projected benefits. They should be the owner of the overall business change that is being supported by the project. The SRO/PO should ensure that the change*

maintains its business focus, has clear authority and that the context, including risks, is actively managed. This individual must be senior and must take personal responsibility for successful delivery of the project. They should be recognised as the owner throughout the organisation.” libid, page 0006, paragraph 3.1.]

- 22.50** The review recommended that a TPB be set up as a matter of urgency and that there be clarity as to the identity of the SRO. It also said that the TPB should be the only body through which key decisions on the project scope should be taken.
- 22.51** From the terminology used it is clear that it is OGC guidance rather than PRINCE2 that is being applied. In that compliance with the recommendations of these reviews was a condition of the grant monies being made available by the Scottish Ministers, there should have been some impetus to adhere to the OGC model.
- 22.52** As was noted in paragraph 22.15 above, the OGC guidance refers to the SRO as merely being “assisted” by the project board. The OGC review does not state expressly where the executive power would lie. It did not say that *all* project decisions should be taken by the board, but it clearly accords it primacy. Oddly, therefore, the review appears to contemplate a different structure to that stated in the OGC guidance. It may be relevant that Mr Heath, who was a member of the team, was unaware of the OGC guidance until it was sent to him by the Inquiry [PHT00000009, pages 7–13]. No basis was stated for departing from the Guidance and doing so is likely to have added to the uncertainty surrounding the role of the project board. The apparent predominance afforded to the project board in this Review adds to the difficulty in determining the role of the SRO. As with the structure proposed in March 2006, it adopts collective responsibility in place of individual responsibility and this gives rise to the danger that, with a number of people and interests involved, there is a culture in which each person assumes that someone else is exercising judgement and control. As will be apparent from the discussion below, that is what happened.
- 22.53** In relation to the recommendation that there should be a project board at all, it will be apparent from the foregoing that, in fact, such a board had been in operation for some time. However, this fact may have been obscured as a result of the board’s having been merged with TEL and being composed of the same people as the board of **tie** or TEL rather than following the OGC guidance. It appears, however, that, up to this time, there had been no SRO. The papers submitted to **tie** and to the TPB in relation to guidance prior to this time had not made mention of the SRO, by way of identifying either the role or the person who performed it. Although Mr Howell thought that Mr Kendall might have been designated SRO [PHT00000011, page 37], there is no record of this and, as Mr Howell appeared very tentative in his views on this matter, I conclude that he was mistaken in this regard. This means that the only oversight by an individual would come from the Monitoring Officer appointed in relation to **tie**’s operating agreement with CEC. At this time, it appears that, in terms of that agreement, the Monitoring Officer would be concerned with the company rather than the project as a whole so there was no one performing the SRO role.
- 22.54** Following the review, Mr Renilson, then the CEO of TEL, was appointed as SRO. This is confirmed in a number of papers on guidance prepared by Mr Bissett, which came later and will be considered below. It was also noted in a later readiness review conducted by OGC in September 2006 [CEC01629382, page 0005]. Mr Renilson interpreted the role as requiring him to use his best endeavours to “make the project happen” [PHT00000040, page 91]. However, he considered that his role as SRO related only to the period when the tram would be operational and not the

construction period [TR100000068_C, pages 0039–0040, paragraph 129]. I have seen no evidence that could justify his belief that his role was so limited but, on any view, the result was that no one was performing the SRO role during that stage. This should have been apparent to all the members of the TPB, and I find it extraordinary that nothing was said at the time. Had the issue been noted then, either Mr Renilson would have started to perform the role or another person could have been appointed SRO in his place. Allowing the project to proceed in the absence of someone to perform this key role – or the equivalent of the Executive in PRINCE2 terms – was a fundamental defect in the governance arrangements. It meant that there was no single person with responsibility for the project and the focus that could be expected from an active SRO was absent.

22.55 Even if Mr Renilson had undertaken the role assigned to him, the situation would still have been far from ideal. TEL became a delivery organisation as the project governance developed and Mr Renilson was its Chief Executive. In my view it is better for an SRO, as the person with ultimate responsibility for the project, to be someone within the client that is commissioning the work, or the end user of what is provided – they should be on the outside looking in. As such, they have some objectivity in relation to the actions of the entity or entities responsible for delivery. It would have been most appropriate to have had an SRO from within CEC because the project “belonged” to CEC. This would have addressed the issue of unsatisfactory reporting to CEC. As I will consider below, the alternative of reporting from the TPB to the CEC Tram Sub-Committee was not satisfactory for this purpose.

June 2006

22.56 A further paper prepared by Mr Bissett on governance – this time for the TEL Board meeting in June 2006 – was intended to address the position through to financial close [CEC01803822]. It said that the “fulcrum” of the project was the TEL Board’s “[acting] as the Tram Project Board” [ibid, page 0001; PHT00000028, page 83] and that the authority for the Project Director came from TEL. **tie** was noted to be the “delivery agent” specified by CEC acting through TEL. Although the TPB and the TEL Board had been merged, this paper noted that it was necessary to have more clear demarcation between TEL as the project board and TEL in its other capacities. It said that TEL was an element of the “project approval” part of governance but also, as the project board, at the project execution level. To achieve demarcation, it was proposed that the project board would revert to the title of the TPB and would be a formal committee of the TEL Board. The paper indicated that Mr Mackay, the non-executive Chairman of TEL, was to chair the TPB. The remainder of the membership would consist of:

- Mr Renilson, the TEL CEO and SRO;
- Mr Gallagher;
- Mr Harper, the Project Director;
- Mr Campbell, a director of TEL and LB;
- a CEC representative;
- a Transport Scotland representative; and
- other advisers as required.

- 22.57** This paper noted that the need to identify an SRO was one of the issues that required to be addressed. It stated:
- “The TEL CEO has overall responsibility to ensure project execution is working effectively. As such he would be the Senior Responsible Owner (SRO) under OGC guidelines and is the lead operational director on the Tram Project Board. This does not precisely fit OGC guidelines, which would for example call for the SRO to chair the TPB, but is a practical approach appropriate for this project.”
[CEC01803822, page 0002.]
- 22.58** It referred to Mr Renilson as being the SRO [ibid, page 0003], and there is no doubt from this that this role covered the construction phase as well as the operational phase. Mr Renilson was a director of TEL and would have received a copy of the paper. Whatever had been the position prior to this it meant that he should have been aware of what was expected of him in that role.
- 22.59** Mr Bissett was asked about the development of the business case that was ongoing at this time, and he explained that that was the responsibility of the Tram project team employed by **tie**, but once approved at that level it would “move through the hierarchy to the Tram Project Board and ultimately TEL to give its seal of approval if it thought appropriate to the Council” [PHT00000028, page 87]. Mr Bissett recognised that the various layers were duplicative. In terms of the guidance noted above, it should have been the SRO who had responsibility for the business case.
- 22.60** If the re-emergent TPB took a decision in relation to implementation of the project, it would do so as a sub-committee of the TEL Board. That decision could take effect within TEL and then **tie** would, in effect, require to be instructed to implement the decision [ibid, page 90]. The complexity of this is obvious. Mr Bissett said that the process worked better in practice than it appeared on paper, which he attributed to:
- “the consistency of membership by senior people of the Tram Project Boards. So, for example, the Tram Project Board meeting to address the tram project would be, give or take two or three hours, possibly longer than that at some points, whereas the TEL Board, which had the same people, had been represented as attendees on Tram Project Board meetings to avoid having two meetings about the same topics.
- “So the TEL Board meeting was actually a fairly limited affair. They had statutory legal responsibilities, obviously, but they didn’t have to revisit the entire conversation about the tram project.
- “So in practical terms, it wasn’t as duplicative as it may appear on paper.”
[ibid, pages 90–91.]
- 22.61** Mr Bissett did not accept that a situation in which both bodies would have to consider the issue and had to rely on overlaps in membership to avoid repetition indicated that something was amiss. Mr Bissett did not accept that there was a lack of clarity as to which body was taking which decisions and/or providing advice to CEC. I consider the issue of the overlaps of membership in more detail in paragraphs 22.92 and 22.93 below.
- 22.62** The paper also noted that two sub-committees of the TPB were established. One of them – the Design, Procurement and Delivery (“DPD”) Sub-Committee – was to be headed by Mr Gallagher, the Executive Chairman of **tie** [ibid, pages 92–95]. This further complicated the decision-making path. The DPD Sub-Committee under Mr Gallagher could take a decision that would advise the TPB, a sub-committee of the

TEL Board. In order for a decision to take effect it was necessary that TEL give a direction to **tie** under the chairmanship of Mr Gallagher. It may be said that formal steps were not required to achieve this, but it remained the position that there was a very complex structure and that reliance on informal directions or instructions usually creates scope for misunderstanding and confusion.

22.63 The paper continued the approach that the TPB was to have executive rather than advisory powers, which, as I have already noted, did not conform to the OGC guidance. The decision to have someone in a non-executive role (Mr Mackay) chair the TPB was also at odds with either the OGC or the PRINCE2 guidance. According to both, the chair of the TPB was someone with core executive role and responsibility. Further, as the function of the TPB and the SRO/executive was to instruct the project director, it is odd that the project director was a member of the board rather than reporting to it. The basis for recommendation as to the membership of the TPB was not stated and is not clear. Once the non-executive chairman and the project director are left out of account it is apparent that although there were people involved who had experience of managing LB (Mr Renilson and Mr Campbell) the only person who might have had experience of a large construction project would be the representative from Transport Scotland. As I noted in Chapter 3 relating to the involvement of Scottish Ministers, however, Transport Scotland's involvement in the project was later brought to an end.

August 2006

- 22.64** The minute of the meeting of the TEL Board on 21 August 2006 [[CEC01794941](#)] suggested that the TPB would be separated from TEL. This had been considered as an option in the previous document, and Mr Bissett noted that there was a recognition that the TEL Board had not yet arrived at the best structure for the future [[PHT0000028](#), page 97].
- 22.65** In this month, Mr Gallagher was appointed as Executive Chairman of **tie**, having been made Non-Executive Chairman the previous month. Mr Gallagher said that that was because the political uncertainties surrounding the project meant that it would be difficult to recruit a Chief Executive to replace Mr Howell. The dual role was intended to be an interim arrangement, but it remained in place until Mr Gallagher resigned in late 2008. Having one person serve as both Chairman and Chief Executive does not comply with the code on good corporate governance derived from the Cadbury and Greenbury Reports [the Combined Code, Principles of Good Governance and Code of Best Practice, [CEC02084834](#)]. This was recognised by CEC at the time of making the appointment, but Mr Aitchison maintained that the departure from good practice was a pragmatic approach in the prevailing circumstances, including the finalisation of the business case [Mr Aitchison [TR10000022_C](#), pages 0098–0099, paragraph 324]. However, that excuse for departing from the code as to good governance fails to take into account the responsibility of the SRO for the business case. Had CEC recognised the role of the SRO and ensured that Mr Renilson was protecting the interests of CEC by performing that role, the perceived justification for departing from the code would have been shown to be without foundation. Allowing the dual role removed a check that would otherwise have been in place in the period through contract negotiation and execution.

September 2006

22.66 A note prepared by Mr Bissett for the meeting of the TEL Board and the TPB on 25 September 2006 [TIE00000905; TIE00000906] outlined the project governance structure for Edinburgh's integrated transport system. It noted that the TPB would be an independent entity, rather than a sub-committee of TEL as had previously been said to be intended. The TPB was to have full authority delegated from CEC. The document setting out the new structure stated that this was to be formalised by the TEL Board's approval of the paper. This is questionable: the decision of the TEL Board might have been effective as between it and the TPB, but the authority of CEC would have been required for such a delegation. On any view, this intention that there be delegation from CEC indicates that an executive function was intended for the TPB. The covering memorandum, on the other hand, said that the members of the TPB were to be empowered by their organisations to take decisions rather than by CEC. This suggests that they could bind only those organisations and is suggestive of a facilitative function. It is therefore apparent that there was still no clarity as to the role that the TPB was to play.

October 2006

22.67 The minutes of the TPB for October 2006 [CEC01355258] noted the approval of a new governance structure. That structure is described in a paper that had been sent to the **tie** and TEL Boards in August [CEC01758865]. It set out the structure which it was said would take the project through to financial close. It also described the key bodies as being the TEL Board, the TPB and the two TPB sub-committees – **tie** was no longer identified as a key body. The paper stated that TEL would make recommendations to CEC as to the project. It also stated that:

"The TPB is established as an independent body with full delegated authority from CEC (through TEL) and TS to execute the project in line with the remit set out in Appendix 3. In summary, the TPB has full delegated authority to take the actions needed to deliver the project to the agreed standards of cost, programme and quality." [ibid, page 0002.]

22.68 The remit in Appendix 3 gave the TPB responsibility:

"To oversee the execution of all matters relevant to the delivery of an integrated Edinburgh Tram and Bus Network with the following delegations:

- a. Changes above the following thresholds
 - i. Delays to key milestones of > 1 month
 - ii. Increases in capital cost of > £1m
 - iii. Adversely affects annual operational surplus by >£100k
 - iv. is (or is likely to) materially affect economic viability, measured by BCR impact of > 0.1
- b. Changes to project design which significantly and adversely affect prospective service quality, physical presentation or have material impact on other aspects of activity in the city
- c. Delegate authority for execution of changes to TEL CEO with a cumulative impact as follows:
 - i. Delays to key milestones of up to 1 month

- ii. Increases in capital cost of up to £1m
 - iii. Adversely affects annual operational surplus by <£100k pa
 - iv. is (or is likely to) materially affect economic viability, measured by BCR impact of <0.1" [[ibid](#), page 0006].
- 22.69** Even within this remit, the conflict as to the role of the TPB is notable. It is first said to be the body with authority to execute the project and then it is stated that it is there to oversee what is done by others – presumably **tie**.
- 22.70** When asked about the contents of this paper, Mr Bissett said that the function given to the TPB was that which had been originally given to **tie**, but this is far from clear from the paper's terms. **tie** had been created to execute the project, and this paper cannot make up its mind as to whether the TPB was there to execute the project or to oversee execution. Mr Bissett sought to modify his position by saying that the TPB was overseeing the project team employed by **tie** rather than undertaking the delivery itself [[PHT00000028](#), pages 105–107]. This merely reinforces the confusion and is clearly at odds with the statement in the paper that the TPB would "execute" the project [[CEC01758865](#)].
- 22.71** The paper suggests the following as the membership of the TPB:
- chair
 - senior Transport Scotland representative
 - senior CEC representative ("Senior User Representative")
 - TEL CEO and project SRO
 - **tie** executive chairman and TEL operations director ("Senior Supplier Representatives")
- 22.72** The titles noted in brackets were said to be the ones that accorded with the OGC guidance as to composition of a project board. This is an error. The designations in brackets conform to the PRINCE2 guidance. The term "SRO", on the other hand, does come from the OGC guidance and not from PRINCE2. This betrays a further lack of clarity as to the model that was being employed. The identified "Senior Supplier Representatives" are not people who fall within the term "Supplier", as it is used in the PRINCE2 guidance. Neither was CEC the "User" in terms of that model, as people from Transdev (or possibly TEL) should have been the "User" and CEC, or **tie** in its stead, the "Business" or client. I further consider the issue of membership below, but my impression is that first a decision was made as to who to include and then an attempt was made to fit designations from the guidance to them.
- 22.73** The decision no longer to consider **tie** a key body in favour of TEL and its board sub-committees is puzzling. In reality, **tie** was the body that employed almost all the people to carry out the work necessary to deliver the project. It was also the body that was seeking tenders for the infrastructure and tram works. It was the body that had entered into the System Design Services contract. It was the only body in receipt of funds from CEC; TEL obtained its funding from **tie**. Anything that TEL was to do would, in reality, be done by **tie**. All the recommendations that TEL might make to CEC would depend on work carried out by **tie**, and it is not apparent that the TEL Board would be in a position to interpret information provided by **tie** employees and consultants so as to reach a different view. This factor means that the recommendations must inevitably arise within **tie** but would be "rebadged" as though they had come from TEL. Mr Bissett said:

"tie would make the proposals through the Tram Project Director to the Tram Project Board, which is where the main discussions on any issues took place. And the Tram Project Board formally reports up to TEL and to the Council."
[\[PHT00000028\]](#), page 108.]

22.74 No reason was given as to why there should be such a bureaucratic and complex process. It is of note, however, that such processes were apparent elsewhere in the management structures of the project, and most strikingly in the process for giving approval to execute the Infrastructure contract ("Infraco contract") and the tram vehicle supply and maintenance contract ("Tramco contract"). The structure that was put in place appears quite artificial and does not reflect the reality, which is that recommendations and advice would come from **tie**. In response to questions as to the difficulties that might arise where formal structures do not match the practice, Mr Bissett said that "informal communications are very often very important in project delivery" [\[ibid\]](#), page 107]. In my view this is yet another unfortunate example of something that is a feature in the Tram project: attempts to rely on informal procedures and communications when it is noted that the formal ones are defective or unsuitable.

Audit Scotland report

22.75 In June 2007, after the Scottish Parliament election, at the request of the Cabinet Secretary for Finance (Mr Swinney) the Auditor General for Scotland published his review of the Edinburgh transport projects [\[CEC00785541\]](#). This will be considered in more detail in Chapter 23 (OGC and Audit Scotland). In relation to the Tram project, Audit Scotland's report concluded that arrangements put in place to manage the project appeared to be sound, with "a clear corporate governance structure" and "clearly defined project management and organisation". Unlike the internal TPB paper from October 2006 [\[CEC01355258\]](#), Audit Scotland's report described **tie** as one of the "key players". The report recorded that the TPB exercised overall governance and had the authority needed to deliver the project to agreed cost, timescale and quality standards. This was clearly an executive rather than a facilitative role. The report said that the authority was delegated to it by CEC via TEL. This is the only identified role for TEL in the governance structure. It is apparent that the structure as narrated by Audit Scotland is not that which had been put in place the previous October. Mr Aitchison noted that what was said about the role and authority of the TPB was not accurate at the time that it was made [\[TR100000022_C\]](#), page 0106, paragraph 326].³⁴

22.76 From the comments that I have already made, it will be apparent that I do not agree with the positive assessment made by Audit Scotland and as matters were to turn out, the confidence expressed was clearly unfounded. This could be partly as a result of the changes made to governance after the report. It could also be a feature of the limited time available to produce the report. Even allowing for these factors, however, in view of the patent lack of clarity as to the roles to be undertaken by each body, the errors in the statements as to the role and authority of the TPB and the unexplained demotion of **tie**, I would have expected the report to have included a note of caution or a note of the need for further work to be undertaken.

22.77 The effect of the report from Audit Scotland was to engender a confidence in the ability of **tie** to complete the project [Mr Aitchison [ibid](#), pages 0086, 0088–0089, paragraphs 260, 264 and 267]. Councillor Balfour noted that councillors had drawn comfort from the report [\[TR100000016\]](#), page 0066 and 0025–0026, paragraphs 66 and 74]. Even people within **tie** appeared to draw support from it. Mr Bissett said:

³⁴ Mr Aitchison's written statement contains 2 paragraphs numbered 326 (see pages 0099 and 0106).

"Audit Scotland performed what I regarded as a very thorough review in (I think) 2007, of the governance system that was put in place. I recall they reported positively and I was encouraged to know that **TIE** and the Council were on the right track in respect of this." [TR100000025_C, page 0022, paragraph 58.]

22.78 Mr Bissett would have been aware of the timescale within which Audit Scotland performed its role. I do not see how he could have regarded it as very thorough. More importantly, however, if there was satisfaction on the part of Audit Scotland it is all the more remarkable that, within months, major changes had been made to the governance arrangements. The false confidence that the report created was unfortunate, in that it meant that chances to examine and improve the governance structures were lost.

July 2007

22.79 In July 2007, following Scottish Ministers' decision to withdraw from involvement in the project, Mr Inch sent a briefing paper to the CEC Chief Executive, Mr Aitchison [CECo1566497]. This was considered in further detail in Chapter 13 (CEC: Events during 2006 and 2007). Mr Inch noted that the arrangements in place were complex, and expressed concern about them. He also questioned whether CEC could competently delegate powers to TPB and observed that having a company (TEL) that was not integrated into the decision-making process as part of governance was inefficient. He said:

"it is now vital that more rigorous financial and governance controls are put in place by the Council given the funding cap that has been placed on the project and the greater financial risks that are to be borne by the Council." [ibid, page 0008.]

22.80 Although he recognised that there might be other options, he canvassed three:

- winding up **tie** and transferring appropriate staff to CEC;
- **tie**'s continuing to progress the project on the basis of a fully documented principal/agent agreement with CEC; and
- establishing a Tram Committee, which would meet on a four-weekly cycle, to replace the TPB and perform its duties.

22.81 It is significant that, in mentioning the second option, Mr Inch commented that "TS have previously urged the Council to implement a more robust monitoring of TIE's activities in delivering the project" [ibid]. It would appear that CEC failed to act in that regard.

August 2007

22.82 It is highly relevant that, in mid-2007, CEC had some appreciation of the need for better governance. The concerns expressed by Mr Inch appear to have led to a paper being prepared by the CEC Chief Executive, Mr Aitchison, for the August 2007 meeting of the Full Council [CECo2083490]. That paper notes the approval that had been given by the Auditor General to the governance arrangements, but nonetheless states a need for rigorous financial and governance controls to be in place. This, too, was considered in further detail in Chapter 13 (CEC: Events during 2006 and 2007). Throughout the paper there are repeated statements that there has been a change in the risk to CEC as a result of the Cabinet Secretary's statement that a grant of no more than £500 million could be provided. As I noted in Chapter 3 (Involvement of the Scottish Ministers), in fact there is clear evidence that there had always been a cap, despite any aspirations from CEC or **tie** to the contrary. I consider that this should have been apparent to Mr

Aitchison and others in CEC. On any view, however, it could never have been thought that the Scottish Ministers would bear the whole of the cost increase, so that CEC would be exposed to increased costs to some extent. It is therefore not clear why risk issues should necessitate a review of governance. In particular, there does not seem to be any proper basis for the statement in the papers that:

"Following the change in the risk profile for the Council, the role of the Tram Project Board requires to be considered afresh." [ibid](#), page 0003.]

- 22.83** For completeness, I add that although the paper states that the TPB was a requirement of Transport Scotland, it is apparent from the documents noted above that this is incorrect.
- 22.84** Although the paper notes the need for rigorous financial and governance controls, it did little to identify what should be done. It reiterated that it was intended that TEL should have the role of integrating bus and tram services and that **tie** was project managing and would have a role in both the procurement and construction phases. It stated that **tie**'s role would be one of agency of the CEC and that it would be set out in clear written terms. It said that senior Council officials had met their counterparts in **tie** and agreed measures to "clarify the relationship between the two parties in the next phase of the contract" [ibid](#)], but it did not say what had been agreed. There was no mention of the changes that had already been made by **tie** and TEL to reduce the role and relevance of **tie**. It indicated that operating agreements would be concluded with each company to formalise and define its function but did not give an outline as to the contents of these documents.
- 22.85** In relation to the councillors, the paper stated:
- "The role of elected members in project decision-making also needs to be defined. The dynamics of the project have changed following the creation of the cap on funding from Transport Scotland. As a result, it is now appropriate to establish a dedicated Tram Sub-Committee. I will report in September on what powers should be delegated to this sub committee [sic] and what powers should be delegated to officers. In the meantime Council is requested to delegate powers to me with respect to any decisions that may require to be taken. Consideration is also being given to the requirements for the Tram Project Board to report to the Tram Sub-Committee." [ibid](#)]
- 22.86** The Tram Sub-Committee will be considered in more detail below and has also been considered in Chapter 13 (CEC: Events during 2006 and 2007). In that the intention had been to establish an arm's-length company to deal with implementation, it is odd that the paper assumed that the councillors had *any* role in project decision-making as opposed to strategic decisions. Although it was not well articulated, it appears that what was intended was a form of monitoring by CEC of the work being undertaken by **tie** and, perhaps, TEL. If so, that is potentially quite an inroad into the concept of using an arm's-length company. If there were to be oversight, it would lead to an inference that if CEC was not happy with what it saw, it would give directions to the companies, override decisions or take decisions itself. This being the case, I would have expected there to be a more detailed consideration by CEC as to the purpose of this oversight and how it affected the role of the companies. Despite this and Mr Inch's concerns, no attempt was made to grapple with the issues fully, to clarify or simplify the structures or to take control away from **tie**, TEL or the TPB.

September 2007

- 22.87** In September 2007, Mr Bissett wrote a further draft paper on governance for **tie**, TEL

and the TPB [included in papers for the September TPB meeting – [USB00000006](#) page 0032 onwards] with new structures that, again, were said to be for the period to financial close (then planned for January 2008) and construction [[PHT00000028](#), page 109]. The paper stated that it updated the governance structures from a year earlier and described the structures as having been agreed. The recommendations in the paper were adopted at the September 2007 meeting of the TPB [[CEC01357124](#), Part 1, page 0006]. The paper recorded that Transport Scotland had withdrawn from involvement in the project and that CEC had established a Tram Sub-Committee. The purpose of this was stated to be “to review and oversee decisions with respect to the project” [[USB00000006](#), page 0033]. Despite this, elsewhere in the paper there was reference to making changes in the composition of the TEL Board “to be the active arm of the Council in oversight of project delivery and preparation for integrated operations” [*ibid.*, page 0034]. There was no indication of how this would be related to the role of the Tram Sub-Committee. There was also reference to:

“[t]he emphasis of the TEL Board on oversight (on behalf of the Council) of matters of significance to the Elected Members in relation to project delivery and preparation for integrated operations” [*ibid.*].

- 22.88** Despite this, the TPB was described as “the pivotal oversight body” [*ibid.*, page 0035]. Apart from the oversight role that it might or might not have, TEL was also said to have overall responsibility to deliver an integrated tram and bus network and, in addition to its oversight responsibilities, the TPB was said to have delegated authority from TEL to execute the project. Thus, each body was charged with both execution and oversight of the project. Needless to say, this was not explained. The paper referred also to the SRO having delegated authority from the TPB. This was a marked departure from the OGC guidance as to the relationship between the two.
- 22.89** Once again, the TPB was identified as a sub-committee of the TEL Board rather than a free-standing body. The paper recognised that **tie** now had only one project and proposed that the councillors and other non-executive directors sitting on the **tie** Board would leave and join TEL or the TPB, but it did not say which. This could have been regarded as material if the two bodies were to have different roles. The intention was that this would leave **tie** with a board consisting of its chairman and a senior council official. It was envisaged that the Boards of **tie** and TEL would meet only quarterly.
- 22.90** Mr Mackay said that the decision to move the councillors to the TPB from **tie** was his [[TR100000113_C](#), page 0021, paragraph 71]. This might have been dictated by his view of the role of each of the bodies. In this regard, he said:
- “CEC were the owners and they delegated authority to TIE, TEL and the Tram Project Board. **TIE** was primarily design, TEL was integration and the Tram Project Board was the engine room and workhorse, preparing and proposing the detail.” [*ibid.*, page 0019, paragraph 64.]
- 22.91** This put TPB essentially in the position that **tie** would have been in at the start of the project. There does not appear to be any foundation for regarding **tie** as having responsibility only for design either in the governance structures or in the work undertaken generally by **tie** up to this date.
- 22.92** It is apparent from a table of composition of the boards [[USB00000006](#), page 0042], which is reproduced in Table 22.1, that there is very substantial overlap between the TPB and the TEL Board. Although changes were made to memberships over time, this amply illustrates the extent of the commonality of membership.

Table 22.1: Membership of TEL Board and Tram Project Board

Appendix 6 Composition of main governance bodies

	TEL BOARD	TRAM PROJECT BOARD (TPB)	TPB COMMITTEES			
			Engineering & Delivery (E&D)	Financial Commercial & Legal (FCL)	Benefits Realisation & Operations (BRO)	Comms
Meeting frequency	Quarterly	4-weekly	4-weekly	4-weekly	4-weekly	4-weekly
Members						
David Mackay	Chair	Chair				
Willie Gallagher	X	X	Chair	Chair	Chair	Chair
Neil Renilson (TEL CEO, Project SRO)	X	X	X	X	X	X
Bill Campbell (TEL Operations Director)	X	X	X		X	
Norman Strachan (TEL Co Secretary)	X			X		
Donald McGougan (CEC Director of Finance)	X	X				
Andrew Holmes (CEC Director of City Development)	X	X				
Phil Wheeler (CEC Member for Transport)	X	X				
Councillor X (Labour Group Transport Spokesperson)	X					
Councillor Y (Conservative Group Transport Spokesperson)	X					
Councillor Z (SNP Group Transport Spokesperson)	X					
Non-executive director - Cox	X					
Total members	12	7	3	3	3	2
Participants (at Chair's discretion dependent on agenda)						
Non-executive director - Hogg						
Non-executive director - Scales						
Non-executive director - Strachan						
James Stewart (PUK)		X				
Susan Clark (Programme Director)		X	X	X	X	X
Steven Bell (E&D Director)		X	X	X		
Jim McEwan (Improvement Director)			X	X	X	
Alasdair Sim (Project Interface & Approvals Director)			X	X		
Stewart McGarrity (Financial Director)/Miriam Thome		X	X	X	X	
Andrew Fitchie (Commercial Director)		X	X	X	X	
Alastair Richards (Benefits Realisation & Operations Director)		X	X	X	X	
Colin McLauchlan (HR & Corporate Affairs Director)		X	X	X	X	X
Graeme Bissett (Strategy & Planning Director)		X	X	X	X	
CEC Senior Representatives (CEC to determine) :						
Duncan Fraser			X		X	
Ian Spence			X			
Rebecca Andrew				X		
Gill Lindsay / Colin Mackenzie				X		
Isobel Reid						X
Iain Coupar (TEL)					X	X
James Papps (PUK)			X	X		
Transdev Senior Representative		X	X		X	
Julie Thompson (Secretary, under direction from Programme Director)	tba	X	X	X	X	X
Total participants (Max)	0	10	14	13	11	5
Total attendees	12	17	17	16	14	7

Source: Tram Project Board Report on Period 6, Papers for meeting 26 September 2007 [libid](#), page 00421

- 22.93** Despite the statement that the councillors and non-executive directors on the **tie** Board would join the TEL Board or the TPB, when considering the proposed membership of the TPB the only change from the October 2006 structure was that there would be no representative from Transport Scotland and the CEC Executive Member for Transport, Councillor Wheeler, was to join. The lack of clarity in membership of the various bodies and lack of clear distinction between them tends to indicate once again that there was a lack of clear understanding of the different roles that they were intended to play. When both the roles and the membership between the various bodies overlap, there is scope for confusion as to where the ultimate responsibility should lie. This created a danger that issues that arose would not be properly examined and this is what happened in practice.
- 22.94** Although the Tram Sub-Committee referred to in Mr Bissett's paper was said to have the function of overseeing decisions made by the other entities involved, it did not operate as intended. It did not ever discharge an effective oversight function. This was said to be as a result of concerns as to commercial confidentiality and political differences about the project rather than the availability of TEL and/or the TPB to provide oversight [Mr Aitchison [TR10000022_C](#), page 0086 paragraph 258 and pages 0103–0104, paragraphs 317–318; Mr Aitken [TR10000015](#), page 0030, paragraph 104; Mr David Anderson [TR100000108_C](#), page 004, paragraph 2(c)]. Even if it had functioned as intended, it formed part of the governance of CEC rather than of the project as such. More fundamentally, it is not clear that the councillors who would be appointed to sit on it would have the experience and skills to enable them to fulfil a meaningful oversight role.
- 22.95** It is of note that, at the time that these arrangements were being developed, in an email of 28 September 2007, Mr Hogg, a non-executive director of **tie**, concluded that there was very little role left for **tie** in what was proposed [[CEC01667446](#)]. This seems to be correct.

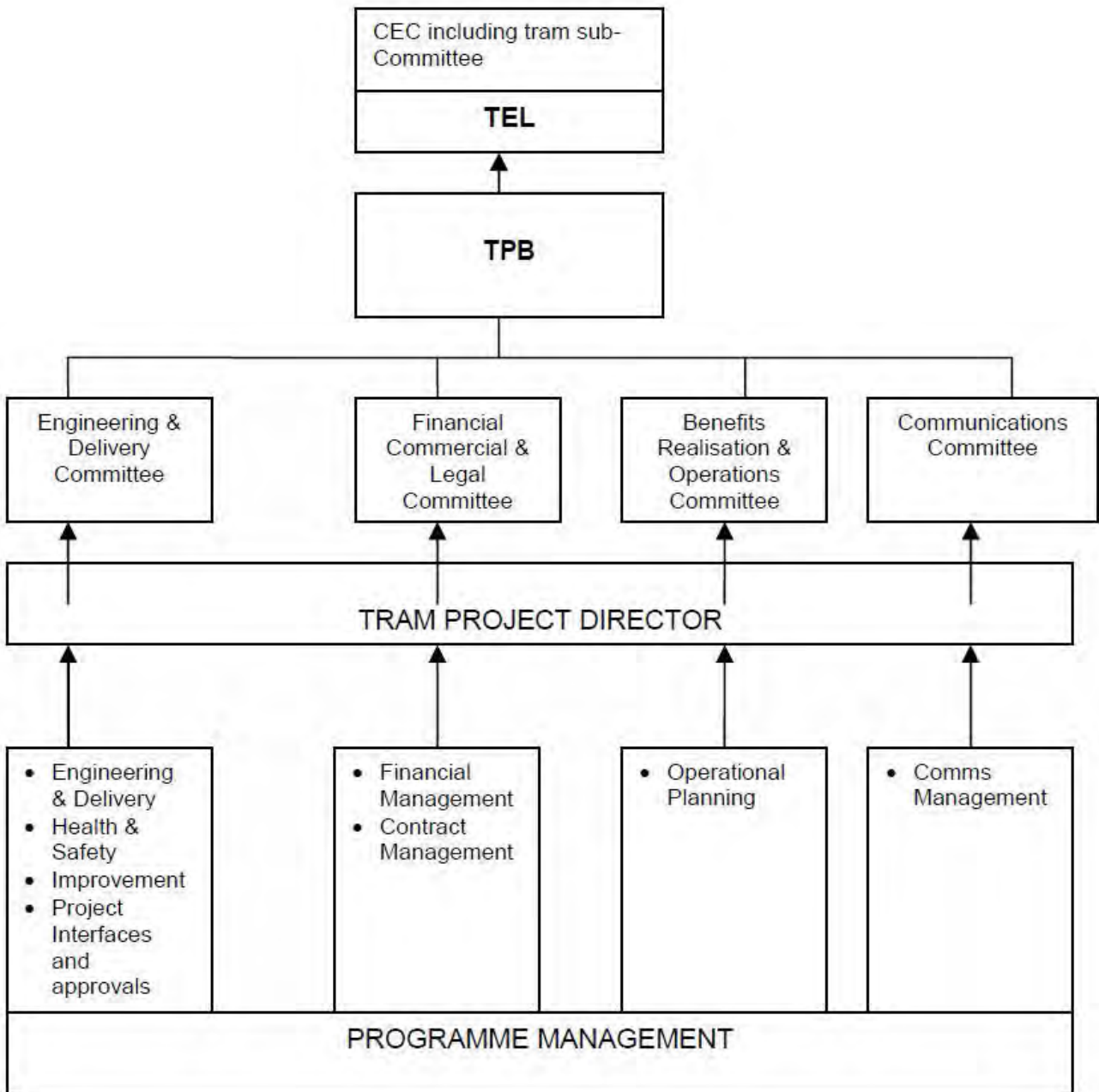
October 2007

- 22.96** The October meeting of TPB was held together with the meeting of the **tie** Board [[CEC01713462](#)]. This was the only time that it occurred in 2007 but it resumed in January 2008 [[CEC01246826](#)], and for the first half of the year the TPB held joint meetings – sometimes with TEL and sometimes with **tie**. There was then a gap and further joint meetings with **tie** in November 2008 [[CEC00988024](#), Parts 1–2], December 2008 [[CEC01053908](#)], January 2009 [[CEC01150181](#)], February 2009 [[CEC00988034](#)] and March 2009 [[CEC00933351](#)]. As the year progressed there was greater ambiguity in that the presentations given indicated that they were given to a joint meeting of **tie** and the TPB, but the minutes refer only to the latter. This perhaps reflects the complexity and extent of duplication built into the governance structure, but it also adds to the difficulty of identifying where responsibilities lay and which bodies were taking decisions. The alternation of joint meetings between the various entities in early 2008 also creates the situation in which the minutes of a joint meeting of TPB and TEL would be approved at a meeting of TPB and **tie**, and vice versa.

December 2007

22.97 The Final Business Case (“FBC”) dated 7 December and approved on 20 December 2007 [CEC01395434, Parts 1–11] set out the governance structures envisaged for the construction period and largely re-stated the governance structures agreed at the meeting in September. (See also Chapter 5, Procurement Strategy.) The diagram in Figure 6.4 of the FBC depicting these structures *libid*, Part 5, page 0094], which is reproduced in Figure 22.2 for ease of reference, did not include **tie** at all. Nonetheless, the text recognised that there was duplication between the scrutiny by the **tie** Board of its activities and the oversight role performed by the TPB, which suggested that it was envisaged that **tie** would be undertaking this work.

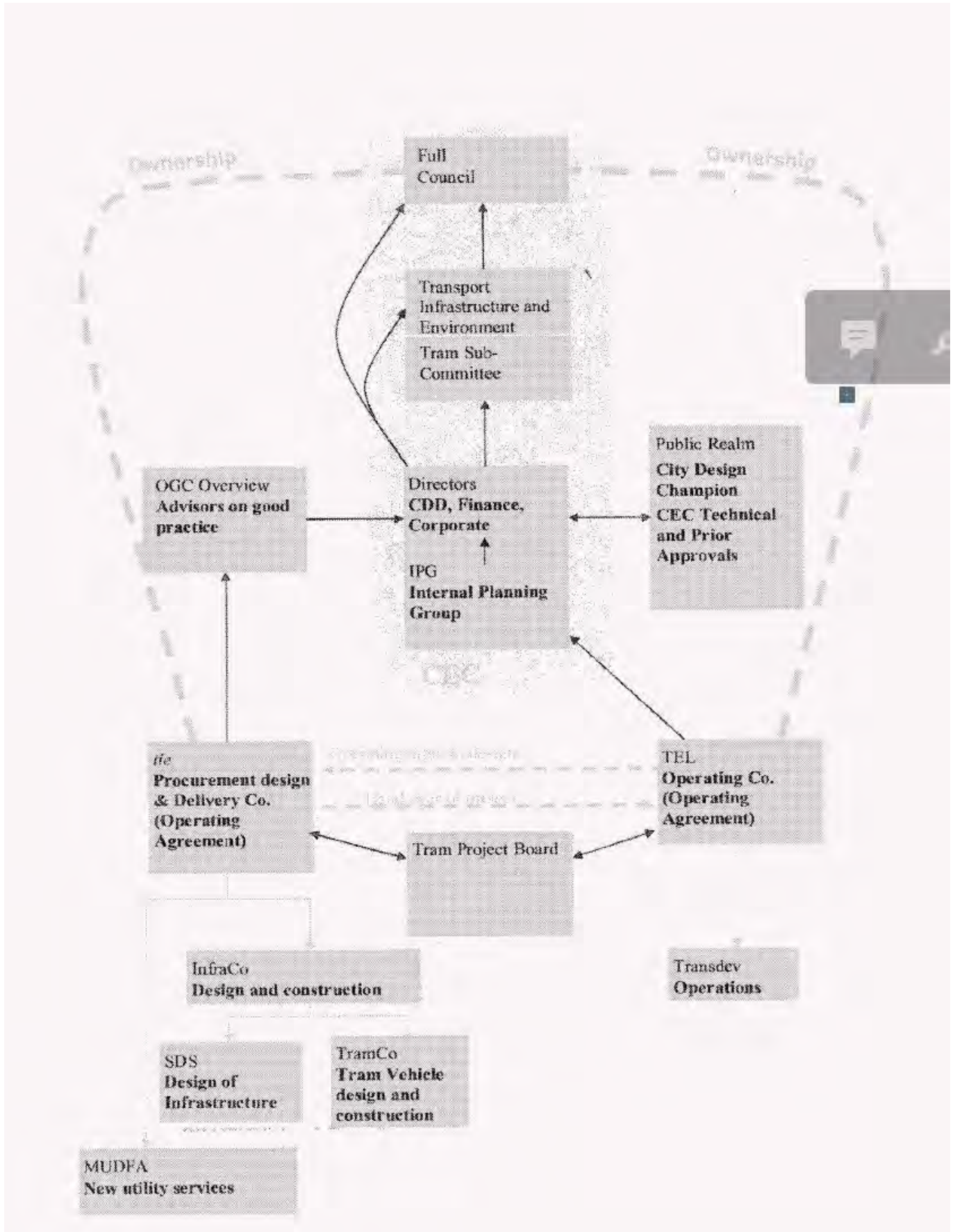
Figure 22.2: Governance structure during construction period



Source: Edinburgh Tram Network, Final Business Case Version 2, 7th December 2007 [CEC01395434, Part 5, page 0094]

- 22.98** Contrary to what had been agreed in September, the FBC stated that the composition of the **tie** Board was to be maintained in its then current form. It was also stated that the composition of the TEL Board would be based on the existing position. As with the paper in October, this was in apparent conflict with a statement that councillors and non-executive members of the **tie** Board would join TEL or the TPB. This change was said to be to “ensure consistency of approach”, to strengthen the role of TPB as the body that delivered the tram system and to reflect TEL as the body that would provide oversight. If the goal was “consistency of approach” and the way to achieve it was overlapping membership of the various bodies, it further calls into question why there were so many bodies and why they were not more distinct. It was envisaged that the TEL Board would require to meet only quarterly, but that the **tie** Board and TPB would meet four-weekly. Reading the FBC gives the strong impression that it lacks clarity, coherence and proper purpose. In saying that, it should be borne in mind that, unlike previous drafts, this version of the business case was not subject to detailed scrutiny by Transport Scotland before it was finalised. Such a lack of scrutiny was a consequence of the decision of Scottish Ministers to withdraw Transport Scotland officials from their previous involvement in the project.
- 22.99** At its meeting on 20 December 2007, in addition to approving the FBC and giving its Chief Executive authority to enter into the contracts, CEC approved governance structures described in a joint report to the meeting and delegated “general authority to the Tram Project Board through TEL and **tie**” [CECo2083446, page 0019]. The report from Mr McGougan and Mr Holmes in relation to this [CECo2083448] adopted the approach, contained in the TPB paper of September 2007, of making the TPB a sub-committee of the TEL Board. The report said that this is what was proposed, although in fact it had already been adopted by the TPB in September. In terms of authority, the report said that there would need to be “seamless” delegation from CEC through TEL to TPB to ensure proper governance and accountability. The report did not consider why it should be TEL or TPB rather than **tie** to which authority was delegated. The report then stated:
- “To further ensure that all aspects of governance are in place Council is asked to authorise through **tie** that this company also has a firm delegation of appropriate powers to engage with the TPB.” [ibid, page 0002.]
- 22.100** I find this impossible to understand. It is not clear what entity is referred to by the expression “this company”. If it is **tie**, how can authorisation of **tie** be made through **tie**? If it is TEL, how is it envisaged that delegation to the parent company will be through its subsidiary? What is a “firm delegation”, and what are “appropriate powers”? It is another example of a lack of clarity, which suggests that there was no proper understanding of what the governance structures should achieve. Despite the statements that there would be delegation to TEL or the TPB, the report also noted that CEC must agree to **tie** entering into and managing the contracts that would be necessary to deliver the tram system. It contained the diagram reproduced in Figure 22.3 [ibid, page 0010], depicting the governance structures:

Figure 22.3: Tram organisational structure



Source: Joint Report (dated 17 December 2007) by the Director of Finance (Mr McGougan) and the Director of City Development (Mr Holmes) for the meeting of the Council on 20 December 2007 recommending (i) approval of the Final Business Case version 2, (ii) staged approval for the award by **tie** of the Infraco contract and the Tramco contract and (iii) approval of the governance arrangements [[CEC02083448](#), page 0010]

- 22.101** There was no key explaining what the various arrows were intended to represent: whether they were reporting, conferring of authority, accounting or a combination of any of these. It is not easy to read, but the arrow between **tie** and TEL is captioned "Handover of project". It is not immediately possible to reconcile that diagram with the governance structures described in the documents noted above. Notably, other than ownership, this diagram contains no link directly between CEC and **tie**.
- 22.102** Both the FBC and the report are difficult to follow. To the likely audience for these documents, who could not be expected to spend the time that I have had to examine them closely and attempt to interpret them, they would be largely meaningless. Nonetheless all the recommendations made in the report were accepted by CEC. Despite the internal contradictions, the impression is given that this report adhered to what had been happening in the preceding months and consolidated the shift of responsibility from **tie** to TEL. As with the reports and papers that have gone before, it does not define roles clearly and does not state a rationale for sidelining **tie**.

January 2008

- 22.103** On 23 January 2008, there was a joint meeting of the TPB, **tie** and TEL [CEC01015023]. The Project Director's report for it noted that, after several months of consideration, the new governance structure had been approved. However, the papers for the meeting contained yet another iteration of governance. This was said to be the structure that would be put in place for the construction period. As of the start of 2008, it was intended that the contract would be signed at the end of January, with work to commence shortly thereafter, so the intention would have been to introduce the new structure within weeks of the CEC's approval of the old one. If there was to be a separate structure for the construction period it clearly would have made sense to record it and seek approval at the end of 2007. Taking many months to agree a structure only to have it superseded almost immediately clearly demonstrates very poor management of this issue.
- 22.104** As before, the new proposed arrangements both describe the TPB as an oversight body and state that it has full delegated authority to execute the project [*ibid*, page 0074]. In his suggestion that the obligation to execute the project should be rewritten as one of overseeing its execution Mr Bissett seemed to accept that there was an apparent conflict between these roles. The basis for the suggestion was that he did not think that "the Tram Project Board was executing in an executive way" [PHT00000028, page 125]. The self-contradictory – or even nonsensical – nature of this does not require comment. Furthermore, the fact that he had to suggest amending the wording of his report several years after it was written at a time when inconsistencies in governance were highlighted by Counsel to the Inquiry indicates at least a failure to understand the confusion of roles within the proposed structure. **tie**'s role was described as being the management of the relevant contracts to deliver the tram network in a fit state for operational purposes, on time and budget [CEC01015023, page 0075]. The papers for this meeting included a copy of the proposed operating agreement between **tie** and CEC [*ibid*, page 0083]. This noted that **tie** provided the services to deliver the tram service to CEC [*ibid*, pages 0084–0085 and 0092]. This conflicted with the intention, expressed elsewhere in the papers, that **tie** was to provide the delivery services to TEL [PHT00000028, pages 126–127]. It also conflicted with what had been agreed by CEC just the month before. Once again, the clear inference is that there was a lack of understanding as to what the parties were trying to achieve and a corresponding lack of understanding of the roles and responsibilities of each body.

- 22.105** The proposals also noted that it was intended that there be "appropriate common membership" [[CEC01015023](#), page 0074] across the **tie**, TEL and LB Boards and that the councillors would be the same on both the **tie** and TEL Boards. Mr Bissett accepted that, in practice, the members of the boards came together in a single meeting. This further calls into question the purpose of having distinct bodies and blurs the allocation of responsibilities.
- 22.106** This meeting also established the Approvals Committee, which was intended to give final approval to the contracts prior to signature. This was considered in more detail in Chapter 12 (Contract Close). It is relevant that the Approvals Committee was to be a sub-committee of the TPB and of the Boards of both **tie** and TEL. This overlap is not surprising as, on the basis of the structures that had been put in place, it would be very difficult to determine which entity should take the decisions and give the advice. It is perhaps one of the most pointed indicators of how confused the governance structures had become that in order to ensure that such a critical decision was properly taken, it was necessary that it be structured so that all three bodies took it.

May 2008

- 22.107** As part of the contract close in May 2008, a new operating agreement was concluded by CEC with **tie**, and for the first time one was concluded with TEL. Each of these is dated 12 May 2008: two days before contract close. Although, by this time, the procurement was complete, the agreement that was put in place between CEC and **tie** at this stage was the first that regulated the Tram project specifically (the "Operating Agreement") [[CEC01315172](#)]. Prior to this, there had been only an agreement covering transport projects generally.
- 22.108** In the Operating Agreement, the services that **tie** was to provide were listed in Schedule 1 as follows:
- "1. Procurement and contract award of all contracts required to deliver the tram project, including the Council's obligations
 2. Provide accurate and current information to Tram Project Board, Transport Edinburgh Limited and the Council for appropriate decision making and approvals
 3. Provide efficient and effective project management services for the Project including cost, financial programme, risk, contract and change management
 4. Provide traffic management expertise to effectively implement and manage both temporary and permanent traffic management alterations, including the Traffic Regulation Order process
 5. Comply with Health and Safety requirements and act as the Construction Design Management Regulations co-ordinator, provide Health, Safety, Quality and Environmental management and expertise to ensure effective approvals through the The [sic] Railways and Other Guided Transport Systems (Safety) Regulations process. This should include protecting the Council's interests
 6. Ensure the design is assured, and provide the necessary quality of design for technical and prior approvals in a timeous manner
 7. Develop and agree a communication strategy with the Council and provide effective communications, consistent with this strategy
 8. Provide and demonstrate to the Council that appropriate site management services are in place to ensure quality is delivered

9. Ensure a continued focus on value engineering and deliver any agreed initiatives
10. Manage the interface with TEL in order to deliver a smooth handover for operations
11. Manage project land in accordance with the tie/CBC licence
12. Ensure and demonstrate to the Council that all contracting parties meet their obligations (including protocols, traffic management, contract conditions, employers requirements [sic], site supervision and testing etc)
13. Manage all third-party agreements in an effective manner and demonstrate that they are in the Council's interest
14. Carry out other duties as instructed by the Council in relation to the Project
15. Act on efficiently and effectively all formal instructions issued by the Council in relation to the tram project" [\[ibid\]](#), page 0016].

22.109 It is immediately apparent that the provision of many of these services must have taken place prior to the Operating Agreement being in place. It is of note that, regardless of the statements in the copious iterations of the governance structures considered above, to the effect that **tie** would provide services to TEL, the Operating Agreement stated that the services were to be provided to CEC. In clause 3.1, CEC delegated to **tie** the power to enter into the various contracts required for construction. Again, this power was passed directly from CEC to **tie** rather than through TEL or the TPB. Significantly, CEC agreed to guarantee the financial obligations of **tie** in relation to certain aspects of the project.

22.110 The Operating Agreement contained several provisions that **tie** should use its best endeavours to achieve certain goals, and it included a general provision that all obligations were to be discharged in an honest, faithful and diligent manner in the best interests of CEC, but it did not include any fixed targets in relation to delivery of the trams in terms of output, timings or costs. Schedule 2 to the Operating Agreement set out the diagram depicting governance structures that had been in the report to CEC in December 2007, which was reproduced in paragraph 22.100 above as Figure 22.3. It did not show any contractual link between **tie** and CEC, so its inclusion in a contract between **tie** and CEC is, at the very least, ironic.

22.111 The Operating Agreement noted that a TMO had been appointed by CEC to monitor **tie** in relation to the project. It contained a number of provisions in terms of which **tie** was bound to provide information to the TMO. It was bound to notify the TMO immediately that it became aware of the likelihood of delay to, or overspend in, the project. The TMO will be considered in more detail in paragraph 22.255 and following paragraphs.

22.112 In the Agreement concluded with TEL [[CEC01315173](#)], the Scope of Services to be provided by TEL to CEC was listed in Schedule 1 as follows:

- "1. Development of a fully integrated bus and tram service plan in advance of tram commissioning.
2. Provide or procure the provision of accurate and current information to the Council for appropriate decision-making and approvals
3. Address with the Council the funding and related implications of Phase 1B

4. Develop and agree a communication strategy with **tie** and the Council and provide effective communications, consistent with this strategy.
5. Plan and manage the interface with **tie** in order to deliver a smooth handover for operations
6. Carry out other duties as instructed by the Council in relation to the Project
7. Act on efficiently and effectively all formal instructions issued by the Council in relation to the Project" [**ibid.**, page 0017].

22.113 It is immediately notable that this did not entail any work in relation to the construction works, and it included no obligation in relation to delivery of the network. Despite this, clause 2.3 of the Agreement stated:

"TEL shall use best endeavours to ensure that it delivers the Project as set out in the Final Business Case. TEL shall use best endeavours to comply with all timescales and financial projections detailed in the Final Business Case. It is acknowledged by the Council and TEL that the primary responsibility for delivery of the Tram System rests with **tie** Limited. TEL will use best endeavours to support delivery of the Tram System so far as it can do within its powers and resources." [**ibid.**, pages 0004–0005.]

22.114 The overlap with the responsibilities of **tie** is immediately obvious; the intention as to which party should actually be undertaking them is not.

22.115 There was a requirement in clause 2.20 for TEL to establish the TPB as a committee of the TEL Board and to delegate authority to it to enable it to carry out its responsibilities. Those responsibilities were not, however, defined in the Operating Agreement and instead it was stated that they were for the TEL Board to define. TEL was entitled to delegate to the TPB any matter that affected the programme, cost and scope of the project, other than the following matters which were reserved to CEC:

"(A) (i) any actual or reasonably expected delay to the Project programme of greater than 3 months; or (ii) any actual or reasonably expected increase in cost of over £10m; relative respectively to the programme leading to commencement of revenue service by 31 July 2011 and capital cost of £512 million (Phase 1A) or £87 million (Phase 1B) as set out in the Final Business Case (or as subsequently approved by the Council prior to commitment by **tie** to the Infraco Contract); or (iii) notwithstanding the terms of (i) and (ii) above, any projected or actual overspend of the available funding budget (being £545 million) at any time (whether on an annual or overall basis); or (iv) any substantial change to the design, scope or service pattern set out in the Final Business Case; and

"(B) the settlement of any single claim in excess of £500,000, or series of claims in any 12 month period which would exceed in aggregate £1,000,000" [**ibid.**, page 0008].

22.116 Although it is easy to see how settlement of claims was a matter that could not be delegated, it is difficult to determine what delegation was prohibited by the references to delay, increase in cost and overspend in the first part of paragraph (A). None of these matters would be at the discretion of TEL, so what was it that it might not do? Was it approval or recognition of the situation; choice of remedial actions; implementation of remedial actions; or something else? I would have expected that in relation to something as fundamental as the delegation of powers there would have been a well-defined position that would be expressed with clarity. The

Operating Agreement permitted the sub-delegation of any matter from the TPB to **tie**. TEL agreed that it would retain ultimate responsibility for all matters that it so delegated. This is not easy to reconcile with the responsibilities placed on **tie** in its agreement with CEC.

22.117 TEL was required to report to CEC on a four-weekly and annual basis with regard to financial matters and progress on the project. In this regard, it should be noted that TEL had no employees, with the result that, in practice, all the reporting would be carried out by **tie**. This must have been known to all parties at the time. The governance diagram attached to the Operating Agreement is at least the same as that attached to the December report to CEC.

October/November 2008

22.118 In October 2008, Deloitte & Touche Limited ("Deloitte") was instructed by **tie** to report on the project governance arrangements, and it did so in February 2009 (see paragraph 22.123 below) [[CEC0011617](#)]. In November, following the resignation of Mr Gallagher from his roles at **tie**, Mr Mackay was appointed Chairman of **tie**, having been a director for some time.

December 2008

22.119 The minutes of the December meeting of the TPB record an expanded membership of the TPB [[CEC01053908](#)]. Although there had been additional attendees at earlier meetings, these were expressed to be meetings held jointly with the **tie** and/or TEL Boards. In January 2009, the councillors and non-executive directors of **tie** reverted to being designated as attendees rather than members of the Board [[CEC00988034](#)]. Matters remained this way until 2011, with the sole change being that Councillor G Mackenzie replaced Councillor Wheeler.

22.120 Following Mr Renilson's resignation, Mr McGarrity, **tie**'s Finance Director, was appointed interim SRO in his stead [[CEC01053908](#)]. Despite this, Mr McGarrity said that at no time was he responsible for the outputs of the project [[TR100000059_C](#), page 0002] and in his oral evidence he stated that his appointment made no difference at all to what the team was doing on a day-to-day basis [[PHT00000047](#), page 3]. This suggests that the real function of an SRO was still not being fulfilled.

January 2009

22.121 On 20 January 2009, Mr C MacKenzie emailed Mr Inch [[CEC01077814](#)] in response to a paper on governance that had been circulated for the TPB. He noted a concern that the Council should be taking a lead on this. As he put it:

"it is not a matter for the family members to debate among themselves what is best for them: it is for the parent to decide on which model or structure it wishes to put in place."

22.122 In my view, his analysis of the situation was entirely correct, but nonetheless, **tie**/TEL/the TPB continued to assume the lead.

February 2009

22.123 In February 2009, Deloitte presented the findings of the review that had been instructed in October the previous year [CEC00111617]. Its overall conclusion was that the governance arrangements appeared to have been operating effectively and that it had not observed control weaknesses. Its principal recommendations were:

- There should be early creation of a single legal entity owned by CEC, which would take in **tie**, TEL and LB. It was said that this would help to “streamline” governance arrangements and assist in the transition of the project through the construction stage to operation.
- There should be consideration of the remit of **tie** in relation to the TPB, as there was duplication in membership and agenda items. The review noted that the TPB had been established when **tie** had more than one project, but as that was no longer the case it was difficult to delineate the two entities.
- An SRO should be identified as a permanent replacement for Mr Renilson, who had left some months earlier and whose role had been allocated to Mr McGarrity, **tie**'s finance Director, on a temporary basis.

22.124 In relation to the division of responsibilities for the project, the review's findings stated:

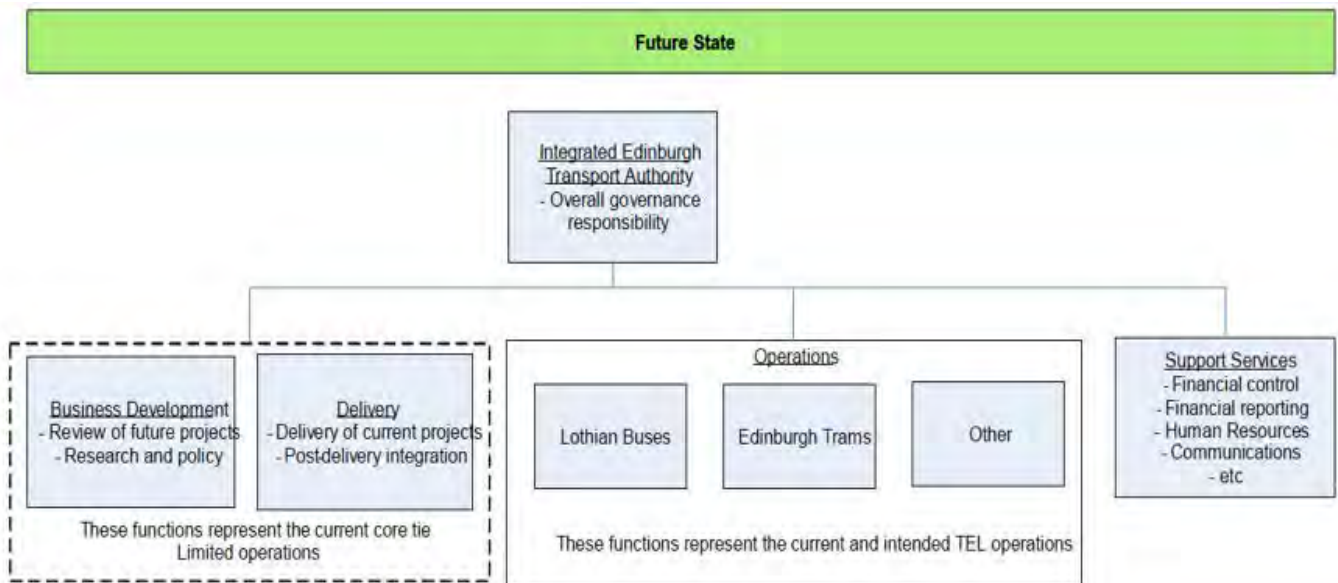
“The role of **tie** is to deliver a project fit for operational purpose, on time and budget yet individuals and organisations outside **tie** have the ability to influence decisions that have a direct bearing on the achievement of these goals. In particular, the TEL Board are responsible for all matters affecting the programme, cost and scope of the project except those which would involve a significant change to the Council's obligations, or settlement of a single or series of claims. In effect, the TEL Board delegate responsibility to the TPB, and **tie** provides services to the TPB.” [ibid, page 0010.]

22.125 The review recognised that this situation gave rise to potential ambiguity as to where key decisions were made and ratified. The situation that it describes was not that which the governance plans had sought to create. Deloitte identified the matter in a nutshell in saying:

“key stakeholders hold the **tie** board accountable for decisions made in respect of the Tram Project when in actual fact the TPB have delegated authority for the delivery of an integrated Tram and Bus network on behalf of CEC and TEL.” [ibid]

22.126 To avoid this, the review suggested an arrangement in which there would be an integrated Edinburgh Transport Authority. It proposed a structure as shown in Figure 22.4:

Figure 22.4: Proposed governance structure for Integrated Edinburgh Transport Authority



- Fully integrated governance framework for Transport in Edinburgh
- Integration of senior management team / strategy / business planning
- More efficient/lower cost governance structure
- More transparent structure for CEC oversight
- Role of tie Limited and TEL merged into directorate structure shown above
- Allows economies of scale to be explored and realised with respect to a variety of business functions
- Transport Act 1985 and tax planning considerations to be a significant part of detailed implementation plan

Source: Internal Audit, Project 2008-01: Review of Governance Arrangements, Final Report, February 2009 [CEC00111617, page 0019]

22.127 It can be seen from Figure 22.4 that the business unit that represented **tie** was regarded as being distinct from the part responsible for operation of the trams. This was not put into effect.

22.128 I agree with the review's comments as to the anomalous situation that had been created for **tie**, the need for more clarity in remits, the desirability of avoiding overlapping memberships and the need for an SRO. In view of these identified problems, I am surprised at its conclusion that governance arrangements were operating satisfactorily and I disagree with that conclusion. As was the case with the report from Audit Scotland, the danger of a conclusion that matters were broadly satisfactory is that it gave rise to false confidence and the problems that undoubtedly existed were not addressed.

June 2009

22.129 After he had joined **tie**, in June 2009 Mr Jeffrey was appointed SRO in place of the interim appointment of Mr McGarrity [CEC00983221, page 0005].

August 2009

22.130 In August 2009, CEC approved changes to the corporate governance for the Tram project [CEC01891434, page 0015]. The report that had been submitted to the meeting on this issue [CEC00110352] said that changes were required to "enable the transition towards the integration of tram and bus services" and "to serve changing circumstances". It envisaged the transfer of CEC's shareholding in **tie** to TEL. In view of the very limited progress that had been made in the construction work by late

2009, it is far from clear that there was suddenly an issue requiring the governance structure to be revisited or even in what respect circumstances had changed. Mr Bissett explained that the changes made were:

“an attempt to streamline the governance structure and also to ensure that the model was being developed looking ahead to the tram opening for revenue service” [TR10000025_C, page 0019, paragraph 48].

22.131 If that was so, it is not clear why it was being done at that time. The changes were being made six months after the Deloitte report but they are not stated to be prompted by, or the result of, that report. Even if they were, it is notable that they do not implement the recommendations that had been made. A need to consider the requirements of the tram system when it was operating had always been there and should have been the role of the user representative on a project board. What is not clear is why control during the construction phase should be handed over to the user rather than the company that had been established to achieve delivery.

22.132 The report stated that:

“While day to day management, control and execution of the Tram Project will remain with **tie** Ltd, all strategic and other material decisions will be made by TEL (or in certain circumstances by the Council) and direction will be given to **tie** Ltd on such matters, through the Tram Project Board, a formal sub-Committee of the TEL Board.” [CEC00110352, pages 0002–0003.]

22.133 The report considered that the changes would streamline and clarify the structures then in place. It did not discuss in any detail the fact that **tie** would remain the body with the contract to build the network and that it was the only body with employees to carry out work. Any decisions in relation to implementation of the work would affect **tie**'s contractual liabilities and not those of TEL. It would therefore normally be the responsibility of the directors of **tie** to take such decisions rather than have them taken by other directors of another company. Despite this, on 29 September 2009 [CEC00680472] the CEC Policy and Strategy Committee on Governance gave approval for new governance arrangements and operating agreements, including the transfer of CEC's shares in **tie** to TEL as soon as possible after the signature of an operating agreement and a memorandum of understanding.

December 2009

22.134 The minutes of a **tie** Board meeting on 16 December 2009 [CEC00531325] noted that, subject to the decision to be taken by CEC, it would be the last formal **tie** Board and would be replaced by the new TEL Board. A draft minute for a **tie** Board meeting on 18 December 2009 noted the approval of the transfer of the entire issued share capital in the company to TEL. While the Inquiry has obtained copies of papers that bear to have been prepared for **tie** Board meetings after that date, there are no written records of *any* further such meetings actually having taken place. This is surprising. Even if there was a transfer of the shareholding such that **tie** was a subsidiary of TEL and it was intended that TEL or the TPB would be taking many decisions in relation to the project, **tie** was the employer for almost all the persons engaged in the works and was the party to contracts for very substantial sums of money. It had the responsibilities for the health and safety of its employees. This was a responsibility that it could not delegate or transfer. Not to have held board meetings in this period or to have declined to keep records of board meetings that were held is a conspicuous failure of corporate governance. In essence, **tie** was being treated as a fiction.

22.135 On 18 December 2009, there was a meeting of the TEL Board, which inter alia approved acquisition of shares in **tie** from CEC, resolved to enter into a new Operating Agreement with CEC and made Mr Hogg, Mr Jeffrey, Mr Craig, Mr Scales, Mr Strachan and Mr David Anderson additional directors of TEL [CEC00645841]. There were already Councillors on the Board of TEL. The new Operating Agreement was signed on 18 December 2009 [CEC00645838]. In it, the following elements were added to the scope of services:

7. The management of **tie** in order to ensure that reasonable steps are taken to deliver the Project and the Tram System.
8. Manage and deliver (through tie) the Gogar Intermodal Station project on behalf of the Council in terms of the Gogar Funding Agreement" [ibid, page 0018].

22.136 In the body of the Operating Agreement, there was still a requirement to use best endeavours to deliver the project in accordance with the FBC. There was no longer a reference to **tie** having the principal responsibility and, instead, the Agreement stated that TEL should use its best endeavours to support delivery of the tram system so far as it could do within its powers and resources, and:

"TEL shall be responsible for the management of **tie** and ensuring that all appropriate steps are taken to deliver the Project in accordance with the terms of the **tie** Operating Agreement and the Memorandum of Understanding between the Parties and **tie** dated of even date with this Agreement." [ibid, page 0006.]

22.137 The scope of matters for TEL to determine was modified to read as follows:

"The following matters will be for the TEL Board to determine and report to the Council as appropriate in terms of the governance arrangements set out in Schedule 2:

"All matters affecting the programme, cost and scope of the Project except the following which are matters reserved to the Council:

"(i) any actual or reasonably expected delay beyond 3 months after the Baseline Date; or (ii) any actual or reasonably expected increase in capital cost which would mean that the Baseline Cost is exceeded by greater than £1,000,000; or (iii) any substantial change to the design, scope or service pattern set out in the Final Business Case.

"On the basis of information provided by TEL to the Council, the Baseline Date and the Baseline Cost will be determined by the Council's Chief Executive and notified to TEL from time to time." [ibid, page 0009.]

22.138 The minutes for the meeting of the TEL Board on 10 February 2010 [CEC00475301] included a welcome by the Chairman, Mr Mackay, to the first meeting of the "new TEL Board". Mr Hogg and Mr Strachan, directors of **tie** who had not previously sat on the TEL Board, were included as directors. The last meeting of the TEL Board prior to the changes appears to have been over a year earlier, on 24 September 2008. The minutes for that meeting were contained in a pack of papers that included an agenda for a meeting on 19 November 2008 [CEC01107538], but there are no records of that meeting having taken place. The failure to hold or record board meetings of TEL in the period from September 2008 to February 2010 is again a serious failing. Apart from constituting a disregard of good corporate governance, it indicates that the structures that had been debated at length were ignored in practice. The directors of TEL would have been aware of it and should have taken some steps. The fact that they did not suggests that they were not aware of their responsibilities as directors.

- 22.139** Looking further back, the minutes of meetings solely of the TEL Board from earlier in 2008 contain no record of dealing with substantive business in relation to the Tram project, and that seems to have been left to the TPB. The minutes in 2007 are similarly brief and contain little or no discussion of the project. Even after the changes had been implemented in late 2009, the records of the Board meetings of TEL do not disclose that any substantive business was conducted. The limited role played by the TEL Board is illustrated by the evidence of Mr McGougan that, despite his being registered as a director of TEL between March 2006 and August 2011, he had no recollection of being a director or of any meetings of the TEL Board [[PHT00000042](#), page 123]. In any event, it is not obvious that TEL had sufficient resources or employees to play an important role in the delivery and/or oversight of the project, given that TEL had only two employees (Mr Renilson and Mr Richards) and derived all its funding from **tie**.
- 22.140** The **tie** Board played little more by way of an active role. There was more by way of consideration of the issues arising out of the project in the minutes of the **tie** Board meeting in 2008, but issues of substance were left to the TPB. For instance, when issues were raised at the Board meeting in August 2008 regarding the Multi-Utilities Diversion Framework Agreement ("MUDFA") and Infracore mobilisation, it was said that they would be addressed within the TPB [[CEC01150362](#), page 0002]. The consideration of issues at the **tie** Board had died away completely by April 2009. From May 2009, consideration of the key work streams was deferred for consideration at the TPB. From the minutes of **tie** Board meetings it was apparent that, as the year progressed, discussion became increasingly perfunctory.
- 22.141** The rationale for these changes is explained in a paper submitted to the TPB in September 2009 [[CEC00680385](#)]. The paper as drafted is intended for all three boards but, as I note elsewhere in this chapter (for example, in paragraphs 22.138 and 22.139), it is apparent that the TEL Board was not active at this time. In addition, although there was a meeting of the **tie** Board on the date referred to in the paper – 23 September 2009 – the minutes of the meeting contain no reference to the paper being considered. The paper noted that the intention to integrate LB was being left to a later stage. The intention was that TEL could oversee the whole project from construction to commencement of operations. This meant that governance over construction activity moved to TEL. Despite this, the contracts remained with **tie**. This situation was confirmed by a memorandum of understanding signed by CEC, TEL and **tie** on 18 December 2009 [[CEC00170165](#)], a draft of which was attached to the paper. The memorandum stated that although day-to-day management of the project remained with **tie**, *all* strategic and other material decisions would be made by TEL and direction would be given to **tie** through the TPB. It is appropriate to note that the same two individuals signed the minute as directors on behalf of both **tie** and TEL. Although this does not affect its legal validity, it does illustrate the overlapping of roles and scope for confusion. More fundamentally, a decision that put TEL entirely in charge of strategy was clearly at odds with the intention that this should have been reserved to CEC.

Conclusions on the timeline

22.142 Drawing matters together, a number of themes occur in relation to the governance arrangements. Although I have sought to separate them and list them here for convenience, in fact they are closely bound up and one may be the consequence of another.

The ascendancy of TEL

22.143 Transdev was given notice of **tie**'s intention to terminate the Development Partnering and Operating Franchise Agreement with them by letter dated 21 August 2009 [[CEC00736909](#)]. Once Transdev was no longer involved and TEL was the intended operator of both bus and tram services, it was entirely appropriate that TEL would have an input into the project. This was recognised in the OGC governance model by the "user" interest. Its role did not, however, indicate or imply that it should have responsibility for or oversight of the construction phase of the project.

22.144 Despite this, TEL was put in charge both in its own right and as the "seat" of the TPB even before the contract with Transdev had been brought to an end. None of the purported justifications for creating this situation is remotely credible. The overwhelming impression is one of trying to create a role for TEL in the construction phase where one did not truly exist. The rationale for this is not clear. As I have discussed above, there was concern – which was justified – that LB would seek to damage the project. It was clearly influential and powerful. It is also apparent that, in terms of running a transport system, it had a great deal of experience that could be of assistance to the project. That is not a justification, however, for putting it in charge of construction of and delivery of infrastructure. **tie** had been created for that specific purpose, and at both board and management levels had recruited people with this objective in mind. To ignore this and put the project in the hands of a company created for a separate purpose was simply perverse. Mr Bissett said that it was "logical" that TEL would take overall responsibility, but nothing in his evidence or the contemporaneous documentation came close to supporting this assertion. The very fact that such a view was expressed casts considerable doubt on the value of Mr Bissett's evidence as a whole.

22.145 Mr Bissett also said:

"TIE's only function was delivery of the Tram Project. So, rather than have multiple reporting lines, the attempt was made to concentrate the governance of the project through the TEL/TPB model with **TIE** as a legal entity executing its own legal responsibilities but not acting as a parallel governance body for the Tram Project." [[TR10000025_C](#), page 0019, paragraph 48.]

"In order to make sure that the **TIE** Board's legal responsibilities were still appropriately addressed without duplicating Tram Project governance arrangements, the Tram Project Board effectively provided the governance over the project. **TIE** reported through Steven Bell as the Tram Project Director to the Tram Project Board. Therefore, there was no change to the position of the people in **TIE** in operational terms, only the reporting lines above the Tram Project Director. The advantages of this were that duplication, reporting to **TIE** as a legal entity and reporting the same to the TPB and the Council, was avoided. I don't believe that there were any disadvantages to this approach." [[libid](#), page 0019, paragraph 49.]

- 22.146** To the extent that there were "multiple reporting lines", this can be seen as being the result of the inclusion of TEL into the governance structures. It seems that the more obvious question that should have been asked was why TEL should have any role.
- 22.147** The effect of putting TEL in charge was that people with no experience of delivery of engineering projects were in control. This is epitomised by the appointment of Mr Renilson as the SRO for the construction part of the project. He was candid that he had no interest in the construction phase and yet he was appointed as the key individual with ownership of the project. The result was that, during the whole of the period to the end of 2008, no one was discharging the responsibilities of SRO. Although Mr Renilson bears part of the blame for this by declining to perform a role that he had accepted, it should have been apparent to the other senior management that this was the situation. Mr Bissett, in particular, had written papers on governance that noted the relevance of the SRO's role, yet nothing was done to ensure that the role was actually performed. It is another example of an approach to the project being based on box ticking: once a person was appointed SRO, that box was ticked but nothing was done to check that the objectives that that was intended to secure were actually being achieved.

Inconsistencies

- 22.148** There were inconsistencies and ambiguities in the roles given to the various bodies in documents and also among different documents intended to apply during the same period. This indicates that matters were not thought through when they were formulated or prior to adoption. It is unsatisfactory that **tie** undertook a contractual obligation to CEC to do something, yet the governance structures placed the responsibility elsewhere. In this situation, how could there be any clarity as to where the ultimate decision-making powers rested? In an email of 26 September 2007 [CEC01561555], Mr C MacKenzie noted that the delivery of the Tram project was something for which **tie** owed a contractual obligation to CEC, and that the danger of governance structures that involved the TPB was that they could weaken accountability. He correctly identified that the TPB would be taking decisions in respect of major contracts to which it was not even a party. This is not a minor or detailed issue of governance; it is fundamental that a matter such as this should be clear.

Confusion as to the various aspects of governance

- 22.149** In general, there was no clear analysis of the concepts of responsibility, accountability, authority, powers, reporting, oversight and undertaking. Often the various matters were fudged and the result was a lack of clarity as to what would happen or who was to perform tasks. Once there is clarity as to who is to undertake a task, that party requires to be given the authority or the powers they need to do it. It is therefore natural that the party with that authority is accountable for its exercise. Oversight is a different function and should not be given to the party exercising the powers. As a separate task, the entity upon which it is conferred has the responsibility for undertaking that role and will be accountable for its discharge. This may all seem obvious, but the confused positions on the entities to which authority should be delegated, which bodies should be accountable and which should take executive decisions demonstrates that it was not understood. As noted above, the OGC review of the governance structure said that it "appears complicated" [CEC01793454, page 0006, paragraph 3.1], and Councillor Dawe said that the relationship between **tie** and TEL was confusing [TR10000019_C, page 0233, paragraph 874]. Some witnesses expressed the view that the roles and responsibilities of each of the bodies were clear [see, eg, Mr Bell TR100000109_C, page 0171, paragraph 147(2)]. Others said

that the state of governance was not a problem. For example, Mr Gallagher said that although governance was complex “we worked well with it” [TR10000037_C, page 0002, paragraph 7], and Mr Bissett said that it worked “a lot better in practice than it appears on paper” [PHT00000028, page 90] and “it worked reasonably well in bringing the various parties together” [TR10000025_C, page 0006, paragraph 16]. I do not accept these comments, and I agree with those who considered that the governance arrangements were deficient as being both unclear and confused. Nothing illustrates the position better than that, when he was asked who was in charge of the project, Mr Howell, the Chief Executive of **tie**, replied:

“That’s a very good question and I at the time would have liked to have asked particularly Tom Aitchison, because I think he should have helped us to figure it out.” [PHT00000011, page 42.]

22.150 Mr Howell also considered the governance arrangements linking TPB and TEL to be confusing because TPB was a sub-committee of **tie** “merging” with another company (TEL). In referring to a “merger” in this context he was referring to Mr Mackay’s misunderstanding that the TPB and the TEL Board were “one and the same”. He thought that Mr Mackay might have failed to appreciate the distinction between the two entities with different responsibilities because he was chair of both of them, and the distinction between the two was not evident to Mr Mackay [TR100000113_C, pages 0042–0043, paragraphs 150–152; PHT00000011, pages 40–41]. Mr Howell was an impressive witness with considerable experience of engineering projects and management. I accept his criticisms of the governance arrangements mentioned above. When someone in his position cannot follow the governance procedures, there could be no better indication that something had gone very wrong. The fact that first the Board of TEL and then the Board of **tie** ceased to sit at all should also have been a clear indicator that governance was breaking down.

Overlaps in “responsibility” and in membership of the various entities

- 22.151** The list of memberships of TEL and the TPB attached to the governance paper prepared in August 2006 [CEC01758865] indicated some overlap in membership. As was noted in paragraphs 22.87–22.93 above, in September 2007 the TPB approved an updated structure to remain in place until contract close. The only change in the membership of the TPB from the October 2006 structure was that there would be no representative from Transport Scotland and the CEC Executive Member for Transport, Councillor Wheeler, was to join it. Table 22.1 in paragraph 22.92 above illustrates the overlap in membership between the TEL Board and the TPB. This overlap creates confusion as to where decisions should have been taken and even where they had been taken. It also means that any idea that one of the bodies was in a position properly to oversee the work of another was flawed.
- 22.152** Mr Bissett said that **tie** would retain ultimate responsibility for the activities of the TPB [PHT00000028, page 41]. There is no basis why this should be the case – a subsidiary would not normally be responsible for the acts of a sub-committee of the board of its parent. What was true was that **tie** was the entity that would accrue any legal liabilities that arose under the contracts arising out of the way in which they were operated by the TPB. On the other hand, he also said that **tie** was to be accountable to the TPB [TR10000025_C, page 0022, paragraph 56].

22.153 Mr Gallagher stated:

"At the time it was necessary to have TIE, TPB and TEL because they all performed different functions for different reasons. There wasn't really an overlap in terms of TIE, TPB and TEL. The TPB was a sub-committee and that was where all of the work was focussed. [sic] **TIE** was an overseeing body helping to provide an increased degree of scrutiny. Originally **TIE** would have overseen other project boards as well but those other projects either fell away or were completed. Having **TIE** was a good idea, in particular in its role as an arm's-length recruiter. The structure was a bit more entrepreneurial as a result of **TIE** being there. It offered an entrepreneurial aspect that would not have been present had the projects been purely overseen by CEC." [TR10000037_C, pages 0053–0054, paragraph 178.]

22.154 In my view, almost all of this is incorrect. There clearly was an overlap between the bodies, as demonstrated by the fact that from time to time **tie** or TEL Board meetings did not take place. I cannot see that there is any justification for the view that **tie** was an "overseeing body". Neither in the theory of the arrangements put in place nor in the reality of what happened can it be said that **tie** had any oversight function. It was the project manager with responsibility for delivering the project on a day-to-day basis and as such it is self-evident that it could not exercise oversight over itself in any meaningful sense of the word. This demonstrates a concerning lack of proper understanding of the governance structures, their operation and their objectives at the highest level within **tie**.

22.155 In relation to membership of the bodies, Mr Gallagher said that the overlaps in membership were helpful, as it meant that it was not necessary to "have the meeting three times" [*ibid*, page 0056, paragraph 185]. Mr Bissett commented to similar effect [PHT00000028, page 57]. This misses the point. If there was such an overlap that it would be necessary to have the meeting three times, that is a clear indication that something is wrong. Dealing with it by duplicating membership of the various bodies does not address the real issue. It also means that any suggestion that one body could provide *effective* oversight of another is bogus. That would require independence, which cannot be achieved with a significant overlap in membership.

22.156 Mr Aitchison went so far as to say that it was CEC policy to encourage overlap in the membership of the boards [TR10000022_C, page 0097, paragraph 321]. I have not seen written expression of this policy, and no justification for it has been offered. I consider that it is apparent that it would undermine clear decision-making and oversight.

22.157 Mr Bissett stated:

"I am always very keen in governance models to see that responsibilities and accountabilities are absolutely crystal clear. It was important that it was known who was responsible for what." [TR10000025_C, page 0022, paragraph 58.]

22.158 I entirely agree that this is important and that responsibilities and accountabilities should be clear. What is apparent from the foregoing, however, is that there was a lack of clarity about the allocations of responsibilities and accountabilities. Creating overlapping responsibilities does not create a safety net in decision-making. It results in a danger that each party or entity involved may think that a responsibility is being discharged by someone else.

The role and membership of the TPB and the lack of an accountable individual

- 22.159** The role afforded to the TPB in the Tram project cannot be reconciled to either of the established project models that were said to have been relevant. The OGC guidance suggested that there should be a project board, and this was duly noted by the OGC in its review in May 2006. One had already been established and then merged into TEL, but in response to that OGC review a body called the TPB was created. It is notable, however, that in terms of both its composition and its operation, it did not function as a project board as the OGC guidance intended. This appears to be another example of box-ticking in that there is formal compliance with a requirement but no consideration as to whether the substance of the guidance was being followed and its objectives were being met. This is not to suggest that a project must necessarily adhere to some pre-existing guidance. Where, however, there was to be a departure from guidance or a new structure was to be adopted, it would be appropriate to have set out the justification or rationale for this action. This process should ensure that the justification for change is properly understood and that all the implications are properly considered.
- 22.160** There appeared to be a general lack of understanding as to the proper role for a project board. Councillor Dawe considered that the TPB was the main means for CEC to have oversight and control by means of the councillors sitting on it [TR10000019_C, page 0238, paragraph 893]. Mr David Anderson suggested that it was to act as a conduit between **tie**/TEL and CEC or to provide oversight of the project and **tie**'s management of it or to allow risk and opportunities to be discussed in a forum where councillors and senior officials sat alongside board members of **tie** and TEL [TR100000108_C, page 0122, paragraph 155]. While it is perhaps understandable that councillors and CEC officials would not be in a position to understand in detail what the purpose and function of a project board should be, there was ignorance on this issue even within **tie**. Mr Gallagher said that the TPB was a "statutory body" that was required to manage the funds supplied by Government [TR100000037_C, pages 0053–0054, paragraph 178]. This is a serious failure in understanding, and I cannot see how it could be maintained. He also said:
- "The delivery for the Edinburgh Tram Project was for the TPB which was initially managed through TIE." [ibid]
- 22.161** This is closer to the mark in terms of the role in delivery, but it was not managed through **tie**. Mr Bissett gave various justifications for the project board as it was used in relation to the trams. He said that it was to be an oversight and challenge body [PHT00000028, page 40], but also that the intention in forming it in October 2005 was to have "a group of people with a single purpose to take the project forward" [TR100000025_C, page 0017, paragraph 43]. Although a project board may consist of people with an interest in taking a project forward, there is more to it than that. It is not merely a subset of the management of whatever entity is delivering the project. It is intended that it should consist of persons representing particular interests in the project. There would, for example, be a clear purpose in maintaining a properly constituted project board for the Tram project even when **tie** had no other projects. Even the Project Director, Mr Bell, did not understand the proper role for a project board [TR100000109_C, page 0171, paragraph 147(2)].
- 22.162** The misconception as to the true purpose of the TPB is epitomised in the comment from Mr Howell that the TPB would be the **tie** Board for all intents and purposes [PHT00000011, page 27]. This accurately reflects what was being done in practice, but is not what should have been done to have an effective project board. Those

bodies should have had distinct but complementary roles. The function of a project board is not the same as the board of directors of a company undertaking a construction project. The membership should not be the same, because the interests and the decision-making processes of the two would not be the same. In the Tram project, these interests and processes were conflated, with the result that governance of **tie** and TEL by their boards of directors broke down and, from time to time, ceased altogether. Meanwhile, the project board was not able to perform the function that would be expected of it. I noted in paragraph 22.150 above that I considered Mr Howell an impressive witness and that his misunderstanding reflects the lack of clarity in what was being proposed.

- 22.163** The misunderstanding of the function of the TPB and the way in which it should work was compounded by the provision for each of the political groups to appoint a representative to attend TPB meetings. Whether this was seen as political accountability or information provision, it was quite inappropriate in terms of the focus of a project board. It is intended to be not a debating club or a forum for scrutiny but a means of bringing together the persons with key involvement in delivery to assist in that delivery. That is not a politician's role – even in a publicly funded project.
- 22.164** As noted above, the first point at which there was an SRO who actually discharged the responsibilities that come with that position was in 2009, when Mr Jeffrey joined **tie**. Although Mr Inch suggested that CEC was the SRO [PHT00000007, pages 97–98] and Ms Drummond, a solicitor at CEC, took the view that CEC was the SRO [CEC01565047], in terms of guidance the holder of that position must be an individual. This meant that, in the critical period in which the contracts were put in place, there was no one performing that role. As I consider above, putting a collective body such as the TPB, the TEL Board or the **tie** Board in charge of exercising powers and making decisions removes the critical element of individual accountability. In paragraph 22.55 I have observed that it was inappropriate to appoint Mr Renilson as SRO when he was Chief Executive of TEL. Equally, although Mr Jeffrey did seek to undertake the role of SRO allocated to him, he was not the appropriate person for that task because he was the Chief Executive of **tie**, which had responsibility for the delivery of the project.
- 22.165** The overall impression that I have formed is that the decisions about which structures should be in place was in part a box-ticking exercise and in part an exercise in creating a role for TEL at the construction stage when, in reality, none existed. This resulted in a dissonance between the various theoretical models and the general understanding of the position. It is notable that the councillors and, from personal experience, both the news media and the public regarded **tie** as being the party that bore responsibility.
- 22.166** I recognise that the views I have expressed are at odds with the comments from Audit Scotland, the OGC team and Deloitte. I have, of course, taken those competing expressions of view into account when forming my opinions, but I consider that they cannot stand in the face of examination of the facts. This is of itself a cause for concern in governance, as verdicts of the review team applying OGC guidance and, particularly, Audit Scotland played a material part in fostering confidence in the structures that were in place. I accept that in part it may be said that the reliance placed on these reports went beyond anything that was intended when the reports were provided. Nonetheless, in a similar situation in future care should be taken to avoid such false confidence. The difficulty with this is not only that the wrong message is taken on by decision-makers; it is also that the confidence means that other, more effective, controls are not put in place.

22.167 It is not possible or appropriate for me to recommend that any particular governance structure is used on a project such as this. There are far too many variables in the planning of such a project to mean that guidance could be given that would apply to every situation, or even most. What can be said is that focus is required on what the overall structure should achieve and how each body will contribute. If there are to be departures from published and accepted guidance, a clear written record should be kept of the fact that there is a departure and why it has been made. At all stages, there needs to be consideration of whether the structures put in place are achieving what was intended from them. This is not a matter of considering merely that matters seem to be getting along; there needs to be proper scrutiny of whether the objectives that should have been identified at the outset are being attained. Each body should have clear roles and responsibilities. It should be clear which body or individual is ultimately responsible for ensuring that a project is delivered on budget and on time. There should be independent oversight of the body responsible for delivering the project on a day-to-day basis to provide a check function.

Bonuses

22.168 The issue of bonuses paid to the people engaged in **tie** and TEL was the subject of comment during the project, and I have considered whether they had any bearing on the problems that arose. It seems that they can most appropriately be considered along with the structures created for the project.

Guidance

22.169 The Cadbury Report included the following guidance:

- companies should establish a formal and transparent procedure for developing policy on executive remuneration and for fixing packages of individual directors;
- a company's annual report should contain a statement of remuneration policy and details of the remuneration of each director;
- remuneration committees should consist exclusively of non-executive directors who are independent of management; and
- a company's annual report and accounts should include full details of all elements in the remuneration package of each individual director by name, including annual bonuses [[CEC02084834](#), pages 0003, 0007–0008 and 0013].

22.170 The 2006 CEC report "Council Companies: 'Code of Guidance'" [[CEC01813429](#)] stated that each company's remuneration committee required to formulate a transparent procedure for developing policy on executive remuneration and for fixing the remuneration packages of individual directors. Where appropriate, a portion of an executive director's remuneration could be structured to link rewards to corporate and individual performance. No director was to be involved in deciding his or her own remuneration [*ibid*, page 0012]. Mr Inch considered that the requirement for transparency included transparency to officials and members of the CEC [[PHT00000007](#), page 62].

tie's bonus scheme

22.171 In 2003, **tie's** bonus scheme allowed certain of its employees a relatively modest performance-related bonus of 10 per cent of base salary (15 per cent for director-level staff) [[CEC02083550](#), page 0023]. The stated justification for such a bonus was that **tie** had hired certain employees from the private sector and the absence of a car and bonus would be perceived as a disadvantage to the **tie** package.

- 22.172** A meeting of **tie**'s Remuneration Committee on 16 October 2006 approved a paper that proposed that (with effect from 1 April 2007) **tie** executive directors (and recommended other senior managers) be entitled to an annual bonus opportunity of 50 per cent of salary. All other **tie** employees were to have an annual bonus opportunity of 25 per cent of salary [[CECo1830099](#), page 0002, item 4; [CECo1828971](#), page 0004, paragraphs 1 and 3]. The context for the increase in bonus opportunity was noted to be that 2006 had seen a significant transformation in **tie** (from a project development organisation to a project management organisation, responsible for project managing and delivering world-class transport infrastructure projects valued in hundreds of millions of pounds) and that **tie** was now competing with the very best organisations in the private sector to attract and retain the best talent [[ibid](#), page 0001].
- 22.173** Mr Cox chaired **tie**'s Remuneration Committee and gave evidence that he thought that the briefing paper came from Mr Gallagher [[PHT00000052](#), pages 181–182]. Although the paper approved by the Remuneration Committee in October 2006 only dealt with bonuses for **tie** staff, in the event, significant bonuses were also paid to contractors who were not directly employed by **tie**, but provided services to it on a full-time, or largely full-time, basis. Mr Cox was not sure whether it was normal practice to pay bonuses to contractors (rather than simply to employees), but he considered that it was an odd situation in that it was not normal to have so many of the key jobs filled by contractors. He considered that **tie** was a peculiar company, in that it was not a standard commercial business, being a "mishmash" between a private-sector company and a public-sector one [[ibid](#), pages 182–183 and 196–197].
- 22.174** In the run-up to financial close in May 2008, the bonus entitlement of senior **tie** staff (and contractors) was dependent partly on individual performance and partly on the timing of financial close and the reported cost, or budget, of the Tram project at financial close [[WED00000140](#), pages 0004–0005; [TIE00151106](#); [CEC00114414](#); [CEC01515065](#); Mr McGarrity [PHT00000047](#), pages 181–188; [PHT00000049](#), pages 72–75]. In the event, it appears that the part of the bonus entitlement relating to the timing of financial close was not paid (because financial close took place later than 28 March 2008), but that the part of the bonus entitlement relating to the estimated cost of the project was paid [[WED00000140](#); Mr Cox [PHT00000052](#), pages 188–191].
- 22.175** Mr Cox gave evidence that although the bonus criteria were set by the Remuneration Committee, they were probably proposed by Mr Gallagher. He accepted that it was not normal practice for the bonus criteria to be set by the chief executive of a company, although he considered that it was not unreasonable to seek the chief executive's views. As chairman of the Remuneration Committee he could not recall whether any independent checks or research was undertaken to determine whether the criteria for bonus payments were appropriate. He agreed with the suggestion that it would have been better for the Remuneration Committee to have sought the assistance of human resource experts to compare the market and to advise on appropriate bonus criteria [[PHT00000052](#), pages 184–186]. He accepted that, with hindsight, it would have been better, in general, to defer part of a bonus based on the cost of a project until the actual cost of the project was known [[ibid](#), pages 191–192].
- 22.176** In the absence of any independent checks or expert advice about the suitability of the proposed criteria for bonus payments and the failure to consider deferring at least part of them until the actual cost of the project was known, I have concluded that the Remuneration Committee failed to perform its function of independent scrutiny of proposed bonus payments. Rather, it merely endorsed the recommendations of Mr Gallagher, who was in attendance at its meetings and who had presented the initial paper concerning bonus payments to the committee's first

meeting. The Remuneration Committee's lack of adequate scrutiny of Mr Gallagher's proposals is illustrated in the following passage from Mr Cox's evidence:

"I was never entirely comfortable with the level of or procedure for **TIE** bonus payments during the period of Willie Gallagher's tenure, but found myself between a rock and a hard place. **TIE** had encountered difficulty in recruiting and retaining staff of a sufficiently high calibre to deliver a project of such size and complexity, with no promise of a secure long-term career. Willie had rebuilt the team, and he was very concerned that if team members were not adequately incentivised it could result in a significant risk, potentially adding perhaps millions of pounds to the project's cost. It seemed to me safer, and the committee agreed, given this scenario, to approve the proposed bonuses.

"Looking back now, I would have subjected to much closer scrutiny the proposed bonus arrangements and levels, and the likely risk and cost to the project of further key staff losses, but whether I would have reached a different conclusion I don't know." [TR100000259, page 0015.]

- 22.177** Mr Gallagher attended meetings of **tie**'s Remuneration Committee between 2006 and 2008. Mr Cox gave evidence that Mr Gallagher was not a member of the Remuneration Committee, that he simply attended to give advice to the committee and that he was not involved in setting his own remuneration or bonus [PHT00000052, pages 174–182]. The minutes of the committee, however, list Mr Gallagher as a member of the committee rather than simply attending it in an advisory role [CEC01830099; CEC01182504; CEC01515068; CEC02086949].
- 22.178** At the initial meeting of the Remuneration Committee on 16 October 2006 Mr Gallagher proposed that Mr Cox should be its chairman. It is inconceivable that someone other than a member of the committee could propose such a motion. Furthermore, CEC officials were under the impression that Mr Gallagher was a member of the Remuneration Committee and queried the appropriateness of that [CEC01222545]. For his part, Mr Gallagher could not recall whether he was a member of the Remuneration Committee, but he was certain that he did not sit in on any matters concerning himself [PHT00000037, page 150]. Although that may be so, it fails to acknowledge that he had an interest in the terms of the bonus scheme that he presented to the first meeting of the Remuneration Committee for its consideration.
- 22.179** Whether Mr Gallagher was formally a member of **tie**'s Remuneration Committee or not (and it appears to me that he was), the impression given (at least to those outside of the committee) is that he was heavily involved in the working of the committee. This was contrary to the guidance on good corporate governance mentioned in paragraph 22.169 above, which was to the effect that remuneration committees should consist exclusively of non-executive directors who were independent of management. Mr Mackay also testified it was not good practice for executives of **tie** to sit on the Remuneration Committee and that he had a "very strong feeling" that there was influence on the committee by people who were in receipt of bonuses [PHT00000038, pages 38–39].

Changes to the bonus scheme in 2009

- 22.180** Mr Gallagher resigned as executive chairman of **tie** in late 2008. The dispute between **tie** and BSC lingered on. A meeting of **tie**'s Remuneration Committee on 23 September 2009 considered a paper on a proposed new bonus scheme. It was noted that, in the past, there had been insufficient formal linkage between bonus payments

and corporate performance (with payments, instead, having been linked mainly to individual performance). There were currently inadequate performance management processes in place to underpin payments and that was also being addressed. Under the new bonus scheme no bonus would be paid to senior directors unless and until the project was completed within agreed cost and timing criteria [[CEC00736780](#); [CEC00672874](#)].

- 22.181** Mr Mackay gave evidence that he was dissatisfied with the bonus scheme and took the opportunity in 2009 (with the assistance of Mr Jeffrey) to “dismantle” it after Mr Gallagher had left. Mr Mackay considered that the bonus scheme was not challenging enough, that there was not enough independent supervision of it and that bonuses should be dealt with by the Remuneration Committee, with those involved in receiving bonuses having no part in the decision-making process [[PHT00000038](#), pages 37–40]. Although Mr Mackay suggested that he encouraged Mr Cox to become chairman of the Remuneration Committee, he was clearly mistaken because Mr Cox was chairman of that committee from its inception [*ibid.*, page 40; [CEC01830099](#)]. Nevertheless I accepted the generality of his evidence about his criticisms of the bonus scheme introduced during Mr Gallagher’s tenure as Executive Chairman of **tie** and the need for change. Mr Cox welcomed the new bonus scheme, having not been entirely happy with the previous scheme [[PHT00000052](#), pages 193 and 198]. Looking back, as indicated in paragraph 22.176 above, he considered that the proposed bonus arrangements and levels of bonus payments ought to have been subjected to much closer scrutiny [[TR100000259](#), page 0015, answer 37].
- 22.182** CEC was sent details of the proposed new scheme and expressed certain concerns, which were resolved at a meeting between Mr Inch and Mr Jeffrey in October 2009 [[CEC00674778](#); [CEC00672873](#); [CEC00673126](#); [TIE00034046](#); see also Mr Inch [PHT00000007](#), pages 160–161].
- 22.183** Even under the new scheme, there was potential for payment of significant bonuses. In May 2010, **tie** submitted an application for payment that included total potential bonus payments of £730,000. Transport Scotland expressed concern internally about the appropriateness of making bonus payments given the state of the project [[TRS00017572](#)]. In the event, **tie**’s Remuneration Committee met in June 2010 and accepted Mr Jeffrey’s recommendation that no bonus payments should be made for 2009/10 [[CEC00314582](#)].
- 22.184** I note in passing that, although **tie**’s annual accounts included a note of the total remuneration of directors, there was no individual breakdown of the amount of bonus paid to individual directors, contrary to the guidance on good corporate governance noted above (see, eg, **tie**’s annual accounts for the years ended: 31 March 2007 [[TIE00899959](#), page 0022], 31 March 2008 [[TIE00899960](#), page 0024] and 31 March 2009 [[TIE00899961](#), page 0024]).

CEC’s oversight of **tie**’s bonus scheme

- 22.185** The 2005 operating agreement between CEC and **tie** contained no provision for CEC to monitor either **tie**’s bonus scheme or individual bonus payments [[CEC00478603](#)]. The Operating Agreement between CEC and **tie** entered into on 12 May 2008 introduced, for the first time, monitoring arrangements of **tie**’s bonus scheme. In particular, the new Operating Agreement provided that **tie** was to approve a remuneration policy, to include the benchmarks and procedures for proposed bonus payments and the project milestones to which bonus payments were to be linked, and that **tie**’s Board required to confirm annually to CEC’s TMO that

tie's incentivisation arrangements were aligned to appropriate project milestones [[CEC01315172](#), page 0008, paragraph 2.25].

- 22.186** These provisions were weaker than had originally been inserted by Mr N Smith when drafting the new Operating Agreement. In short, although Mr N Smith had attempted to introduce greater transparency and oversight of **tie's** bonus scheme when drafting the new Operating Agreement, that was met with resistance from senior **tie** officials, who made their concerns known to senior CEC officials, which resulted in the provisions of the final Operating Agreement being "watered down" [email from Mr N Smith to Mr McGougan and Mr Holmes [CEC00013392](#) attaching comments on new draft operating agreement [CEC00013393](#), page 0002, paragraph 14; email from Mr N Smith to Ms Lindsay dated 10 January 2008 [CEC01394985](#); Mr N Smith [PHT00000006](#), pages 131–135; Mr C MacKenzie [TR100000054_C](#), pages 0042–0043 and 0113; Mr Inch [PHT00000007](#), pages 112 and 164; Ms Andrew [PHT00000005](#), pages 126–127]. Mr Cox also gave evidence of being aware of a reluctance on the part of Mr Gallagher to share remuneration information with CEC because of terms and conditions disparities between **tie** and CEC [[PHT00000052](#), pages 196–197].
- 22.187** Prior to the new bonus scheme proposed by Mr Mackay in 2009, CEC had little knowledge or awareness of **tie's** bonus scheme or individual bonus payments. An email from Mr C MacKenzie to Mr Inch, dated 15 June 2009, expressed concern that there was no visibility of **tie's** bonus scheme: "we do not know how it operates and what milestones trigger payment of bonus" [[CEC00908380](#); see also Mr Inch's email dated 24 June 2009 to Mr Aitchison – [CEC00880015](#)].
- 22.188** Mr Aitchison and Mr McGougan considered that, as **tie's** monitoring officer, Mr Holmes was the council official responsible for overseeing **tie's** bonus scheme [Mr Aitchison [PHT00000041](#), pages 165–166; Mr McGougan [PHT00000043](#), page 102]. Although Mr Holmes accepted that he was the monitoring officer for **tie**, he had no knowledge of how the bonus scheme operated, and he considered that bonuses were an internal matter for **tie** and its Remuneration Committee. He also considered (as did Mr Inch) that there was a need for confidentiality in relation to salaries, including bonuses [Mr Holmes [TR100000046_C](#), pages 0105–0106, paragraph 388; [PHT00000042](#), pages 112–115; Mr Inch [PHT00000007](#), page 51]. Although Mr McGougan, as CEC's Director of Finance, was aware of the total bonus figure, he was not aware of the scheme's detailed operation or of what was paid to individuals [[TR100000060_C](#), page 0134, paragraph 347; [PHT00000043](#), page 102].
- 22.189** I consider that **tie's** bonus scheme and the amount of individual bonus payments made were not clear and transparent and did not follow the guidance noted in paragraph 22.169 above. I consider that CEC exercised inadequate oversight and control over **tie's** bonus scheme and was simply unaware of whether the large sums paid out in bonuses were appropriate or justified. I also question the appropriateness of significant bonuses being paid to contractors (rather than to permanent staff or employees), which, again, appears to have been a matter about which CEC was unaware.
- 22.190** Furthermore, the bonus scheme provided an incentive for senior **tie** officials to aim to bring the project budget and programme within certain targets. Although that, in itself, is a good thing, what is questionable is whether the bonus scheme provided an incentive (whether conscious or unconscious) to report that the project budget and programme targets were being met, whether that was the case or not. The fact that no bonuses were paid for achieving the desired contract close dates means that there can be no suggestion that the contract was rushed in order to obtain

those benefits. Nonetheless, bonuses were paid based on the estimated contract price. In Chapter 9 on procurement up to the appointment of preferred bidder I have considered the unsatisfactory position underlying the determination of the figure for contract price to be reported in the FBC. The only way in which it seems to me to be possible to eliminate any improper incentive would be to ensure that bonus payments are based on the actual or outturn, rather than estimated, cost and programme of the project. That would mean that bonuses based on these criteria were only paid at the conclusion of a project (when the final cost and completion date were known), which might have the further benefit of encouraging senior staff to remain with a project until its completion. Recruitment of staff was said to be a problem, and I can see that this approach might make it more difficult. That, however, calls into question the decision to use a company created specifically for the project, which would have to recruit all the expertise required rather than using existing consultants. I consider this further below.

Role of CEC

- 22.191** The core idea of governance is perhaps about the proper and effective exercise of the authority to implement the project. Since, for the Tram project, it was always clear that such authority derived from CEC, it must bear the ultimate responsibility for supervising the exercise of that authority. It seems to me that the need to supervise is the corollary of having granted the authority in the first place. A failure to check that the authority that has been granted is being properly exercised results in a loss of control over it. It was necessary, therefore, that CEC be clear about what it had authorised, who it was authorising to do it, what reporting it needed to supervise the exercise of that authority adequately, and what arrangements it had in place to supplement or countermand that authority in response to events.
- 22.192** The very notion of a company at "arm's-length" denotes both a measure of independence but also some element of control. There is, however, no fixed template as to how much freedom the company will have, the extent of control to which it will be subject and how that control will be exercised. The extent of control was a source of tension in relation to **tie**. Some of the councillors who gave evidence expressed concern that **tie** essentially saw itself as a free agent that should be free from any interference by CEC. Others said that, through its councillors, CEC should have taken a greater hand in managing the situation as it deteriorated. Within the company, there were people who appeared to resist or resent CEC involvement and others who believed that, ultimately, CEC was in charge.
- 22.193** It is difficult to avoid the view that the phrase "arm's-length" in relation to a company serves, at best, to obscure the intended nature of the relationship of a company with CEC and, at worst, is a misnomer having regard to the effective control of the company that arises from CEC's 100 per cent ownership of it. It appears to me that the following issues are raised in relation to companies wholly owned by CEC:
- control of the companies
 - reporting by the companies
 - supervision of the companies and mechanisms for scrutiny
 - residual powers of CEC
- 22.194** I consider each of these in turn, but first I consider the guidance available to CEC in relation to these companies.

Guidance on council-owned companies

- 22.195** On 18 December 2001, the executive members of CEC approved a Code of Guidance and Conduct for the governance of council companies (the "Council's Code") [[CEC02084490](#), pages 0009–0017]. All new and existing council companies were required to adopt the Council's Code. The report to members of the executive by Mr Aitchison [[ibid](#), page 0003] explained that the Council's Code was based on the principles of good corporate governance contained in the report of the Cadbury Committee on the Financial Aspects of Corporate Governance (the "Cadbury Report") [[TR100000309](#)] and the joint Code of Guidance on Funding External Bodies and Following the Public Pound (the "FPP guidance") published by the Accounts Commission and the Convention of Scottish Local Authorities ("COSLA") [[CEC02084822](#), pages 0005–0008].
- 22.196** The joint letter from the Accounts Commission and COSLA issued to local authorities in Scotland on 24 May 1996 explained that the context in which the FPP guidance was prepared was the "basic premise that where public funds are involved there is an expectation of a high degree of control and accountability" [[ibid](#), page 0003]. The FPP guidance was in force throughout the Tram project and remains in force (see the report by the Accounts Commission, 'Councils' use of arm's-length organisations', May 2018, page 5, key message 2) [[TR100000306](#)]. The significance of the FPP guidance is illustrated by the fact that, on 29 June 2005, Scottish Ministers issued a Ministerial Direction requiring local authorities to comply with the guidance [[TR100000305](#)]. The FPP guidance noted that the principles of openness, integrity and accountability applied to councils in their decisions on spending public money (which were subject to public record and external audit) and that the same principles should apply to funds or other resources that were transferred by councils to arm's-length bodies [[CEC02084822](#), page 0006].
- 22.197** The Council's Code included provision for CEC to appoint a monitoring officer for each company, to ensure that the council's interests were being safeguarded and that the requirements of the Council's Code, and any operating agreement with the company, were being implemented and enforced. The monitoring officer was responsible for ensuring that an annual report was made to CEC on the performance of the company [[CEC02084490](#), pages 0013–0014].
- 22.198** In 2006, the Council's Code was updated to introduce more detailed requirements for monitoring CEC companies [[CEC01813429](#)]. The overall purpose of the monitoring officer was, again, to ensure that the CEC's interests were safeguarded. In addition, he or she had to ensure that the company was at all times adhering to best practice in relation to corporate governance. The monitoring officer was to receive quarterly reports from the company on items of interest or concern, including risk reporting. In turn, the monitoring officer required to make biannual reports to CEC on the performance of the company. The company was to provide draft annual accounts to the monitoring officer and an annual business plan for approval by CEC [[ibid](#), pages 0007–0009].

Control of the companies

22.199 Although there can be no single “correct” answer in relation to the residual role of a local authority in this situation, it is obvious that what is required is clarity about how much control is in place. Put another way, there should be clarity as to:

- the remaining powers of the local authority to act, which powers they still have to take action themselves, and the circumstances in which they will use them; and
- what control it has in relation to the decisions that will be taken by the other bodies in the governance structure.

22.200 Turning first to the latter issue of what a local authority could do to control the activities of the companies or other entities that were established, evidence was given to the Inquiry that there are three means by which local authorities exercise control over arm’s-length companies:

- as shareholders;
- by agreement(s) concluded with the company; and
- by appointment of directors.

Shareholder powers

22.201 The articles of association of both **tie** and TEL included article 70 from the standard form Table A (Companies (Tables A to F) Regulations 1985) (as amended) [[TR100000304](#)]. Article 70 states that the business of the company is to be managed by the directors, but is subject to any directions given to them by means of a special resolution passed by the shareholders. A special resolution requires 75 per cent of the votes cast to be in favour of it but, as sole owner, the CEC was always in a position to give directions. By this means it could exercise some control over the decisions taken by directors. In addition, its shareholding meant that it was at all times in a position to remove any of the directors and/or appoint further ones.

22.202 There is no indication that CEC sought directly to use any of these powers or indicated that it might do so. The closest was the emergency motion passed by CEC on 18 November 2010, in which the council’s Chief Executive was instructed to make preparations with **tie** and BSC for mediation or another dispute resolution procedure [[CEC02083139](#), page 0021]. As Councillor Dawe explained:

“this was us as a Council saying: TIE has failed to achieve what needs to be achieved, and therefore we’ll use another means.” [[PHT00000001](#), page 186.]

22.203 In response, Mr Jeffrey was concerned that CEC would effectively take control of the project without officially doing so [[PHT00000033](#), page 65]. This led to a draft email from Mr Jeffrey dated 22 November 2010, intended for Mr Aitchison, in which he indicated that it was necessary to be clear on roles and responsibilities and that if CEC wanted to take formal control this should be communicated to the Board [[TIE00304261](#)]; and an email that was sent to Mr Aitchison, Mr Maclean and Mr McGougan on 24 November, in which he said:

“if the council have lost confidence in tie, then exercise your prerogative and remove tie from the equation. I am not defensive about this, indeed I first suggested it in my e-mail to you several weeks ago, and it is a real option for CEC to consider, but please do not keep re-opening it. I expressed my views to you today on the potential implications of such a course of action.” [[CEC00013441](#), page 0002.]

- 22.204** As Mr Jeffrey's email indicates, this is a drastic step that would terminate the autonomy of the company. Even if directions were given in terms of the articles of association, the freedom of the company to regulate its affairs would be materially eroded and, to a significant degree, it does away with the idea that the company is at "arm's-length". What happened in relation to the decision to seek mediation shows that it could be done in a less drastic manner but, as Mr Jeffrey identified, that could quickly lead to confusion as to who was in control. It is also of note that such informal communication of wishes really only had "teeth" when viewed against the background of the powers to remove the Board or give directions. If the wishes of CEC were just that – nothing more than wishes – this course of action could not really be considered an avenue of "control".
- 22.205** In summary, these powers are capable of providing hard-edged control but come at the cost of collapsing the notion of the company being at arm's-length.

Agreements

- 22.206** The second means by which a local authority can exercise control over its wholly owned companies is by agreement (see paragraph 22.200 above). It is not uncommon for shareholders to conclude an agreement between themselves and with the company owned by them that seeks to regulate what the company can and cannot do and the manner in which it is to be managed. As the extent and nature of the control are dictated by the terms of the negotiated agreement, there is no upper or lower limit on the extent of control that can be exercised. In addition to agreements regulating these matters, there can be agreement regulating the service that should be provided by the company to CEC or others.
- 22.207** In the Tram project, there were agreements with both **tie** and TEL, as narrated above. However, the agreement with **tie** that related to the negotiation and conclusion of the contract was concluded after the work had been done, so it was of no value. The controls in the TEL agreement once it was put in place in 2008 were also ineffective. It was signed on 12 and 13 May 2008 and, as was noted in paragraph 22.115 above, it reserved to CEC:

"any actual or reasonably expected increase in cost of over £10m; relative respectively to the ... capital cost of £512m (Phase 1A)"

and

"the settlement of any single claim in excess of £500,000, or series of claims in any 12 month period which would exceed in aggregate £1,000,000" [[CEC01315173](#), page 0008].

- 22.208** It is not clear what is being reserved here. Such lack of clarity in something that defines the scope of responsibility is unacceptable. If it is intended to prevent liabilities being incurred in excess of the capital cost it is ineffective having regard to the form of the contract that was concluded with BSC. Once the contracts were signed, **tie** was liable for all sums due in terms of them and, provided that there was authority to enter into the contract, limits set by CEC could not temper that. In theory, CEC could have put a ceiling on the sums that it was willing to pay under the guarantee that it provided of the obligations of **tie** under the contract, but it is inconceivable that any of the contractors would have agreed to proceed on such a basis. The statement of a such limit in the agreement may, however, have been another factor that provided a false confidence that the costs would not be exceeded.

- 22.209** The above factors highlight the key issues in relation to control of this type – it must be the correct form of control and it must be at the time when it can still be of effect. To ensure that the control is exercised at a time when it can be effective it is necessary to have a clear idea of what the intention is behind the control. Is it to avoid paying claims that are not due, to ensure that decisions are taken in a way that will not lead to more cost than is strictly necessary, or to ensure that unforeseen contractual liabilities are not undertaken? Each may require a different form of control but, more importantly, each requires that the control is exercised at a different time. If the aim is to ensure that undue liabilities are not undertaken, then no procedures that operate after the agreement has been signed will be effective. This is locking the stable door after the horse has bolted. In addition to such controls being ineffective they may create a false impression that the concern in question is properly managed and, in so doing, may mean that more effective controls are not put in place.
- 22.210** In relation to the agreements between CEC and both **tie** and TEL, it is apparent that the obligations imposed are couched in very general terms. This, however, is a feature that is to be expected in a contract between a company and its sole shareholder. In drafting such a contract there will be no expectation that the matter would ever require to be enforced by court action. To an extent, in that situation, the agreement could be seen as more of a set of aspirations or targets than a statement of rights and responsibilities. That being the position, it is hardly surprising that the agreement is relatively short and very different from that which would be concluded with a third-party supplier of services. The generality of such agreements does, however, mean that it must be recognised that the extent of control that is afforded in practice by them may be fairly limited.

Appointment of directors

- 22.211** The final means of the local authority exercising control over its wholly owned company is by the appointment of directors (see paragraph 22.200 above). The idea that councillors should sit on the **tie** Board was expressed at the very outset in the approval given by CEC to form **tie** [[USB00000228](#)]. From the date on which it was formed, the articles of association of **tie** entitled CEC to appoint up to four directors of the company [[CEC00775279](#)]. The articles of TEL initially entitled CEC to appoint two directors and LB to appoint two directors. Later versions entitled CEC to appoint up to five directors, LB to appoint up to two and **tie** to appoint a single director. Later still, the provisions for these appointments were dropped.
- 22.212** Various justifications were given for the arrangements for appointment of directors by CEC. As well as providing control [Mr Aitchison [TR100000022_C](#), page 0005 paragraph 15; Mr Macaulay [TR100000053_C](#), page 0008 paragraph 14], it was suggested that they provide “democratic accountability” [Councillor Dawe [PHT00000001](#) pages 77–87], assist in the flow of information and policy from CEC to the various bodies and vice versa, and represent CEC on the board [Dame Sue Bruce [PHT00000054](#), page 4]. I consider the issue of flow of information in its own section below (see paragraph 22.219 onwards), and here I concentrate on control and accountability.
- 22.213** A consideration of the duties and obligations of the directors once appointed demonstrates that it is not an effective means of control. Although a director may be appointed by a person or entity outside the company, it is well established in the UK that, once appointed, such a director owes duties only to the company and not to the person or body that appointed them. For instance, it would not be permissible for a director appointed by CEC to the **tie** Board to make a decision on the basis of what was best for the Council's interests. Where there is only one shareholder in

the company, there may be little difference between the interests of the company and those of the shareholder, but the distinction remains. In taking a decision for the company, the director in this position may take into account the perspective of the appointing shareholder as to what is best for the company but cannot simply take as a starting point what is best for the shareholder. Although, at times, these directors are described as “representatives”, that is inaccurate and it is better to consider them nominees. This creates a possible difficulty that could have arisen for the CEC-appointed directors when the interests of CEC and the interests of **tie** started to diverge. This was recognised by some witnesses (see, eg, Mr Macaulay [TR10000053_C](#), page 0008, paragraph 14; Mr Aitchison [TR10000022_C](#), page 0090, paragraph 270). Although apparently aware of the conflict that might arise as a result of owing duties to CEC and to the company in question, others seemed untroubled by this. There seemed to be a general approach that the councillor or director in question would be able to work matters out as and when a problem arose. I do not accept these casual dismissals of the problem or glib beliefs that matters could be resolved. Often, the suggested solution would involve disclosing to CEC what was happening within the company. As I consider below, that option would often not be available due to the obligations of confidentiality owed to the company. I do not consider that any of these suggestions properly addresses the conflict and provides an acceptable solution.

22.214 This problem of the potential incompatibility of duties incumbent on councillors or directors had been recognised in CEC prior to the Inquiry. In December 2012, Mr Maclean, in his capacity as Director of Corporate Governance, prepared a report for councillors in relation to council-owned companies [[CEC02086791](#)]. This noted that an earlier review that had been carried out made a number of recommendations, including:

“1.5.1 Elected members should not be directly involved in operational decision-making of Council companies. Given the potential for conflict of interest between their roles as councillors and as directors (where there is a statutory duty to act in the best interests of the company and not the shareholder), it is recommended that elected members do not act as directors on company boards, but carry out a strategic direction-setting, oversight and challenge role as members of the relevant Council committees.

“1.5.2 In light of the same potential conflicts of interest, council officials should not sit on company boards. As an alternative to acting as company directors, it is recommended they have observer right on boards of Council companies.

“1.5.3 Council companies should recruit and appoint executive and non-executive directors with the appropriate skills and experience. The boards should meet at regular intervals, with a minimum of five meetings every year. Each board should, where appropriate, have properly constituted audit, remuneration and nominations committees.” [[ibid](#), pages 0004–0005.]

22.215 Despite this, Mr Maclean’s report notes that a working group of councillors had determined that they wished to participate directly in decision-making. I would comment in passing in relation to this that a desire to participate in decision-making is at odds with the idea of an arm’s-length company and may suggest that the councillors would be better not transferring control to companies at all. However, as the desire was there, to accommodate it the report proposes that three councillors should sit on the board of each CEC company. The motion as passed by CEC gave effect to this modified proposal [[CEC02083113](#)]. The report does not indicate that the

councillors' working group had identified or even considered any solutions to the concern as to conflict of interest. I consider that Mr Maclean was correct to identify the problem and that it cannot be ignored in the way that the councillors wish.

- 22.216** The effect for the Tram project of the requirement of directors to act according only to the company's interests was that the presence of directors did not mean that it was necessarily possible to give effect to the interests of CEC in decision-making. It means that their presence did not provide democratic accountability and that it could not ensure that CEC policies were respected in decision-making. Therefore appointment of directors by CEC was ineffective for almost all the purposes for which it was said to have been carried out. The only thing that could have been done by the appointed directors when a CEC policy or decision was relevant was to draw it to the attention of the other directors. Not only is putting councillors on the board(s) as directors ineffective; as with the other ineffective safeguards I note above, it creates a false feeling of confidence. The danger in that is that, as a result, other effective measures are not put into place.
- 22.217** I recognise that nominated directors are a common feature of business life and are routinely used by lenders and investors. Even in those situations, however, unless there is agreement to the contrary the obligation of confidence and the requirement to put the interest of the company first will apply. In those situations, there may be express contractual modification of these obligations and the underlying investment or lending agreement may have its own mechanisms to provide control if situations occur that are contrary to the interests of the lender or investor.
- 22.218** It is not surprising that there were such diverging views on what control CEC had over **tie** and the other entities and the extent to which there should be control. There was no comprehensive and clear view taken at the outset and matters were left to be adjusted as they went along. As a result of this, false reassurance was taken from various measures that had been put in place without any proper assessment of whether they met the needs or desires of CEC. If arm's-length companies are to be used it is necessary that at the outset there is full consideration of the controls that are to be put in place. This needs to consider the extent to which control is desirable and the various measures to be used need to be the subject of critical evaluation to assess whether they will actually provide the desired regulation. Here, as elsewhere, failings occur when the approach is simply one of ticking boxes without considering the substance of what is to be achieved.

Reporting by the companies

- 22.219** Whatever scope for intervention by CEC existed, its effectiveness depended on both a flow of sufficient accurate information to CEC and whether CEC's procedures provided an effective form of scrutiny. There cannot be effective scrutiny by either councillors or officials unless they are sufficiently well informed. This can be illustrated by the view of Councillor Balfour that had accurate information been provided to councillors, the decisions taken by them would have been different [[TR100000016](#), pages 0002–0003, paragraphs 4–8].
- 22.220** In relation to the councillors, there were a number of different sources of information. Some information came direct from **tie**, but the majority came via council officials.
- (a) The Chief Executive briefed the council Leader [Mr Aitchison [TR100000022_C](#), page 0102, paragraph 313 NB This statement contains two paragraphs each with the numbers 313 and 314].

- (b) The CEC Director of Finance briefed the Executive Member for Finance [\[ibid\]](#).
- (c) The CEC Director of City Development briefed the Executive Member for Transport [\[ibid\]](#).
- (d) Briefings were given to Opposition spokespersons [\[ibid\]](#).
- (e) Briefings were given when reports were submitted to the full council [\[ibid\]](#), page 0102, paragraph 314]. These were done to each political group separately.
- (f) Briefings from **tie** personnel and council officials were given to group leaders. According to Councillor Balfour, on occasions these briefings contained confidential information that he could not share with other colleagues [Mr Aitken [TR100000015](#), page 0032, paragraph 112; Mr David Anderson [TR100000108_C](#), page 0004, paragraph 2(c); Councillor Balfour [TR100000016](#), page 0027, paragraph 80].
- (g) Requests for information could be made [Mr Aitken [TR100000015](#), page 0032, paragraph 110]. These would generally be made to officials who would, if necessary, seek information from the other entities involved.

22.221 As with most areas of the project, witnesses also said that reliance was placed on informal discussions [Mr David Anderson [TR100000108_C](#), page 0119, paragraph 154]. Different classes of councillors were informed to different degrees. Those who sat on the TPB or the Boards of **tie** and TEL would have information that they were unable to share. As mentioned above, the information provided in the briefings to group leaders was sometimes termed "confidential", so it could not be shared with other councillors, and Executive Members could not share the content of the briefings that they had had. This created an unsatisfactory position in which not all the councillors voting on any matter had the same information.

22.222 I note in paragraph 22.212 above that one of the suggested reasons for appointing councillors to the boards of companies wholly owned by CEC is that they assist in provision of information. In some quarters, there was a view that officials and councillors attended the TPB meetings and sat on the Boards of **tie** and TEL so they would have known what was happening, and that this meant that CEC was aware [see, eg, Mr Gallagher [TR100000037_C](#), page 0060, paragraph 199]. In my view, these views are misconceived. Irrespective of whether any duty would arise at common law as a result of the director being aware that the information given to him or her was of a confidential nature, the director's duties to act in the best interests of the company will, in general, mean that it is unlawful to disclose that information. It is perhaps with this in mind that the articles of TEL contained a provision that a director of the company who was also a director of **tie** or LB was entitled to make disclosures about the affairs of TEL to those other companies [[CEC00478762](#), page 0008, article g]. There is no provision to this effect in the articles of **tie** and no provision in the articles of either company to permit disclosure to CEC.

22.223 Although attending meetings of the TPB did not of itself make the attendees directors of TEL, it was a sub-committee of the Board of that company and the circumstances of the discussion there are such that it would be expected that confidentiality would attach to them so this information, too, would be protected. The error in understanding of the position in relation to sharing information creates a danger. Here, as elsewhere, it gives rise to the risk that the incorrect assumption that a safeguard exists means that proper measures are not put in place. The view that appointment of directors was an informal means of passing information appears to have been used as a substitute for proper reporting.

- 22.224** The Council's Code of Guidance for its companies and the relevant operating agreements between CEC and **tie** set out the reporting and other requirements in detail [[CEC01813429](#) (Council's Code); [CEC00478603](#) (2005 agreement); [CEC01315172](#) (2008 agreement)]. I note that in the various copies of the 2005 agreement provided to the Inquiry the agreement was signed by the Council Solicitor on behalf of CEC, but was not signed on behalf of **tie**. This did not have any effect on CEC, however, because in any event **tie** was regulated by the Council's Code, as will be mentioned below. Rather the significance of the failure to complete the documentation is similar to the failure to sign and return the letter of appointment of DLA mentioned in Chapter 4 (Legal Advice), and the failure to have the report requested by the Solicitor about the Infraco contract for her consideration before agreeing that the Chief Executive should sign it. All these failures suggest a lack of appropriate procedures within the Legal Department to ensure that documentation was completed for the protection of CEC. This was of significance in relation to contract close, which was discussed in Chapter 12 (Contract Close).
- 22.225** The financial reporting by **tie** did not meet the requirements imposed by CEC. In short, while **tie** appears to have produced an annual business plan and draft annual accounts for CEC's approval, quarterly reports were not produced to CEC's monitoring officer, nor did the monitoring officer provide regular reports to CEC (whether annually or biannually) on **tie**'s performance. Mr Holmes was **tie**'s monitoring officer [[CEC02087101](#)], but he could not recollect receiving quarterly reports from the company or making annual or biannual reports on its performance to CEC [[PHT00000041](#), pages 189–191]. The Inquiry has been unable to recover any such reports. Mr Inch stated that although quarterly reports may not have been provided by **tie**, Mr Holmes was, in fact, receiving information more frequently – on a daily basis. He also referred to CEC's Internal Planning Group ("IPG"), which was regularly provided with information in relation to the performance and progress of the project. In saying that, Mr Inch accepted that such reporting was done in a less structured or formal way than that envisaged in the Council's Code [[PHT00000007](#), pages 78–80]. Although it is true that a lot of information was provided to CEC in relation to the Tram project in a variety of different ways, I consider that that is not the same as the formal system for monitoring the performance of a council-owned company envisaged in the guidance noted above. It is a matter of concern that these requirements were not fulfilled and no consideration was given to whether the information that CEC actually received (and the manner in which it was provided) was a suitable and adequate alternative. Mr Fair, of the Chartered Institute of Public Finance and Accountancy, gave evidence that he could find no objective evidence of formal performance appraisal of **tie** and that critical controls over the formal management of performance between 2007 and 2011 were difficult to find [[TR100000264](#), page 0053, paragraph 3.108]. The guidance noted above, and the operating agreements between CEC and **tie**, contained provision for regular performance appraisals, and I consider that it was indicative of the "light touch" applied by CEC to its monitoring of **tie** that it did not insist on these provisions being complied with. The Council's Code also required **tie** to provide the monitoring officer with all agendas and papers for Board meetings at least five days before the meeting. Although Mr Holmes could recollect receiving such material, he stated that he would not have necessarily read them all himself because "a lot of paper came across my desk" [[PHT00000041](#), page 190]. This evidence, coupled with his failure to obtain quarterly reports or to make annual or biannual reports on the performance of the company, tends to suggest that Mr Holmes did not appreciate the extent of his obligations as **tie**'s monitoring officer or that, if he did, he failed to fulfil them.

- 22.226** As with other issues, the failures of Mr Holmes in this regard should not be seen in isolation. The absence of formal annual or biannual reports to CEC in accordance with the Council's Code ought to have been apparent to the Chief Executive (Mr Aitchison), who had submitted the Code to CEC for approval. Mr Aitchison ought to have raised the absence of such reports with Mr Holmes and, in any event, ought to have had procedures in place to ensure that such reports were provided regularly and timeously to CEC. Had that occurred, councillors would have been better informed about **tie**'s performance before contract close.
- 22.227** In relation to the project itself, the quality of reporting by the **tie** team engaged in the project was poor. Complaints came from Transport Scotland about the standard of reports that it received. As early as June 2008 – within days of the contracts being signed – Mr Gallagher expressed his dissatisfaction with the standard of reporting in relation to the MUDFA works [CEC01288728]. He noted that the problems that existed would not have been picked up from the formal report to the TPB and that "there are issues all over the place". In another email in the same chain, Mr Bissett agreed and said "I do think the reporting here and in the TPB papers (which I assume is the TS report) is not sufficiently detailed to disclose the vital signs." [ibid, page 0001]. Reports to the TPB would have been an informal route by which council officials such as Mr Holmes and Mr McGougan could have become aware of problems.
- 22.228** Reading though the reports that were submitted, I agree with the criticisms of them. In the first year of the contract, a dispute of fundamental importance was clearly emerging, yet its existence and nature are not apparent from the reports. In months in which there was a lack of any real progress, a number of possible justifications were offered without a clear indication that there was a disagreement as to the meaning of core terms of the contract. The reports give "[f]inalisation of the agreement of change delaying the commencement of work" as a reason for lack of progress. This tells the reader nothing of the dispute that was emerging as to the interpretation of the contract and whether works would be a "Notified Departure" giving rise to an Infraco Notice of **tie** Change in terms of the contract. It provides no indication that the issue that had arisen had the potential to increase the costs of the project significantly. The Project Director's reports contain large amounts of word-for-word repetition from month to month over extended periods. During the hearings it was said that the same issues were arising in relation to lack of progress from month to month, and that is why they were repeated. I do not accept, however, that it was the position that what could be reported in one month was identical to what had been reported three or four months earlier. If that was the position, it would indicate that absolutely nothing was being done by **tie** to address the issues. Identical estimates for completion dates were repeated month after month, long after it must have been apparent that they were wholly unrealistic. Tellingly, errors were repeated from month to month. These factors indicate that the reports were not being scrutinised, checked or corrected.
- 22.229** The opaque reporting on the project is in stark contrast to the clear and accurate manner in which the problems were identified and reported by the OGC peer review team as early as July 2008 [CEC01327777]. It noted that:
- MUDFA works were only 60 per cent complete, with an uncertain completion date that would have an increasing impact on the Infraco works;
 - the design was not complete at contract award;
 - it was unclear to the review team where risk lay for design development;
 - in interview, BBS and **tie** each considered that risk lay with the other party;

- there were concerns regarding changes and management of changes;
- the programme was then currently three months behind schedule; and
- there were significant risks of further delay.

22.230 This shows that the problems were identifiable, which makes the quality of the reporting by **tie** all the more concerning.

22.231 The effect of the omissions and errors is that the reports are misleading. Anyone who knew of the disputes with BSC must have been aware of this. Mr Bell, who wrote the Project Director's reports, would clearly have been aware, but he was not alone. All members of senior management in **tie** would have been aware that the nature and extent of the problem were not being reported, and all these people bear responsibility for the state of the reports. There is not sufficient evidence available to me to conclude that there was collusion within **tie** to give a misleading picture, but it is striking that this position was allowed to remain. These reports were, in a sense, intended for internal use within the project. However they formed the majority of the substance of the reports provided to Transport Scotland and were also used to inform CEC. Their shortcomings are therefore material beyond the TPB and **tie**.

22.232 During the hearings and in submissions it was said that defects in the formal reporting did not matter, as the necessary information was being provided in informal discussions or in oral briefings. In a large-value project funded with public money, those are not an adequate substitute for clear, concise and formal written reports. The written record will assist in ensuring that matters are understood and not overlooked.

22.233 Even when information was available to council officials, it was not always made available to councillors. In an email of 8 January 2010 sent to Mr Maclean (which was also considered in Chapter 18 (CEC: May 2008 to 2010)), Mr Smith attached a brief history of the project [[CEC00473790](#)] and said:

"dissemination of the actual history here could cause serious problems and we definitely don't want to set hares running ... be very careful what info you impart to the politicians as the Directors and **tie** have kept them on a restricted info flow" [[CEC00473789](#)].

22.234 It had been apparent from the outset of the Tram project that it was a source of political controversy. This highlights the problem that can flow from that: any information that indicates that there are problems may be the subject of public debate. Opponents of the scheme will use it to revisit the original decision, or at least to attempt to cause political damage to the proponents of the scheme. This could lead to doubts as to whether the project would be curtailed or stopped.

22.235 Mr Ramsay referred to this reluctance of a delivery body to pass on information as the "agent-principal" dilemma, in which the delivery agent would choose not to give the principal as clear and as full a picture as they should have done [[PHT00000012](#), pages 195–196]. This was also considered in the evidence of Professor Flyvbjerg on optimism bias and was considered in Chapter 21 (Risk and Optimism Bias). This general reluctance to communicate information could apply to any aspect of the project, but there are inevitably particular areas of commercial sensitivity in any construction project that one party does not want the other party to know of. This raises the issue of confidentiality, and it is to that issue that I now turn.

Confidentiality

- 22.236** A requirement for confidentiality was invoked during the period in which disputes under the Infraco contract were being pursued to adjudication to restrict information available to councillors and council officials or to restrict communication of information that was made available. It is easy to respond to the withholding of information by saying that it is wrong that councillors should not be given the full picture, but is that really correct?
- 22.237** It is apparent that some restriction on the dissemination of information was required. Leaks of information were capable of causing embarrassment or inconvenience to **tie**, but the problems could be more fundamental – particularly as the relationship with BSC deteriorated. If commercial strategies, concerns, analysis of the position and similarly commercially sensitive information were to leak back to BSC – either directly or through the media – there was scope for causing material prejudice. As Mr Aitchison noted, reporting in public would have put **tie** at a clear commercial disadvantage [TR10000022_C, page 0103, paragraph 316]. It is easy to see how a concern to prevent this harm would give rise to a default position of not handing over material. There was particular concern that legal advice obtained in relation to the disputes should not become available [Mr David Anderson TR100000108_C, page 0120, paragraph 154]. No commercial entity would be happy to be party to a contract in which it had to disclose all its deliberations as to the issues arising under the contract while the other party could keep its considerations and evaluations private. Without some ability to control release of information, public authorities would be put at a disadvantage.
- 22.238** There were sharply divided views as to where to draw the line on what should be kept back. By way of illustration of one extreme, Councillor Donald Anderson said:
- “I fully understand that there is a need to have confidential discussions particularly on commercial issues and there is a need in a difficult contractual situation to reflect privately on the issues raised and the questions posed for you as an elected member of a decision-making body. However, there is also at times a need to be open about the decisions you are taking, and the need for appropriate scrutiny and discussions about such issues. The Council is not a private company, and the council was essentially the client and jopint [sic] shareholder in the delivery of the project. All its decisions have to be publicly justified and there is no excuse for keeping vital and important information from elected members who are the ones that, ultimately, take those decisions.” [TR100000117_C, pages 0009–0010, paragraph 17.]
- 22.239** Although it is true that CEC was the client and shareholder, and it is also true that, over time, decisions will have to be justified publicly, I do not think that it follows that all material must be made public and that each decision must be publicly justified as it is taken. If this was taken to its logical conclusion it would have the effect that all material must be available in all council contracts, and I do not agree that that should be the position.
- 22.240** There were nonetheless concerns on the part of councillors that arguments as to confidentiality were being used simply as a device to keep information from them. For example, when disputes were taken to adjudication, the councillors were told that they could not see the decisions that had been made. (This was also considered in Chapter 18, CEC: May 2008–2010.) This meant that they had to depend on reports that were given by **tie**. As will be considered below, although there may have been informal channels in which a full picture was given, the formal reports did not

accurately reflect the outcomes. Another example is that Councillor Donald Anderson objected to the fact that **tie** had said to councillors that if they questioned what was being done, it would cost the taxpayer more, as a consequence of which scrutiny and debate were inhibited [*ibid.*, page 0050, paragraph 115].

- 22.241** It is not apparent why the decisions in the adjudications (see Chapter 17, Adjudications and Beyond) could not have been made available. They were already known to BSC, so leaks were not a concern. Councillors said that they were told that the Infraco contract stipulated that they should remain confidential. Having considered the contract, I can see nothing in it to this effect. It therefore appears that this is an example of information being withheld simply because it was undoubtedly bad news. The result was that when the true picture in relation to the adjudications began to emerge, there was lack of trust between councillors and **tie** personnel.
- 22.242** In recent years, CEC has begun to address the problem of reconciling the need for confidentiality with the requirement to inform councillors by use of "data rooms". These are stores of information that can be consulted by authorised parties, but the documents themselves cannot be removed and copies may not be taken. Although that approach is not a complete answer to the dilemma, the general view within CEC is that it has been effective.
- 22.243** Although data rooms deal with practicalities, they do not address the core issues: should councillors see all information, or only information that they require; and, if the latter, what information do they require to see? The common justification for provision of information is that there is a need for accountability and informed decision-making. Although there is undoubtedly a need for both, I consider that it is an error to assume that this means that all communications must be released. There is a danger of conflating accountability with transparency. No one could doubt that there must be accountability for the expenditure of public money. That does not mean, however, that the whole operation of a contract has to be transparent to the public. This would mean that public-sector bodies would always be at a material disadvantage compared with private bodies. It is of note that the need to keep some information private is recognised in the Freedom of Information (Scotland) Act 2002, section 33, which allows certain information to be withheld on the basis of commercial confidentiality. Where government – at either Holyrood or Westminster – enters into contracts involving large sums of money, individuals or departments may be called to account and the project can be scrutinised by bodies such as Audit Scotland or National Audit Office. It is not the case, however, that every MSP or MP is kept informed of commercial strategies, negotiations and the like. There is no reason why the position should be any different for local government.
- 22.244** Ultimately, I consider that the proper ambit of the requirement for information is determined by the residual scope for action by CEC, so the question of what information must be provided has to be answered along with the determination of those retained powers. As I have noted in paragraph 22.199 above, there is no single, correct answer in relation to the question of what residual powers should be retained where an arm's-length company is used. However, where, as here, the actions of the company in question have the potential to expose CEC to a substantial liability in respect of which CEC will have no recourse against any other party, it would be reasonable that there should be a much more significant residual role. Whatever decision is taken in that regard, the information that must be made available should enable CEC to determine whether the situation is one that requires intervention. If there is a feeling that the barrier should be set low on the assumption that there should be intervention quite readily, that would be a factor suggesting that the

project in question is one that is simply not suitable for transfer to an arm's-length company. Below, I return to the issue of the decision to use such companies. Here, as elsewhere, what was needed was clarity – clarity as to what the future role of the council would be so that there could, in turn, be clarity as to what information should be given to it. Such clarity was absent in the Tram project.

Supervision of the companies and mechanisms for scrutiny

Full council

- 22.245** In addition to having information available to councillors, the other ingredient required for effective scrutiny by the CEC is that there should be efficient and effective procedures to enable this to take place.
- 22.246** In relation to proceedings before the full council it is apparent from an examination of the minutes of its meetings that, when matters came before it, the Tram project was just one of many items that had to be discussed. This would limit the amount of time available for consideration of the issues that were arising. Although councillors said that they considered that they had sufficient time, any objective consideration of how matters were put before CEC meetings indicates that there would have been benefit in ensuring that there was sufficient time for fuller consideration of the papers in advance of the meetings. In addition, voting on issues concerned with the Tram project proceeded upon party lines [Mr Aitken [TR100000015](#), pages 0031–0032, paragraph 109; Mr Donald Anderson [TR100000117_C](#), pages 0006–0007, paragraph 11; Councillor Balfour [TR100000016](#), page 0026, paragraph 77]. This was preceded by discussions in the party groups, in which there would be agreement as to what line should be taken. Nonetheless, the Tram project had already given rise to sharp divisions on party lines, so voting on this basis meant that there was unlikely to be close scrutiny.
- 22.247** The above factors meant that proceedings before the full council could not be expected to provide an effective form of scrutiny. The Tram Sub-Committee of CEC could have functioned so as to better inform members and to afford sufficient time for effective examination of any issues that arose. However, concerns as to commercial confidentiality meant that the minutes of the TPB were not provided to the Tram Sub-Committee [Mr Aitchison [TR100000022_C](#), pages 0103–0104, paragraph 318], and it did not meet frequently. These both undermined its ability to function as an oversight body. The suggestion that the TPB was itself a form of scrutiny on behalf of CEC does not bear examination, for the reasons outlined above.
- 22.248** In addition to scrutiny from councillors, various council officials had particular responsibilities in relation to the project:
- Ms Lindsay had a role in relation to the legal arrangements;
 - senior council officials were tasked with financial and budgetary monitoring;
 - Mr McGougan also provided oversight on finance and budget monitoring;
 - Mr Holmes was the Director of City Development, the lead department in CEC for the Tram project, and he was succeeded by Mr David Anderson, who oversaw construction progress; and
 - the Chief Executive, Mr Aitchison, chaired the IPG, which reviewed progress as a whole [Mr David Anderson [TR100000108_C](#), page 0117, paragraph 153].

22.249 Ultimately, however, decisions in relation to what was to happen were taken by councillors. Even if the councillors entrusted the oversight function to the officials, there would have to be a way in which strategic issues that were identified could be reported back to the councillors and a structure put in place for councillors to give them appropriate consideration before taking a decision.

CEC's Internal Planning Group

22.250 CEC's IPG was chaired by Mr Aitchison and comprised senior officials of CEC (ie Mr Aitchison, Mr Holmes, Mr McGougan, Mr Inch and Ms Lindsay), supported by more junior officials. It was created in October 2006 with the remit of ensuring that CEC had a clear understanding and oversight of the various strands of work that would require to be undertaken to enable CEC to approve the FBC for the Tram project at its meeting on 1 February 2007 [[CEC01565477](#) – see paragraphs 6 and 10 for the IPG's remit]. The IPG met frequently throughout the life of the Tram project, meeting regularly from October 2006 and on a monthly basis from July 2007 onwards.

22.251 Although the IPG was able to, and did, exercise some informal oversight of the project, its main focus (as stated in its original remit) was to co-ordinate the various actions required of CEC to deliver the project, but it did not carry out a formal, or express, oversight or governance role. If it was expected to carry out such a role then that ought to have been clearly stated in its remit and clearly understood by all involved. That was not the case, as is clear from emails from Mr Turley dated 12 May 2010 and 15 June 2010 in which he noted the uncertainty over the IPG's remit, including, in particular, its responsibility for oversight of the project's programme and budget [[CEC00236984](#); [CEC00241274](#)].

22.252 It is also worth noting, more generally, that responsibility for the Tram project was shared among several senior officials within CEC and no one official was responsible for delivering the project within budget and on time [Mr Inch [PHT00000007](#), pages 20–21; Mr Holmes [TRI00000046_C](#), page 0112, paragraph 413]. I consider that, as a matter of good project governance, there ought to have been an individual senior official within CEC who was responsible for ensuring that the project was delivered within budget and on time. This is not intended to overlap with the function of the SRO. The purpose would be to have an individual responsible for overseeing and co-ordinating the activity of CEC in relation to the project rather than the project as a whole. The person would have responsibility for ensuring that the manner in which decisions were taken by the CEC and resources were made available would be coherent and supportive of the project. Purely by way of example, this might require bringing together other persons from different parts of the council, taking steps to avoid conflict in objectives or decisions between different parts of CEC or requiring that information be given or steps be taken by departments within the council. Although it might be said that these were the functions of the Chief Executive of CEC, it is not realistic to expect someone in that position to provide the time and focus that would be required to fulfil the role.

CEC's Tram Sub-Committee

22.253 In a report to CEC on 23 August 2007 it was recommended that a CEC Tram Sub-Committee be set up to review and oversee decisions in respect of the Tram project [[CEC02083490](#), pages 0003–0004, paragraphs 16 and 20]. A subsequent report to CEC on 20 September 2007 noted that such a sub-committee had been established to review and oversee decisions in relation to the Tram project, with a view to enhancing councillors' oversight of it. It was proposed that the sub-committee would meet every six-to-eight weeks. Its remit included regular review of the risk profile

for CEC, and it was proposed that the TPB would report to the Tram Sub-Committee [[CEC02083455](#), pages 0002–0003, paragraphs 11–16].

22.254 In the event, the Tram Sub-Committee first met on 12 May 2008 and, clearly, was not in a position to exercise any meaningful oversight of the project before financial close on 14 May 2008. The sub-committee met only infrequently thereafter (it met on a further six occasions between 2008 and March 2011) and was unable to exercise any meaningful oversight of the project, even in the period after financial close. This seems to have been due partly to concerns in relation to providing members with commercially confidential information after the disputes arose between **tie** and BSC [Mr McGougan [TR100000060_C](#), page 0142, paragraph 369].

Tram Monitoring Officer

22.255 CEC's Code of Guidance required the appointment of a monitoring officer for each company in which it had an interest. The overall purpose was to ensure that CEC's interests were safeguarded [[CEC02084254](#), page 0007].

22.256 CEC's 2008 operating agreements with **tie** and TEL each provided for the appointment of a monitoring officer [[CEC01315172](#) (**tie**); [CEC00039231](#) (TEL)]. The intention was for the same person to monitor both **tie** and TEL, as the "Tram Monitoring Officer", and to designate the Director of City Development or his nominee as such [[CEC02083448](#), page 0003, paragraph 4.6; [CEC02083446](#); [CEC01338853](#), page 0043]. Clause 3.5 of each of the operating agreements anticipated that the monitoring officer would be a director of TEL and a member of the TPB. For the TEL monitoring officer to be a director of TEL was, however, contrary to the Code, which did not allow a director of a company to be its monitoring officer, presumably to avoid conflicts of interest [[CEC02084254](#), page 0007; cf Mr Holmes [PHT00000041](#), pages 185–186; Mr Inch [TR100000049_C](#), pages 0083–0084, paragraph 195]. The requirement for the TEL monitoring officer to be a member of the TPB gave rise to a similar difficulty, given that the TPB was a committee of the TEL Board [[CEC02083448](#), page 0002, paragraph 4.2]. It is difficult to see how an officer could objectively and impartially monitor TEL if he was himself a member of a committee of its board.

22.257 Despite these terms appearing in the TEL and **tie** operating agreements when they were formally executed in May 2008, CEC did not appoint a monitoring officer under either agreement. This appears to have been an oversight. Such an oversight is surprising, given that the agreements were signed by the Council Solicitor, Ms Lindsay, who was also involved in the preparation of at least the TEL agreement [*ibid*]. Mr Holmes had been the monitoring officer for both **tie** and TEL prior to his retirement on 1 April 2008 [[CEC01392168](#)], but his successor as Director of City Development, Mr David Anderson, did not take over either position. There was some evidence that Mr Holmes had been the TMO, but since that post was formally created only on execution of the **tie** operating agreement in May 2008, this must have been an informal use of that title [see, eg, Mr Inch [TR100000049_C](#), page 0016, paragraph 40; Mr Holmes [TR100000046](#), page 0002, paragraph 2; Mr Holmes [PHT00000041](#), page 183].

22.258 In a review of Tram project governance in October 2008, it was assumed that Mr Poulton had been nominated TMO, but this had not been formalised by CEC issuing a letter of appointment to **tie**. This led to a recommendation to appoint him as monitoring officer for **tie** [[CEC01053689](#)]. No equivalent recommendation was made in relation to TEL. The reason for that is unclear.

- 22.259** Mr Poulton was formally appointed as TMO on 5 January 2009, and his appointment was intimated to the Chairman of **tie** on the same date [CEC02086935; CEC01182449]. The terms of these letters indicate that they were in response to the governance review mentioned in paragraph 22.258 above. It is clear from the letter of appointment that Mr Poulton's role related only to **tie**. There is no evidence that anyone was appointed as TEL monitoring officer at this time. Since he was neither the Director of Finance nor the Director of City Development, Mr Poulton did not meet the requirements of the TEL operating agreement to be its monitoring officer. Mr Poulton had made it clear to the Director of City Development (Mr David Anderson) when recruited as CEC's Head of Transport that he was reluctant to be involved in the Tram project [TR100000115_C, pages 0001–0002, paragraph 1]. He was, therefore, a strange choice for the role. Despite his reluctance, he agreed to take on at least some TMO functions from around October 2008, although, as noted above, he was not formally appointed to that role until January 2009 [PHT00000051, page 23]. Mr Poulton said that Mr Anderson wanted to formalise the TMO role because of difficulties with the Tram project [*ibid*, pages 16–17].
- 22.260** Mr Poulton considered himself to lack the experience, time and resources to perform the TMO role [*ibid*, pages 39–40]. He had no experience of tram projects. He was a civil engineer by profession, but focused on traffic and transportation matters rather than on civil engineering or construction management [TR100000115_C, pages 0001–0002; PHT00000051, page 5 onwards and pages 39–40]. He agreed to take on the TMO role on the basis that he would report to Mr Anderson and would not be required to commit more than 5 per cent of his working time to it. The 5 per cent figure reflected the time that Mr Anderson was himself able to devote to the Tram project. In this, Mr Poulton did not meet the expectations of Mr Aitchison, who in his evidence to the Inquiry described Mr Poulton as:
- "probably the first person in the management structure whom you were expecting to be able to devote something like 100 per cent of his time to the project" [PHT00000041, page 21].
- 22.261** It is concerning that CEC's Chief Executive misunderstood the position to that degree.
- 22.262** Notwithstanding the provisions of the **tie** operating agreement, Mr Poulton was neither a member of the TPB nor a director of TEL. He attended meetings of the TPB, but not as a board member. He did not attend any meetings of TEL's Board. Mr Poulton did not know why he was not appointed to either body. He considered his role to lack "teeth", and that this might have been different if he had been an office holder at the TPB. On the other hand, Mr David Anderson, to whom Mr Poulton reported, was a member of the TPB.
- 22.263** Mr Poulton received little by way of briefing on his appointment. He did not know who, if anyone, had preceded him as TMO. He received no files or papers from a predecessor. His letter of appointment enclosed a copy of the **tie** operating agreement and said that he would be required to monitor **tie**'s activities as detailed in it. It asked him to provide Mr David Anderson with a brief monthly TMO update report for inclusion in IPG reports. Mr Poulton thought that his appointment might have been in part to address CEC's concerns that it lacked information about the project.
- 22.264** Mr Poulton saw his TMO role as gathering information from **tie** and reporting it within CEC, both to the IPG and to the convener of CEC's Transport, Infrastructure and Environment Committee [PHT00000051, page 31 onwards and page 49]. Mr Fraser, and later Mr Conway, helped him [*ibid*, page 32 onwards]. Mr Poulton accepted Mr Inch's description of the TMO role as "the eyes and ears of the Council in terms of

monitoring the project" [libid, page 73]. The matters to be reported to him by **tie**, and by him within CEC, included cost overruns, programme overruns and what **tie** was doing to mitigate them. Mr Poulton's appointment as TMO therefore opened up an additional line of reporting between **tie** and CEC.

- 22.265** The TEL and **tie** monitoring agreements were revised in December 2009, reflecting the fact that **tie** was by then a subsidiary of TEL. Under these new arrangements, day-to-day management of the project remained with **tie**, but strategic and material decisions were to be taken by TEL, who would give directions on such matters to **tie**. TEL was also responsible for the management of **tie**, including ensuring that it acted in accordance with its operating agreement [CEC00645836, page 0002, clause 1.4; CEC00645838, page 0006, clause 2.4].
- 22.266** The revised TEL operating agreement, unlike the 2008 version, used the title "Tram Monitoring Officer". In my view, this underscored the intention that the same person should monitor both TEL and **tie**. Indeed, since **tie** was now a subsidiary of TEL, and TEL now had responsibility for monitoring **tie**'s compliance with its operating agreement, it was arguably more important for the protection of CEC's interests that TEL had a monitoring officer than that **tie** did. Furthermore, while the TPB could plausibly supervise the activities of **tie**, it could not realistically supervise the activities of TEL, because it was a sub-committee of the TEL Board.
- 22.267** In terms of the revised agreement, the TMO was no longer required to be a member of the TPB, or a director of TEL, but was to attend meetings of the TPB and the TEL Board [CEC00645836, page 0003, clause 1.11]. This removed the conflict of interest inherent in the 2008 TEL operating agreement. In a further change from the 2008 TEL operating agreement, the TMO could be an appointee of the Directors of Finance or City Development [CEC00645838, page 0012, clause 3.5]. This change made it possible for Mr Poulton, as the incumbent TMO, to take on responsibility for the monitoring of TEL. Mr Poulton, however, maintained that he was never asked to monitor TEL and, indeed, that he had been specifically instructed by Mr David Anderson not to do so. Furthermore, he was unaware of anyone else being appointed as the monitoring officer of TEL [Mr Poulton PHT00000051, pages 106–109]. He assumed that Mr McGougan, or someone in the Finance Department, was responsible for that role [TR100000115_C, page 0005, answer 20]. By contrast, Mr McGougan said that Mr Poulton (as the then TMO) "would have responsibility for monitoring TEL" and was unaware of any instruction from Mr Anderson that Mr Poulton was not to do so [TR100000256, page 0001, answer 3]. However, Mr McGougan provided no evidence of Mr Poulton being directed or instructed to take on the monitoring officer role in relation to TEL.
- 22.268** In the absence of any evidence confirming the appointment of a monitoring officer to TEL, I accept Mr Poulton's evidence in this regard, and find that CEC did not appoint a monitoring officer to TEL following the 2009 revision of the operating agreements. This is notwithstanding the fact of the TEL operating agreement making specific provision for this role to be revised, approved by CEC and signed by officials from its legal department (on this occasion, Mr N Smith and Mr Maclean) in the course of 2009. The oversight is, in those circumstances, surprising.
- 22.269** Notwithstanding the lack of any formal appointment, it appears to have been assumed that Mr Poulton was indeed TEL's monitoring officer. For example, clause 2.24 of TEL's operating agreement required TEL to notify the TMO of likely delay or overspend in the project. When TEL's chairman gave notice under that provision, he sent it to Mr Poulton [TIE00084642]. Mr Poulton did not respond to the notice but passed it to the Director of City Development.

Operating agreement descriptions of TMO role

22.270 **tie**'s operating agreement set out both general and particular features of the TMO role. The most general provision described the TMO as "the Council officer nominated by the Council to monitor **tie** in relation to the Project" [CEC01315172, page 0003, clause 1.1]. That reflects the broad language of CEC's Code of Guidance, which stated that the purpose of the monitoring officer was to "ensure that the Council's interests are being safeguarded" [CEC02084254, page 0007]. The role of the monitoring officer under the TEL operating agreement was described in similar, although not identical, terms.

22.271 A broad view of the TMO's function under the operating agreement would amount to a single-handed supervision of all of **tie**'s functions in relation to the Tram project. It was plainly not construed by Mr David Anderson or Mr Poulton in that way, not least given their arrangement that Mr Poulton would spend no more than 5 per cent of his time fulfilling the role.

22.272 The TMO's role in supervising **tie** has to be considered in the context of the wider governance arrangements, which to some extent superseded it. Mr Inch said in his evidence to the Inquiry that:

"The [TMO] role was to deal with that interface between **TIE** and the Council. It was confused a bit by the TPB because, clearly, the Tram Monitoring Officer was meant to have that responsibility and it changed over time. There is no simple answer to this. The Tram Monitoring Officer was the individual who had the responsibility for dealing with issues arising from the tram but that became a little confused later on with the introduction of the TPB and then, latterly, the Tram Subcommittee. The Tram Monitoring Officer was still operating, but the role of that person changed as the project developed." [TR100000049_C, page 0066, paragraph 159.]

22.273 As far as I am aware, there is no document explaining how the TMO's functions were meant to fit in to the rest of the project governance structure, or to demarcate its responsibilities from those of the other participants within that structure. The scope of the TMO's role within that governance structure was, in my view, not properly defined.

Mr Poulton's work as TMO

22.274 Mr Poulton saw the TMO role as an additional channel of communication between **tie** and CEC. His main source of information was Mr Bell, **tie**'s TPD, from whom he received weekly reports – typically only two or three pages long – between March 2009 and October 2010. A typical example of such a report was CEC00863074. Mr Poulton passed these reports to each of the CEC Chief Executive and Group Leader. He received daily reports from Mr Bell on the Princes Street works from March 2009, but (according to Mr Poulton) these were concerned with traffic and pedestrian safety rather than matters of contract or programme management [PHT00000051, pages 77–78].

22.275 The monthly reports to the IPG included a TMO report between February 2009 and September 2010. These, too, were brief and covered the main matters of dispute under the Infraco contract in a high-level and summary form.

22.276 Mr Poulton was not himself a decision-maker in relation to the issues that he was reporting. He did not consider himself qualified to scrutinise **tie**'s handling of the contractual disputes. He regarded that as a matter for more senior officials, in particular Mr David Anderson, who attended the IPG along with CEC's Chief Executive

(Mr Aitchison) and its Director of Finance (Mr McGougan). Mr Anderson and Mr McGougan were also both members of the TPB. They were both in a position to seek more information or to raise concerns as they saw fit.

- 22.277** Mr Poulton, for his part, was content with **tie**'s reporting. Although he initially considered it poor, he said that CEC ultimately got "near enough everything [they wanted or needed] ... over a period of time" [[libid](#), pages 81, 100 and 103]. He was aware of **tie**'s obligations under the operating agreement to provide information to CEC, and to his role as TMO in enforcing those obligations. He considered the powers under the operating agreement to be sufficient for CEC to get the information that it needed from **tie**. Nonetheless, CEC's officials continued to have concerns about **tie**'s reporting, and it recorded them, for example, in the IPG's action notes from its meetings in September 2010 and January 2011 [[TIE00896604](#); [CEC01715621](#)]. These comments were made after Mr Poulton's activities as TMO were either winding down or had come to an end. It is possible that reporting declined as he ceased to be involved. However, I consider the more likely explanation to be that CEC's expectations of reporting increased. From the second half of 2010, CEC's officials made a concerted effort to understand more about the project, so that they could, independently of **tie**, formulate a strategy to resolve the project's difficulties. It seems to me that Mr Poulton's satisfaction with reporting reflected the very limited purposes for which he personally needed it and the fact that he was not himself bringing any critical thinking to bear upon it.
- 22.278** In addition to reporting to the IPG, Mr Poulton, together with other senior officials, was involved in briefing political group leaders monthly on progress, costs and timescales. Although the Inquiry does not appear to have written records of these reports, they are likely to have been brief. Mr Poulton said that the councillors were generally dissatisfied with these briefings, citing a lack of clarity, repetition of issues, delay in resolving issues, vagueness of information, and a lack of any clear indication of mitigation measures [[PHT00000051](#), pages 82–83].
- 22.279** Overall, in my view the reporting via Mr Poulton added little, if anything, to CEC's understanding of those matters, which were of fundamental importance to the duration and cost of the project.

2010 changes to the role of TMO

- 22.280** In April 2010, the IPG decided that Mr Poulton was to undertake a more intensive role on the project. He spent three months full time at **tie**'s office, examining various project issues, and produced a report for senior CEC management in a greater level of detail than his previous work as TMO [[CEC00236871](#); [CEC00236872](#), page 0005; [CEC02086414](#)].
- 22.281** Around the same time, CEC reviewed the role of the IPG and the TMO. In August 2010, the Director of City Development proposed that in future the IPG's remit should be more explicitly focused on objectives, including the following:
- providing CEC management scrutiny and oversight of the Tram project;
 - identifying high-level risks against the programme and budget for possible discussion at the TPB or with **tie**'s senior management; and
 - identifying, managing and mitigating programme-level risks to the CEC and the city resulting from a failure by the project to achieve its objectives, including risks arising from commercial and legal disputes and financial pressures arising from programme delays and scope changes [[CEC00242752](#), pages 0009 and 0034].

- 22.282** Mr David Anderson considered the TMO to be critical to the effective functioning of the IPG, acting as a key link between CEC and **tie** and being responsible for monitoring the project on behalf of CEC. The TMO would, in particular, oversee the programme, project management, and financial, commercial and legal aspects of the project [ibid](#), pages 0035 and 0039].
- 22.283** Mr Poulton said that, except in minor respects, Mr David Anderson's proposals reflected the TMO role as he had understood it from the outset [[PHT00000051](#), pages 115 and 116]. However, at the time, Mr Poulton recognised that the TMO role had to be given greater consideration than it had received previously [[CEC00236872](#), page 0005]. In my view, Mr Anderson's proposals involved a significant strengthening of the TMO role, based on the recognition by CEC's officials that they needed to improve their oversight of the project, in response to the difficulties that it had encountered. The proposals coincided in time with CEC's senior officials having lost faith in **tie**'s management of the project and starting themselves to take a more direct role in it.
- 22.284** Mr Poulton was approached by Mr David Anderson with a proposal to make the TMO a full-time role. In hindsight, Mr Poulton agreed that the role ought properly to have been a full-time one [[PHT00000051](#), pages 39 and 52]. He said that:
- "any city authority ... delivering a tram project or mass rapid transit ... [should] have a good, competent and capable monitoring officer in place, and it would have to be 100 per cent of the person's role" [ibid](#), page 117].
- 22.285** That was his view irrespective of whether a company such as **tie** was in place to manage the project [ibid](#), page 118].
- 22.286** Mr Poulton declined to take on the role on a full-time basis, and suggested instead his engineering manager, Mr McCafferty, for appointment. He described his own involvement with the role as "ramping down" from August 2010, and it came to a formal end in December 2010. Mr McCafferty took up the role after the Mar Hall mediation in March 2011.

Discussion

- 22.287** I had difficulty in forming a clear understanding of Mr Poulton's expertise. On the one hand, he was keen to emphasise his expertise in traffic matters and to downplay any suggestion that he was experienced in construction management [ibid](#), pages, 5, 6 and 14]. On the other hand, he made critical comments on the performance of Bilfinger Berger ("BB") and **tie**'s management of them. In short, these were that BB were "claim orientated" and had a deliberate tactic of disruption or delay to gain extra payment from **tie**, and that those at **tie** were "kidding themselves on" that they could make the contract work through strong contract management techniques [[TR100000115_C](#), page 0034; [PHT00000051](#), page 145 onwards]. These comments suggested that Mr Poulton had sufficient experience to form a view about these matters. If he did, it begs the question of why he did not do more about it at the time. Under examination from Inquiry Counsel, Mr Poulton conceded that these comments were not based on his own direct knowledge of the project's facts and circumstances, and for that reason I do not attach any weight to those particular views.
- 22.288** In his statement Mr Poulton also referred to his "personal feeling was that the contractor never wanted to deliver the programme to the contracted price in the first instance" [[TR100000115_C](#), page 0035]. It is difficult to understand this comment in the context of the pricing assumptions contained in Schedule Part 4 to the contract,

and it tends to suggest that he was under the impression that the contract had a fixed and firm price. If that is correct it is a matter of concern that the TMO was unaware of the mechanism for calculating the price payable to the contractor. On the other hand, he later referred to the contractor sticking to the letter of the contract rather than its spirit [PHT00000051, page 153]. I question whether these two positions are compatible with each other. I am also troubled by the fact that, in the undernoted passages of his evidence, he referred to his experience of dealing with contractors. He stated: "...that was really my own personal opinion, having dealt with a number of contractors throughout the years" [ibid, page 148]; and "... it's just my own personal thought on dealing with a lot of contracts over the years" [ibid, page 150]. He was also critical of **tie**, describing its approach to the project as "naïve". To describe someone as naïve implies that one has better knowledge and experience of the relevant matters than the person criticised, but Mr Poulton denied that this was the case for him in relation to **tie** [ibid, pages 152–153]. In his evidence he also referred to different construction contract forms, suggesting that he had background knowledge of such matters [ibid, page 161]. These remarks tended to contradict Mr Poulton's earlier evidence that he lacked experience in such matters. Overall, I was left with the impression that Mr Poulton probably had more experience in relation to construction matters than he was willing to admit. His denial of such experience might be seen as a convenient means of attempting to avoid criticism for his failings as TMO.

22.289 Furthermore, it is my firm impression from other evidence that Mr Poulton sought to underplay his role in the project. This was most obvious from his misleading remarks that he attended the TPB only "on occasions" [TR100000115_C, pages 0002–0003, answer 7; page 0006, answer 25; pages 0006–0007, answer 32; page 0009, answer 38]. This was something that he repeated under affirmation at the Inquiry's oral hearing. Moreover, when Inquiry Counsel raised with him whether that was accurate, Mr Poulton attempted further evasions before being compelled to accept that his attendance was indeed more than occasional. The minutes of the meetings of the TPB record his attendance at 29 out of its 40 meetings between 2008 and 2011 [PHT00000051, page 26 onwards]. A distinction can be made between a witness who genuinely cannot remember events and one who advances a positive, but untrue, explanation of occasional attendances at meetings as an observer in order to minimise his involvement in, and responsibility along with others for the failure of, the project. I concluded that Mr Poulton was in the latter category. When the Inquiry was on a non-statutory basis he refused, as was his right, to authorise CEC to release his contact details to the Inquiry. However, his explanation for doing so was not convincing. It failed to recognise that it was ultimately for the Inquiry, as opposed to a witness, to determine the value of interviewing and citing that witness [see TR100000252; PHT00000051, pages 2–5]. This evidence is another indication of Mr Poulton's endeavour to avoid scrutiny for his actions and failings as TMO.

Monitoring officer role and function

22.290 The role of a monitoring officer, as conceived in CEC's Code of Guidance, is expressed in very broad terms: to ensure that "the Council's interests are being safeguarded". "The Council's interests" in **tie** and TEL, and thus the Tram project, were far reaching. At the very least, they included anything with a significant impact on the scope, programme and cost of the project. That implies a prominent and important role for the monitoring officer in the Tram project. However, the project had a governance structure that already included senior council officials and councillors, who could be expected to look out for CEC's interests. There is no indication that at financial close the TMO was intended to play a significant role in supervising the operational management of the Tram project.

- 22.291** CEC's handling of the role is, nonetheless, a matter of some concern. The roles of monitoring officer for **tie** and TEL had existed prior to financial close. The fact that they fell into abeyance on Mr Holmes' retirement from CEC, and were not revived when Mr David Anderson replaced him, does not reflect well on CEC's arrangements for business continuity. The fact that the posts were not filled at financial close, when the operating agreements were signed, does not reflect well on CEC's internal administration, especially given that the signatories were CEC solicitors. The fact that a governance review identified the absence of a monitoring officer for **tie**, but not the absence of one for TEL, confirms the view that internal administration of project governance at CEC was poor, as does the failure to appoint a monitoring officer for TEL in 2009 when that company's operating agreement was revised. These failings are, in my view, symptomatic of a wider failure by CEC to establish robust governance arrangements.
- 22.292** CEC's discovery, in late 2008, that **tie** had no monitoring officer coincided with the realisation that the project was in difficulty and that CEC lacked information about it. It is therefore understandable that the TMO role was seen as a way for CEC to gather information. The commitment of only 5 per cent of Mr Poulton's time to the role meant that he was never likely to have a significant impact. The reporting to, and by, Mr Poulton was brief. It is unlikely to have added much, if anything, to the much more detailed reporting already taking place via the TPB, at least when it came to the more serious problems that fundamentally affected the cost and duration of the project.
- 22.293** It is not realistic to have expected Mr Poulton, on 5 per cent of his time, to have fulfilled any broader supervisory function of **tie**. One only has to consider (for example) the paperwork before the TPB to recognise that.
- 22.294** The greater emphasis placed upon the TMO role in 2010 was a response to the continued deterioration of the project. It was part of a general shift by CEC to take a more direct role in project governance after **tie**'s efforts were perceived to have failed. Mr Poulton's more detailed report produced in that year is an indication of what might have been achieved if CEC had had a full-time TMO from the outset of the project. If CEC had appointed a full-time TMO who was willing and able to understand construction management and disputes, it might have had a better appreciation of the project's problems at an earlier stage. It might then have been equipped to resolve them earlier, or at the very least to be better informed about them when the mediation took place in 2011.

Residual powers of CEC

- 22.295** Councillor Dawe said that, as the funder of last resort, CEC had the task of making sure that **tie** was doing what it should have been doing [[TR100000019_C](#), page 0234, paragraph 880]. I consider that this goes too far. Although it was true that CEC had a very obvious financial interest in what was done by **tie**, to say that it had the task of making sure that **tie** was doing as it should places too great an obligation on CEC – at least when applied to the whole of the functions undertaken by **tie**. In terms of the major strategic decisions in terms of which CEC was ultimately the party accepting a liability – most notably the conclusion of the contracts – it was critical that CEC formed its own view of whether this step should be taken. At that stage, it is not merely a question of considering whether **tie** was doing as it should or was making the correct decision; it was a decision that was properly for CEC to take. In the context of CEC's decision to authorise **tie** to sign the Infraco contract, this required the Director of Finance, the Director of City Development and the Council Solicitor to be satisfied that the draft contract reflected CEC's objectives, including

price certainty. It appears that this was recognised by the Council Solicitor, because she instructed Mr C MacKenzie to request that Mr N Smith report on the draft contract as noted in paragraphs 4.32 and 13.38–39 above. She was unaware that Mr N Smith had refused to do so. At the date of contract close, Mr C MacKenzie was on annual leave. In any event, the Council Solicitor was not in possession of the required report when she joined with the other two senior officials in signing the certificate to the Chief Executive confirming that he could authorise **tie** to conclude the Infraco contract. Once that decision was taken, however, CEC had established other entities to implement the contracts. To suggest that CEC should conduct any form of close monitoring to “ensure” that **tie** did as it was supposed to would place a very onerous burden on CEC and is not consistent with an arm’s-length approach. Some form of oversight is nonetheless appropriate. The question is: what would have been the appropriate degree of oversight? This may depend on many factors, including the importance of the project and the costs involved. Applied to the Tram project, it seems to me that a system of reporting and verification was required.

22.296 In relation to matters other than strategic ones, although CEC had delegated authority to the TPB in December 2007 (see above), it would have been open for CEC to have taken executive steps itself or to have countermanded or reversed decisions of the TPB (or either of the companies). Mr Mackay said:

“At the end of the day, any decisions taken by any of these Boards [TPB and TEL Boards] had to be referred to the City of Edinburgh and Transport Scotland. We could have been overruled at any stage. I have to say seldom did that happen, but I think it was important.” [TR100000113_C, pages 0023–0024, paragraph 82.]

22.297 I do not think that it is correct that every decision had to be referred to CEC, let alone Transport Scotland, but this statement of the continuing powers within CEC is correct. There was, however, confusion as to the role that remained for CEC once the arm’s-length company was established. The evidence from the councillors as to what role existed or should exist for CEC disclosed a variety of different positions. It was highlighted in particular in the evidence to the effect that CEC should have stepped in or taken some action at the stage that the problems in the relationship between **tie** and BSC became apparent. In this field, it seems that the issue of party politics intrudes, and some allowance must be made for that. Councillor Aitken was of the view that CEC should be taking action, and he thought that the problem was in part that there was a lack of political leadership. He considered that CEC ought to have been consulted about the issue of disputes as soon as they arose, to enable CEC to take a strategic decision about the approach to be taken to its resolution. Instead, CEC officials and **tie** decided to invoke legal procedures that he considered to have been an error [TR100000015, pages 0019–0020, paragraph 65]. Councillor Balfour said that, ultimately, CEC made the decisions and were responsible for them, but that should be seen against a background of a lack of clarity about the roles and responsibilities of the main project stakeholders. He considered that CEC’s role should have been to monitor the situation and intervene when required [TR100000016, page 0022, paragraph 65]. In his view, the companies should have been entrusted with the works and then left to report back when they were completed [*ibid.*, page 0023, paragraph 66]. Councillor Dawe disagreed with the criticisms [PHT00000001, pages 204–206].

22.298 The issue of what oversight and control should have been exercised by CEC is another in relation to which there is no single correct answer. Just as the decision to have an arm’s-length company is one on which there are different points of view, all of which may reasonably be held, views may legitimately differ on what residual role

should be retained by a local authority in the position of CEC. What can be said with certainty, however, is that that role should be clearly stated and be understood by councillors, council officials and personnel within the company. If there is a proper understanding of the residual powers, an informed decision can be taken as to when they should be exercised. This was not the case for the Tram project, as the evidence from the councillors indicates a lack of consensus on this issue. The term "arm's-length company" was familiar to them and appears to have been adopted without any real understanding of what it meant in practice. To fudge the issue by having a company and then assume that CEC should be intervening, without any clear idea when this should happen, has the effect that there is no clear allocation of responsibility. The result may be that neither party clearly takes control, that a consistent approach is not maintained, or that effective action becomes impossible.

The decision to use an arm's-length company

- 22.299** Although I have looked at the relationships and responsibilities of entities that were created to progress the project, and then considered the wider issue of the residual powers of CEC, there is a still more fundamental issue of why the project was entrusted to an arm's-length company rather than being undertaken directly by the CEC as it later came to be. CEC guaranteed the obligations of **tie** under the various contracts entered into by **tie** to deliver the trams. This meant that, in terms of exposure to the liabilities of the Tram project, using **tie** was no different from having the contract undertaken directly by a department of CEC or having an agent conclude contracts on its behalf. As is apparent from the discussion above, the difference that arose from using **tie** was that CEC had much less control of both the conclusion and the operation of the contract and therefore much less control over the liabilities to which it was subject. CEC had handed over its powers but retained all the financial responsibility. This was recognised by Dame Sue Bruce in her evidence [PHT00000054, page 3]. On the face of it, this seems to be the worst of all worlds for CEC. This raises the issue as to where the intention to use an arm's-length company came from and what the justification for it was.
- 22.300** There was no consensus in the evidence as to where the idea of using an arm's-length company originated. It was suggested by a number of witnesses that it was imposed as a condition of grant availability by the Scottish Ministers, or later by Transport Scotland, but there is no evidence to support this. A letter dated 28 February 2002 from the Minister for Enterprise, Transport and Lifelong Learning, Ms Alexander MSP, said that she would "strongly support the principle of an off balance sheet company ... to progress the Council plans" [USB00000232, Part 1, page 0010]. This is the only communication from Scottish Ministers that comes close to dictating the delivery mechanism. The concept of an "off balance sheet" company relates to the way in which the liabilities and expenditure are reflected in accounting terms. It means that the expenditure will not be caught by any spending limits on the public body. It also enables any income to be retained within the company and spent on projects without counting towards any public expenditure limits. The decision to have **tie** as an "off balance sheet" company was taken against the background that it would have a revenue stream from congestion charging, which could be ring-fenced for funding various transport schemes. Following the rejection of the congestion charging scheme, however, there is no further reference to the company being "off balance sheet" and instead it was consistently referred to as an "arm's-length company". It appears that the term "off balance sheet" company may have been used loosely at the outset, without any particular intent beyond an arm's-length company.

22.301 Some of the reasons or justifications proffered for using a company to deliver the Tram project are as follows.

- It was said that as a result of past problems there had been a loss of confidence in the ability of CEC to deliver projects [Mr Howell [PHT00000011](#), page 7; Mr Macaulay [TR100000053_C](#), page 0006 paragraph 10; [PHT00000016](#), page 68; Mr Renilson [PHT00000039](#), pages 182–183]. It is not clear, however, why it was thought that giving CEC less control rather than identifying and addressing problems would make the situation better. If the problems were thought to have been inherent in CEC, leaving it ultimately in charge would simply leave the problems in place.
- It was required for the parliamentary process, to get the Bills through [Mr Macaulay [TR100000053_C](#), page 0007 paragraph 12]. This is not borne out by other evidence.
- It was a condition of the grant from the Scottish Executive or the Scottish Government [Mr Howell [TR1000000129](#), page 0009, paragraph 26]. No such condition was imposed.
- It made it possible to recruit staff with the necessary abilities [Mr Macaulay [PHT00000016](#), page 69]. This includes a need to be free from the salary constraints that were applicable to local authorities [Mr Howell [TR1000000129](#), page 0009, paragraph 25]. Like any other Scottish local authority, CEC did not, as a matter of routine, employ people with the skill sets necessary to deliver such a project because there would be simply no need to have them on the payroll all the time. While having the company did provide a recruitment vehicle and mean that higher salaries could be paid, both the procurement of the necessary skills and the issue of salaries could be met by using external consultants. This is demonstrated by what was done after the Mar Hall mediation. Obtaining the appropriate experience does not therefore necessitate loss of control. In addition, merely having a company did not solve recruitment difficulties. Mr Gallagher noted that there was international competition for people with the appropriate skills, which made recruitment difficult [[TR100000037_C](#), page 0010, paragraph 33].
- It meant that the body carrying out delivery was able to be entrepreneurial [[libid](#), page 0054, paragraph 180]. The success of the property companies established by CEC shows that this can be true. It is not clear, however, in what way **tie** was expected to be entrepreneurial or in what way it is thought that it displayed such attributes. This does not appear to have been articulated at the time that **tie** was established, and there was therefore no consideration of whether it was a factor that should outweigh the loss of control by CEC. It prevented the governance of the project from getting lost in the governance of a large public authority [[libid](#)]. Larger projects than this can be – and are – delivered by large public authorities. The project management models considered above have been developed in part to address this and are intended to provide means, when they are followed, of preventing governance processes from getting lost. In fact, as noted above, **tie** did not provide focus to the Tram project and a number of elaborate governance structures were put in place over time.

22.302 In my view, none of the witnesses to the Inquiry was able to give a justification for the decision to use an arm's-length company to undertake the project.

- 22.303** At the time that the decision was made to establish **tie**, it was intended that there would be a number of projects falling under the umbrella of the New Transport Initiative. The intention was that there should be major investment in transport schemes that would be funded in part from congestion charging revenue [[USB00000228](#)]. Apart from developing transport projects identified by CEC, **tie** would also generate ideas and projects of its own. This could have been relevant to the argument that an arm's-length company would be entrepreneurial. However, even the broad policy objectives that were to be pursued at the outset could be seen as a reason to keep a structure that retained control where it would ultimately be required – with CEC. The determination of such broad policy issues was precisely the sort of area in which the input of the councillors would be required for decisions. It was perhaps in recognition of this that although an arm's-length company was proposed, it was always clear that strategic direction and key policy decisions would remain with CEC.
- 22.304** It is not clear to what extent the possibility that there would be a road charging scheme was relevant to the decision. CEC had made it clear that the arm's-length company should be used irrespective of whether road charging went ahead [[ibid](#), page 0024]. On the other hand, Mr Macaulay said that the existence of a potential revenue stream from congestion charging was "pretty fundamental" to the creation of **tie** [[PHT00000016](#), page 75]. It is easy to see why a company that holds the revenue of any scheme separately from general CEC funds is attractive. This is more a matter of ring fencing the money and was one of the matters referred to in the Council Report concerning the New Transport Initiative dated 18 October 2001 [[USB00000228](#)]. However, once the intention to have a road charging scheme was dropped after the local referendum in February 2005, this possible justification lost any force. From at least that time on, **tie** was not going to be in a position akin to CEC's leisure or property companies. There would be no income or profit to be set against the need for public funds to provide the facilities. It was never the intention that the construction costs for the Tram project could be paid out of fare box revenue. The position was that **tie** was simply a conduit through which CEC funds would be expended. Although it is not clear that this justification was actually one that influenced the original decision, I consider that, even if it had been, when the charging scheme was dropped it would have been appropriate to reconsider whether this was the most suitable delivery vehicle. It would have been appropriate that consideration was given to whether there continued to be a role for **tie** or whether the Tram project should, instead, be delivered by an experienced engineering consultancy organisation, with an established track record of delivering major transport infrastructure projects. Instead, what happened was that **tie** was given increased funds and grew in size, morphing into a project management organisation (or quasi-project management organisation) [Mr Macaulay [PHT00000016](#), pages 60–66].
- 22.305** Ultimately, the reasons for choosing an arm's-length company were not well articulated. I find this surprising, as it would be natural to expect that something as fundamental as the delivery model would be the subject of detailed consideration. Even after Mar Hall, there does not appear to have been much contemplation of the issue. The change at that late stage appears to have come about because CEC had lost confidence in **tie** and BSC did not want it to be part of the contract rather than because a fundamental re-consideration of the most effective way to deliver the works was required.

- 22.306** I have noted above that the whole of the burden of contractual liabilities remained on CEC despite the creation of **tie**, but there are further financial consequences that should be considered. A structure in which a wholly owned company was the delivery vehicle meant that CEC bore the entire risk of that company providing services of a poor quality. Had a third party independent of CEC been instructed, there would normally be a remedy in damages if it failed to provide services of the quality contracted for or if it was negligent in the performance of the services. Prior to contracting it would be possible to assess the financial strength of the service provider to meet any claim arising in such a situation or, as is more common in professional services, to obtain details of the insurance cover maintained by the service provider in respect of such claims. By these means the risks of poor quality of service are passed to the service provider as the person with control over this. Although the operating agreements with TEL and **tie** referred to insurance, it was to be maintained only if available at "commercially reasonable rates" [[CEC02083448](#), pages 0015–0016, paragraphs 2.12–2.13].
- 22.307** As noted in paragraph 2.49 (d), CEC has raised court proceedings against a number of people, including **tie**. The action against **tie** will not result in the direct recovery of damages from **tie**, as **tie** has no assets and was not insured against claims by CEC. In a report dated 17 December 2007, prepared by the Director of Finance and the Director of City Development for consideration by CEC at its meeting on 20 December, one of the risks identified as being retained by CEC was that the market could not "provide Professional Indemnity Insurance to **tie** vis-à-vis a claim by the Council against **tie**, because **tie** is wholly owned by the Council" [[ibid](#), page 0007, paragraph 8.13]. By contracting in this way, CEC put itself in a position in which it had a very large financial interest in the quality of the service provided by **tie** but had no real control over that quality and no recourse if it suffered loss as a result of poor service.
- 22.308** Further, had the services been provided by an external body or consultancy, it would have been possible to examine the past performance of the party being considered for appointment. It would be possible to find a business that had experience of similar projects or employed staff that had such experience. Instead, using a newly created company meant that there was no existing staff and no history of successful project delivery. I do not think that it is just with the benefit of hindsight that it can be said that there is a clear advantage when delivering a project such as this to look to a body with established capability rather than hoping that the body that is to be formed will acquire that capability. As implementation of the project reached the construction phase, there was increasing cause to call into question the ability of **tie** to deliver what was required. As was considered in Chapter 3 on the involvement of Scottish Ministers, the Stirling–Alloa–Kincardine ("SAK") railway project managed by **tie** was not a success. To respond to that by leaving the Tram project with **tie** and ending the involvement of Transport Scotland cannot be justified. Even if the matter had not occurred to CEC earlier, the disengagement of **tie** from the SAK rail project should have set alarm bells ringing.

22.309 Since the Inquiry hearings, in May 2018 Audit Scotland published a report entitled 'Councils' use of arm's-length organisations' [TR100000306] following on from its 2011 publication 'Arm's-length external organisations (ALEOs): are you getting it right?' [TR100000311]. These documents use the term "arm's-length external organisations" ("ALEOs") rather than "arm's-length companies" because they cover other entities. The latest report notes that councils value ALEOs. It does, however, note a number of areas of concern that resonate with the experience in the project.

In particular:

- councils must have clear reasons for using ALEOs and must consider alternatives;
- oversight accountability and good management are essential;
- councils should consider at the outset the risks involved in using ALEOs;
- there is a need to demonstrate more clearly how use of ALEOs improves outcomes;
- there are risks of conflicts of interest where councillors or council officials take board positions. There can also be difficulties where board members are privy to information that they are unable to share.
- there should be clear reasons for appointing councillors and officials to ALEO boards. This should recognise the responsibilities and requirements of the role.

22.310 The Audit Scotland report considers ALEOs across a wide range of provision of services that are very different from the implementation of a transport project. Many, such as provision of leisure services, cultural services, and property and development, involve generation of revenue, although three councils use them for social care. It notes that financial benefits to the use of ALEOs have arisen from rules on non-domestic rates relief and VAT. These factors are not relevant to a project such as the project, which was a one-off project entailing expenditure in excess of £540 million and which would not generate any revenue while the work was being carried out. Nothing in the Audit Scotland report causes me to doubt the view that I have taken as to the inappropriateness of using **tie** or TEL as arm's-length organisations to deliver the project.

Conclusions

22.311 The governance structures put in place for the Tram project were bureaucratic and ineffective. The approach contained in applicable guidance was put to one side. There was no clearly articulated rationale for this, and it appears that the intent was simply to include as many people and bodies as possible rather than having something that would provide what was required. There was not only a move from individual to collective responsibility, but a duplication of layers of collective responsibility. A key aspect of effective governance is that it should be clear where responsibilities lie, but this was not the case with this project. The remit of the bodies was often written in unclear language. The role of CEC was not well defined, and procedures were not in place to ensure the adequate communication of information and consideration of it once it was communicated. On almost every level, the governance structures were inadequate.

22.312 Where does responsibility for this mess lie? It is easy to focus on certain individuals. Mr Renilson accepted an appointment as SRO, but did not discharge any of the responsibilities that came with it. Mr Bissett was the author of the many papers that led to the various inadequate structures. It might be expected that he ought to have realised that what he proposed would not provide the required clarity and focus. It

would be a mistake, however, to attach responsibility solely to these individuals. As I noted in paragraph 22.54 above, the fact that Mr Renilson was not performing the duties of SRO ought to have been apparent to all the members of the TPB and the Boards of **tie** and TEL. The structures devised by Mr Bissett were approved by the boards of both companies and the TPB. The shortcomings in what was proposed should have been clear to everyone on those boards. When the stage was reached that the Boards of TEL or **tie** were not sitting, the duties of the directors required them to raise the matter and seek to remedy it.

22.313 Above all, CEC was in charge and approved the structures. It had direct responsibility for determination of its residual role and putting in place mechanisms to ensure that that role could be performed effectively in the public interest. In relation to the entities created to implement the project, it ought to have been apparent to CEC officials, at least, that the effect of the various proposals from 2007 onwards was to divert power, responsibility and accountability away from the company with which CEC had contracted for delivery: **tie**. The introduction of these structures is another example of something that was subject to multiple approvals, but at no stage was it scrutinised with sufficient care. The impression is created that, in giving approval, reliance was placed on the fact that it had been approved already by another entity or that it was known that it would be approved elsewhere.

Chapter 23

OGC and Audit Scotland

Introduction

23.1 During the Edinburgh Tram project (the "Tram project"), independent reviews of it were undertaken in accordance with guidance issued by the Office of Government Commerce ("OGC") and by the Auditor General for Scotland. While the reviews are referred to in the earlier chapters of the Report, I consider it useful to draw the various considerations together here. These did not identify the problems that came to affect the project and it is useful to consider why this was the case and if anything could or should be done differently in future. The fact that these reviews – in particular that of the Auditor General – had been carried out was a factor relied upon by CEC and **tie** to indicate that the project was in good health.

OGC

23.2 The OGC was part of HM Treasury. In 2003 the OGC published a series of guidance notes on best practice in the procurement and delivery of construction projects, which were re-issued, in substantially the same terms, in 2007 [the background to the guidance is set out in 'Procurement Guide 01, Initiative into action' – [GOV00000020](#)]. The guidance was produced after extensive consultation within government and with contributions from leading individuals and organisations across the construction industry, and it was endorsed by the National Audit Office. It was taken into account by the Scottish Government when formulating its guidance (contained in its Construction Procurement Manual) and was relevant to the procurement of construction projects in Scotland.

The gateway review process – Introduction

23.3 One of the OGC guidance notes related to project organisation, roles and responsibilities. [The 2003 note is [CEC02084819](#); the 2007 note is [GOV00000003](#).] The elements that address structures relating to governance were considered in Chapter 22 (Governance) of this Report. In addition, however, the guidance set out certain principles that required to be put in place by the client organisation and which were stated to be critical factors for success. These included that:

- everyone involved in a project should work together as an integrated team (i.e. the client, designers, constructors and specialist suppliers), with effective communication and co-ordination across the whole team;
- there should be clear roles and responsibilities, which should be defined and understood and should be supported by an uncomplicated project management structure; and
- the procurement route for the project should support and facilitate integrated team working [[CEC02084819](#), pages 0004–0005].

23.4 In addition, guidance was provided on procurement strategies and the need for projects to undergo a gateway review process, whereby they would be subject to independent reviews at certain critical stages in the procurement process, before proceeding to the next stage. The gateway review procedure was set out in OGC guidance note 2, 'Project procurement lifecycle'. [The 2003 guidance is [GOV00000018](#); the 2007 guidance is [CEC02084815](#).] The various gateway reviews

were shown in a diagram in the guidance note [[GOV00000018](#); [CECo2084815](#), pages 0006–0007]. The diagrams in the guidance dated 2003 and 2007 were not materially different. At the time, five gateway reviews were identified and each was tied to a key decision required in relation to the project.

- 23.5** Gateway reviews were conducted in the Tram project. Reviews had originally been required by Transport Scotland but they were continued even after the changes made in the summer of 2007. They took place over a relatively short period of time (usually a few days) and were based largely on interviews, rather than on a detailed consideration of documents. A report was produced immediately after each review, which was intended to provide a high-level, or strategic, summary of the state of the project and its readiness to proceed to the next stage in the procurement process.
- 23.6** Mr Heath, who was a member of the review team for the project in 2006, gave evidence that the OGC team conducted short, high-level reviews that identified areas of action. He stated that the reviews of the project were not, and were not intended to be, akin to a quasi-audit. In the time available, the review team was not able to verify the accuracy of the information provided to it and required to assume its accuracy. In addition, because of the variable frequency of the reviews of the project, members of the review team were often looking at situations long after they had delivered their previous report [[TRl00000044](#), pages 0013, 0016 and 0034; [PHT00000009](#), page 65].

May 2006 review

- 23.7** Between 22 and 25 May 2006, an independent “readiness review” of the project was carried out by a team led by Mr Hutchinson. The people making up the team had considerable experience of the delivery of transport infrastructure. A report was issued to Mr Howell, Chief Executive of **tie**, on 25 May 2006 [[CECo1793454](#)]. The terms of reference, reproduced in Appendix A to the report, noted that the purpose of the review was to provide an independent assessment of various matters, including the extent to which the project satisfied criteria similar to those that would be assessed as part of an OGC gateway 2 review. As noted in the report, no OGC gateway reviews had previously been undertaken and the stage of the project at the time of the review and the decisions that had to be made were not the same as in the OGC guidance. The terms of reference also envisaged that the review would be high-level and strategic, and would rely principally on interviews with members of the **tie** project team, advisers, contractors and representatives of CEC, Transport Scotland and Transport Edinburgh Limited (“TEL”) [[ibid](#), pages 0002, 0010–0011]. Although a number of documents were made available to the review team, they were not all comprehensively reviewed [[ibid](#), page 0003].
- 23.8** The report of the review assessed the overall status of the project as being “red” (i.e. to achieve success, the project should take action immediately) [[ibid](#), page 0004]. It included the following conclusions:
- the procurement and contractual strategy should be reviewed in the light of market feedback;
 - the Vehicles Invitation to Tender Notice was not yet sufficiently developed to be released to bidders, and the project team (including Transdev Edinburgh Tram Limited and advisers) were not yet ready to manage the processes that would follow from release of that notice and which lead-up to the release of the Infraco ITN [Invitation to Negotiate];

- the programmes to deliver the project, including Infraco ITN documentation, the TEL business plan and the draft Tram Final Business Case ("FBC") were not fully developed; and
- the project would not currently satisfy the criteria that would be assessed as part of an OGC gateway 2 review [[ibid](#), page 0003].

23.9 The findings and recommendations section of the report noted that the procurement model should be reviewed because of concerns that potential Infraco contract bidders might not want to take on designers or might charge a premium for full novation of the System Design Services contract ("SDS contract") [[ibid](#), page 0004]. It also noted that the governance structure for the project appeared complicated compared with best practice. It was recommended that a project board be set up as a matter of urgency and that there should be clarity as to the identity of the senior responsible owner ("SRO") for the project [[ibid](#), pages 0006–0007]. The report also recommended that the operation of **tie** and its board should be reviewed to ensure that it remained fit for purpose as a high-quality delivery organisation and that the availability of permanent members of **tie** staff with engineering, transport planning and commercial skills should also be reviewed. The review team was surprised at the number of occasions on which there were inconsistent messages from interviewees, giving rise to concern that this was evidence of impaired communications within the team and its advisers [[ibid](#), page 0007].

23.10 In relation to risk management, while the main risks were regularly reported to senior management and board members, the review team found no obvious evidence of that being acted upon. The report recommended that the project director review the process for acting upon and mitigating risks to ensure successful delivery of the project [[ibid](#), page 0008]. The report also noted that a number of activities had taken longer than expected, necessitating a series of revisions to the project programme, and it recommended that a revised programme should be developed and approved by all stakeholders [[ibid](#), pages 0008–0009]. In relation to affordability and funding, there was no agreed common understanding as to the expected out-turn costs of the project and the consequent balance between scope and affordability [[ibid](#), page 0009].

23.11 Andrew Harper was interim Tram Project Director ("TPD") at the time of the review. He gave evidence to the Inquiry that he was responsible for implementing the recommendations of the review and that he addressed all its recommendations such that, by the time of the next review in September 2006, all the recommendations had been implemented to the satisfaction of the review team [[TR10000043_C](#), page 0033, paragraphs 122–123].

September 2006 review

23.12 In September 2006, a further readiness review was undertaken, although on this occasion the Chief Executive of Transport Scotland instructed it. Again, the criteria to be applied were those for an OGC gateway 2 review. Interviews were conducted by the review team on 26 and 27 September, and a report was produced on 28 September 2006 [[CECo1629382](#)].

23.13 The overall status of the project was assessed as being "amber" (i.e. the project should move forward, with actions on recommendations to be carried out before the next review of the project) [[ibid](#), page 0004]. The report concluded that:

- there had been a considerable transformation in the organisation, attitude and effectiveness of the **tie** team since the previous review, with a common

understanding of the requirements of the procurement process and the challenges faced;

- while communications and joint working between TEL, **tie** and Transport Scotland had significantly improved, there was still room for improvement in respect of communications in some areas between CEC and Transport Scotland;
- there was a challenging timetable for the submission of the draft FBC to CEC for approval on 21 December 2006;
- the period until February 2007 was a critical period for the project, with key deliverables being due (including completion of project estimates, issue of Infraco contract ITN and completion of the draft FBC);
- a detailed tender and negotiation process for both the tram vehicle supply and maintenance contract ("Tramco contract") and Infraco contract tenders was required; and
- there was no compelling reason not to issue phase 1 of the Infraco contract ITN documentation on the planned date of 3 October 2006 [*ibid*, pages 0003–0004].

23.14 The findings and recommendation section of the report noted that the various recommendations arising from the previous review had been either achieved or partially achieved. It noted that a Tram Project Board ("TPB") had been set up and was meeting regularly and that Mr Renilson had been identified and recognised as the SRO for the project. While a review of the skills of permanent **tie** staff had been undertaken, and some key permanent appointments had been made, the review team considered that further work was still required to reinforce permanent staff in individual project teams, particularly those with design engineering skills [*ibid*, pages 0004–0006].

23.15 In relation to the procurement strategy, the review identified that the key risks remained the proposed multiple novations of the SDS contract and the Tramco contract to the Infraco contractor. While the Infraco bidders had agreed to tender on the proposed basis, the inherent pricing risk would not be known until the tender returns were received. All the Infraco bidders had expressed a desire to change the responsibilities for some aspects of the detailed design, and the Review noted that it was vital that any concerns from the Infraco bidders were fully considered and acted upon during the bid period in order to maximise the probability of success of the procurement strategy. It concluded that procurement plan appeared "tight but deliverable" [*ibid*, pages 0006–0008].

23.16 A follow-up to the September 2006 review took place on 21 and 22 November 2006, and a report was issued to Transport Scotland [[CEC01791014](#)]. The review concluded that:

- all the recommendations from the recent gateway 2 review had been fully or substantially achieved;
- the improvements in communications and joint working previously noted had continued;
- the **tie** project director would leave towards the end of December 2006; concern was expressed at the loss of continuity and possible loss of momentum during the critical early months of 2007, and a prompt replacement was essential;
- there remained a challenging timetable for the submission of the draft FBC to CEC and Transport Scotland for approval on 21 December 2006;

- the period until the end of March 2007 remained critical for the project;
- the levels of experienced negotiating resource within **tie** should be reviewed with a view to maximising the chances of the “ambitious” timetable for selection of the preferred bidders and appointment of the Infraco and Tramco contractors to be met; and
- although the review team understood that the design contractor was being better managed, it considered that the SDS contract would require active management by **tie** [*ibid.*, page 0003].

23.17 The findings and recommendations section of the report noted that a number of interviewees had expressed concern that SDS performance to date could undermine bidder confidence. The review team understood that **tie** was now managing SDS contract performance actively and effectively, but it considered that additional engagement and engineering leadership could prove beneficial [*ibid.*, page 0005].

September/October 2007 review

23.18 An OGC gateway 3 review of the project took place on 25 September and 1–4 October 2007, this time on the instructions of the Chief Executive of CEC (reflecting the withdrawal of Transport Scotland from the project in the summer of 2007), and a report was produced on 9 October 2007 (erroneously dated 9 October 2006) [[CEC01562064](#)]. Again, the review was based largely on interviews rather than detailed consideration of documentation. The overall status of the project was assessed as being “green” (i.e. the project was on target to succeed, provided that the recommendations were acted upon) [*ibid.*, page 0003]. The review team concluded that:

- the project was continuing to make good progress and **tie** had conducted a robust competitive procurement in a difficult market within the agreed procurement strategy;
- there had been a number of changes in the senior management team (including that of project director) and **tie** had successfully managed these changes. Some further changes would be necessary going forward; and
- the project faced a challenging period over the next three months, with the requirement to appoint a preferred bidder, for due diligence and contract novation to be finalised and formal funding support to be evidenced. All these matters were to be achieved alongside the Multi-Utilities Diversion Framework Agreement (“MUDFA”) and mobilisation works and the maintenance of a tight programme of planning and technical approvals [*ibid.*].

23.19 The findings and recommendations section of the report noted that both Infraco bidders had stated that they would prefer an early appointment of the preferred bidder, in order to optimise the time available for the due diligence and final negotiation processes, particularly as there had already been a delay from the dates notified to bidders at the time of submission of best and final offers. Both Infraco bidders and the Tramco bidder noted the unusual process in respect of novation, but all stated that they had become comfortable with it. While the review team had not studied the agreements in detail, it had been assured that there was a process in place to ensure that there were no mismatches in obligations between the Infraco contract and the two contracts that would be novated to the Infraco contractor. It noted that the partner from DLA Piper Scotland LLP (“DLA”), who had led the legal advice to **tie** to date, would be seconded to **tie** full time, to ensure that the suite of contracts was fully aligned. The timeliness of project delivery was noted to be

of concern. Both Infraco bidders had raised a concern that the planned preferred bidder period, which would include due diligence on the designs and the novated contracts, was tight. There was already a requirement for an overlap between the due diligence process and the mobilisation phase. The review team had seen a draft of the Infraco preferred bidder agreement, which included a list of activities and agreements that required to be finalised during the preferred bidder period and the areas of uncertainty of scope and price that required to be finalised. It believed that it would be very challenging to finalise these matters by the target date, at the level of quality expected, and it recommended that the preferred bidder be appointed as soon as possible, with the programme during the preferred bidder period being closely monitored at a senior level. The team also recommended that **tie** should actively consider:

(i) the levels of certainty required to meet the CEC approval process, and how that would be achieved;

(ii) the implications of contract signature not being achieved by the target date of 28 January 2008; and

(iii) the necessary consequences of any areas that could not be finalised by contract signature and novation, and how (and when) full certainty would be established [[ibid](#), pages 0004–0005].

- 23.20** The review noted the understanding that there was significant contingency within the current costings and that the project team expected that the current budget would be more than adequate for phase 1a and for the majority of phase 1b (albeit that it would not be possible to determine that precisely until the Infraco contract price was finalised). It recommended that the process of managing funding and contingencies should be agreed between **tie** and CEC and regularly reported [[ibid](#), page 0005]. Continuity of resource was considered important to ensure that the “corporate memory” was retained from the negotiating phase into the implementation phase [[ibid](#), page 0006].
- 23.21** The Review recorded a number of key changes within the overall delivery strategy, including the reduction of the role of the Technical Support Services (“TSS”) contractor as design checkers and an increase in the responsibilities of **tie** in that area (including the introduction of the **tie** engineering department) and the co-location of CEC planning officials and **tie** employees to expedite the planning approval process. Following the withdrawal of Transport Scotland from the project, the report noted that there had been a major change to its governance, resulting in a more focused strategy whereby CEC had sole responsibility for the procurement and the risk of any cost overruns. The review team considered that all these changes had been extremely positive and would contribute to the likelihood of the project’s succeeding [[ibid](#)]. I would note that, as was considered in Chapter 3 relating to the involvement of the Scottish Ministers, in fact the withdrawal of Transport Scotland from the project did not result in any change to CEC’s responsibility for cost overruns. The mistaken belief to the contrary in the report is understandable, however, when one recalls that it was based upon interviews rather than a detailed examination of the relevant documentation.
- 23.22** The Review does not state the basis on which it was thought that the change away from using TSS and the reduction in the role of Transport Scotland would contribute to the success of the project. In relation to the withdrawal of Transport Scotland from the project, in his oral evidence to the Inquiry Mr Heath stated that the review team was of the view that there were risks in having a project reporting to two different bodies, with two potentially diverging sets of objectives. It considered that these

risks could be removed by having Transport Scotland behaving simply as a funder, overseeing its investment, and using an independent assessor to confirm milestones for payment. Mr Heath accepted, however, that, whatever changes took place to the governance arrangements, it was self-evident that one would not wish to lose the experience and expertise of Transport Scotland in the project, particularly as CEC did not have such expertise or experience itself, and that the experience and expertise of Transport Scotland required to be fed into the project somehow (while also taking account of the need to ensure that the roles and responsibilities of each party were clearly identified) [[PHT00000009](#), pages 61–67].

Risk review in October 2007

23.23 As was discussed in Chapter 13 (CEC: Events during 2006 and 2007) the team that undertook the OGC 3 gateway review in September/October 2007 was also asked by CEC to undertake a review of the risks arising to CEC from the project. Such a review was carried out between 10 and 12 October 2007, and a report was provided to the Chief Executive of CEC on 15 October 2007 [[CEC01496784](#)]. Its terms of reference, which were set out in an appendix, required the review team to identify, assess and quantify the risks that remained with the public sector, all with reference to a risk allocation matrix prepared by **tie**/DLA. In his evidence to the Inquiry Mr Heath explained that the review team would not have had time to review the terms of the lengthy contracts and their schedules and that as, in any event, the members of the review team were not lawyers, it would not have been good value to the client for them to have reviewed the contracts [[PHT00000009](#), page 74]. The review team was also asked to provide a reasoned explanation of the adequacy or otherwise of the available financial headroom in the project [[CEC01496784](#), pages 0014–0015].

23.24 The review team reached the following conclusions on what risks remained with the public sector:

- the out-turn price and delivery programme of MUDFA works
- the design and approvals processes delayed the programme
- financial close was delayed and had knock-on effects on the approvals and programme
- the novation process was not fully effective
- changes of scope
- delivering land packages to programme
- third-party delays
- ground conditions
- systems integration was not fully effective
- delayed and/or qualified acceptance
- project management skills and costs [[ibid](#), page 0003]

23.25 The review team endorsed the assessment of the value of public-sector risk on the capital expenditure programme at £49 million at a 90 per cent confidence level. Its best estimate of the schedule risk was currently 21 days, also at a 90 per cent confidence level, which equated to a capital expenditure risk of £2.2 million in the context of the proposed contracts. The team also concluded that the overall headroom of £49 million in the capital expenditure was a prudent provision at that stage of the project's development [[ibid](#), pages 0003–0004]. The review did,

however, note that this was a "snapshot" taken at a particular moment in time and would have to be the subject of regular review [ibid, pages 0012–0013]. It was also an assessment of risk carried out on the assumption derived from **tie** that, of the project costs, £320 million was fixed or certain through being spent already or subject to agreed prices. Regard was also had to the extent to which the available funding of £545 million exceeded the estimated costs of £498 million in concluding that this was extremely advantageous compared with those of other tram projects and that CEC could "take comfort" from it [ibid, page 12]. These apparently confident statements must be viewed in light of the evidence from Mr Heath about them. He explained, for example, that in endorsing **tie**'s assessment of public-sector risk, the review team was merely stating that it was satisfied that correct procedures and processes had been followed by **tie** in arriving at that figure. It was not in a position to confirm that the figures were correct or sufficient. Significantly, the review team was proceeding on the important assumption that the Infraco contract was for a fixed sum. If it had been told that the sum was not entirely fixed, it would have wished to understand the extent to which the price was not fixed [PHT00000009, pages 75 and 77–80; TRl00000044, page 0018].

- 23.26** The findings and recommendations section of the report noted that the **tie** risk management process was well developed and reflected best practice, that a mature risk register was in place together with excellent risk capture and management processes and that advanced quantitative risk analysis of capital cost estimates was routinely produced and incorporated into project estimates [CECo1496784, page 0004].
- 23.27** Mr Heath considered that the two critical factors in the project were the control of the utilities diversions and the ability to deliver and novate design successfully, and that each of the review team's reports had gradually "ramped up" the warnings about the need to keep an eye on these matters [PHT00000009, page 82]. As is apparent from the following paragraphs, these two issues were interrelated.
- 23.28** In relation to the utilities diversion works, it was noted that delays in the MUDFA works could introduce consequent delays to the Infraco works. There appeared to be a strong **tie** team managing these works, with the result that the review team considered the main risk to be delays or changes to design resulting in MUDFA works starting late. The review team considered that the amount in the risk allowance for MUDFA risks appeared adequate at that stage, and it recommended that there should be considerable focus on the design preparation and design approval mechanism to ensure that the MUDFA works were commenced on time and did not require to be revisited. In addition, the emphasis on strong contract management required to continue [CECo1496784, page 0005]. In his evidence to the Inquiry Mr Heath stated that he did not think that the review team had been told that the MUDFA programme had been revised to extend the completion date for these works from May/June 2008 to November 2008 (which was shortly before the planned commencement of the Infraco works at the beginning of 2009). Had the team been aware of that, and had some of the delayed works been on the critical path of the Infraco works, the team would have taken a different view in its report [PHT00000009, pages 69–70].
- 23.29** Generally, Mr Heath stated that the review was based on the facts and information provided to the review team at the time. Therefore, if the facts or information were to change then it would need to reconsider its views on the adequacy or otherwise of the risk allowance in light of the changed circumstances [ibid, page 88].

- 23.30** This provides an illustration of the limitations inherent in OGC reviews. In the limited time available to a review team it is unreasonable to expect it to undertake detailed investigations amounting to an audit, and it is dependent upon the provision of accurate information for the compilation of its report. The Gateway assessment should be seen as a valuable check that is of assistance to the project management team to assist them in providing fresh eyes to consider the position. While it might be suggested that the body that is the subject of such a review need only answer questions raised by the review team, it respectfully seems to me that this undermines the purpose of the Review. Information about changes to the programme resulting in delay to work that could impact on the commencement and/or progress of the Infraco contract works should have been volunteered, together with details of the plan to address such delay. That would have enabled the review team to comment on the effect of delay and the adequacy of the remedial measures, and to require an update of the position at subsequent reviews.
- 23.31** In my view, a duty of disclosure should apply to all publicly funded projects that are subject to independent review, whether they are being undertaken by a public body directly or indirectly, otherwise the objective of protecting the public purse will be frustrated. The fact that the project was being delivered by **tie**, on behalf of CEC, rather than by CEC itself does not excuse the failure to disclose material facts to the OGC review team. I return to consider shortcomings in the information provided below.
- 23.32** In relation to the infrastructure works, the report noted that the Infraco contract was the immediate focus of the project, and considered that it was at risk of the possibility of delay in confirming a preferred bidder and of "cost creep" between the award of the preferred bidder and final contract signature. That risk had been exacerbated by the delays in design. It noted that while a value engineering programme was ongoing, that programme had yet to be finalised, thereby impacting on the certainty of the final costs. Based upon an assurance from the **tie** commercial team that 70 per cent of both of the Infraco contract bidders' costs were fixed, the review team recorded that £150 million of the Infraco contract costs were fixed. It noted however, a number of risks that could affect the Infraco contract. These included changes in scope and the elements such as planning or MUDFA which were not the responsibility of the Infraco contractor. The introduction of a "no change" culture was essential in view of the review team's experience that major projects became destabilised if there was no rigid change mechanism. The link between design/approval and Infraco contract was critical and would need serious attention. The review team recommended that the forthcoming **tie** organisational changes place programme management at the centre of the project. It was clear that the amount of design that it was envisaged would be delivered to support novation of the SDS contract to the Infraco contractor would not be achieved, and the review team recommended that **tie** and CEC agree a package of work to deliver design work to support novation and to minimise risk [[CEC01496784](#), page 0009, paragraph 3.5.4].
- 23.33** As was discussed in Chapter 13 (CEC: Events during 2006 and 2007), CEC had originally intended to instruct Turner & Townsend to undertake a review of the risks arising from the project and the adequacy of the risk allowance, but **tie** had dissuaded it from doing so. Instead, this OGC review on risk was commissioned. Mr Heath gave evidence that such a review by Turner & Townsend might well have been a good idea, as it would probably have gone into much more detail than the OGC review and might have acted as some sort of audit on the numbers, which the OGC team was not able to do. In that sense, he considered that a review by such

a company would probably have been beneficial (albeit that one would have had to have had regard to how long it would have taken and whether it would have imported the risk of delay) [PHT00000009, page 93].

- 23.34** Having regard to the respective dates of the risk review in October 2007 and of contract close in May 2008, I consider that it would have been possible to require Turner & Townsend to report on its findings before contract close. Even if there was delay occasioned by a risk review by Turner & Townsend, that delay would have arisen because of issues discovered by it which had to be resolved before contract close. CEC would have been better informed of the need to resolve these issues before concluding the Infraco contract and the likely consequences of failure to do so.
- 23.35** In the event, no further reviews were instructed between the OGC team's reviews in September/October 2007 and financial close in May 2008. It was suggested to Mr Heath by Inquiry Counsel that it was only once a contract was agreed that the rights, duties and liabilities of parties, and the allocation of risk, became clear, with the result that there should be a final review once the terms of the contract were agreed, but before the contract was signed. Mr Heath considered that that was a sensible suggestion that, with the benefit of hindsight, might well have proved useful in the case of the Tram project [ibid, page 72]. Although Mr Heath referred to the benefit of hindsight, it is clear that Transport Scotland would have instructed a review of the draft contract before signature had Scottish Ministers not instructed it to withdraw from active participation in the governance of the project. As was discussed in Chapter 13 (CEC: Events during 2006 and 2007), such a review is likely to have identified the problems with the contract that ultimately emerged, as well as the fact that the contract price was not fixed and the associated risk of price increases.

Conclusions on the OGC reviews carried out before financial close

- 23.36** In his evidence to the Inquiry, Mr Heath stated that the views of the OGC team were highly dependent on the information provided by others (e.g. **tie**). He accepted that the risk review was, of necessity, at a very high level, given the short timeframe. The OGC reviews of the project were each carried out over a few days, were largely based on interviews and involved limited consideration of documents. By their very nature, they were intended to be reasonably quick and high-level reviews that gave correspondingly high-level, or strategic, advice on the state of the project at that time, highlighting any particular issues to be addressed. While it is apparent that this approach is necessary in the context of a review which must be carried out quickly, it does not seem that it was a point that was generally understood. The consequence of that is that the reviews were relied on as having determined matters when in fact they had not. Although an important and necessary independent check on a project, such reviews were not intended, by themselves, to provide the client with sufficient independent assurance about the state of a project. Three matters arise from this. The first is that in addition to OGC reviews, there was a need for a client to obtain independent advice and assurance from specialist advisers from time to time. This was recognised in the OGC guidance discussed in paragraph 23.3 above in relation to project organisation, roles and responsibilities in a construction project. I also note, in that regard, the practice of Transport Scotland at the time. The second is that it is necessary that there is full disclosure of information to the team carrying out the review and some means of ensuring or compelling this. The third is that it is not reasonable to rely on the review as having given the project or any aspect of it a seal of approval. That is not the function of the review.

- 23.37** As was discussed in Chapter 13 (CEC: Events during 2006 and 2007), I consider that, as well as ensuring that the project underwent OGC gateway reviews, CEC ought also to have obtained independent legal advice on the risks to it arising from the Infraco contract (and that such advice ought to have been obtained after the terms of the contract were finalised but before the contract was entered into). Clearly, such a review could have been undertaken only by suitably experienced legal experts and was not within the scope of an OGC gateway review or the expertise of the review team.
- 23.38** In addition, and as was discussed in Chapter 13 (CEC: Events during 2006 and 2007), I consider that, before authorising the award of the Infraco contract, CEC ought also to have instructed a suitably experienced firm of multi-disciplinary engineering, transport and project management consultants to undertake a detailed review of the state of the project, the risks to CEC, the quantification of these risks and whether the proposed risk allowance was adequate. Such a review was in accordance with the OGC guidance noted above and was necessary to enable CEC to obtain suitable independent assurance of the risks to which it would be exposed if the contract was signed.

OGC reviews after financial close

- 23.39** **tie** asked the OGC review team to undertake a number of independent peer reviews of the project after financial close, in order to provide assurance in advance of the critical milestones in the Project Delivery Phase. These reviews are considered in the paragraphs that follow.

July 2008

- 23.40** The first of these reviews was carried out on 1 and 2 July 2008, with a report being issued to **tie**'s TPD on 2 July 2008 [CEC01327777]. The report noted that the recommendations from the gateway and risk reviews carried out in September/October 2007 had been implemented [*ibid.*, page 0002]. It recorded that the MUDFA works were continuing and were about 60 per cent complete, the Infraco contract was a bespoke contract tailored specifically for the project, the programme had been delayed due to the lengthy contract negotiations and the project faced a challenging period over the next three months, given the need to mobilise the Infraco contractor's supply chain properly [*ibid.*, page 0003]. It noted that the uncertainty surrounding the completion date for the MUDFA works would have an increasing impact on the Infraco contract works, and the review team recommended that the remaining such works be prioritised in order to minimise the impact on the Infraco contract programme [*ibid.*, page 0006]. In his oral evidence to the Inquiry, Mr Heath stated that at the time of this review the review team had been surprised to find out that progress of the MUDFA works had been slower than it had previously been led to believe [PHT00000009, pages 95–96].
- 23.41** This review also noted delays in design and programme [CEC01327777, pages 0006–0008]. System Design Services ("SDS") design was not complete at the point of novation to Bilfinger Berger Siemens ("BBS") and it was unclear to the review team where risk lay for design development. In interview, BBS and **tie** each considered that the risk of design development lay with the other party. The review team considered that the bespoke nature of the Infraco contract introduced "additional risks arising from the inevitable areas of uncertainty associated with the interpretation of this unique form of contract", and it was recommended that **tie** management should consider whether it had sufficient legal skills to fully understand and execute the contract on a daily basis.

- 23.42** Moreover, although it had not reviewed the Infraco contract in detail, the review team considered that it was necessary for **tie** to determine how it would manage the Contract and whether it intended to apply the change management procedure in relation to a number of issues. The most significant of these issues was in relation to "Issued for Construction" drawings if they varied from the "frozen baseline design". Although it did not state the fact, the existence of changes brought about by this means would be in conflict with the requirement for a "no change" culture identified in the last review before the contract was signed, carried out in October 2007 [see paragraph 23.32 above].
- 23.43** The review noted that the programme was three months behind schedule and considered that there were significant risks that it would be delayed further because no apparent progress had been made since the award of the Infraco contract. Significant programme risks identified included possible delay by SDS in design development, the failure of CEC to complete approvals in line with the programme and the failure to complete MUDFA works before the start of the Infraco works.
- 23.44** The report considered that key to the success of the project was the working relationship between **tie** and Bilfinger Berger, Siemens and CAF ("BSC"), especially because all parties had "come through an extended and bruising period of negotiation". Accordingly, it recommended that **tie**
- "should proactively lead the development of partnering relationship approach with it's [sic] suppliers and agree roles and responsibilities especially where there are opportunities for team integration" [libid](#), page 0008].
- 23.45** When Mr Heath was shown Schedule Part 4 ("SP4") to the Infraco contract for the first time during his evidence to the Inquiry, he expressed surprise at the wording of Pricing Assumption 1 (normal design development), stating that one person's normal design development might be another person's major change. He also expressed surprise at paragraph 3.2.1 of SP4 (which stated that the contract price was based on certain pricing assumptions that represented factual statements that the parties acknowledged were not correct). Having read that provision, Mr Heath recognised that it threw considerable doubt on whether the contract was truly a fixed-price one [[PHT00000009](#), pages 100–103].
- 23.46** In relation to the reference to a "frozen baseline design" in paragraph 23.42 above, Mr Heath explained that, throughout the process, the review team had talked of the need to freeze the baseline design at some stage in order to provide certainty on cost and, to some extent, certainty on programme. A baseline design was necessary to know what was expected to be built; once that was known it was possible to estimate how long it would take, and how much it would cost, to build it. That was standard practice [[libid](#), pages 104–105]. While this would be true if the design was truly frozen, it is apparent that what was done was to attempt to obtain a price for the project on the basis of a design at a particular date in the clear knowledge that the design would continue to evolve and without any common understanding as to which party would bear the cost burden of the changes.
- 23.47** Mr Heath explained the context of the recommendation, mentioned in paragraph 23.41 above, that **tie** management should consider whether it had sufficient legal skills to understand the contract fully and to execute it. A **tie** management representative had given the review team a presentation on contract management, in the course of which Mr Heath and Mr Gillan, another review team member, had asked whether **tie** intended to apply a light touch to the management of the contract. The answer was in the affirmative. Mr Heath and Mr Gillan then had a peremptory

look at a couple of issues in the contract and considered that these issues did not lend themselves to a light touch. That resulted in the recommendation that the people running the contract needed to understand what its provisions meant and how they were to be applied [*ibid.*, pages 105–106].

March 2009

23.48 In February 2009, after the Princes Street dispute arose, the review team was asked to review and report on **tie**'s decision to commence the dispute resolution procedure ("DRP") in relation to that dispute and on the strength of **tie**'s case in relation to the matters referred to DRP. On 19 March 2009, the review team issued a report to Mr McGarrity, **tie**'s Finance Director, who was also, at that time, the SRO. In relation to the issue of whether **tie** was entitled to instruct BSC to undertake the works subject to the Princes Street Change Order, the review team found **tie**'s reasoning difficult to follow and suggested that an adjudicator would have the same difficulty [*CEC01002735*, page 0004]. It is clear from Mr Heath's evidence that the review team was concerned at the lack of a co-operative approach between **tie** and BBS. While it was clear that **tie** had made a number of mistakes, he considered that many of them could have been mitigated by a contractor properly participating in the partnering relationship necessary for the project's success [*TR100000044*, page 0034, paragraph f]. The importance of a co-operative approach was recognised by **tie** at the outset and ironically appears to have influenced its decision to select BBS as preferred bidder. In the following passage of his evidence Mr Heath explained his concerns about the approach adopted by the parties soon after the conclusion of the contract:

"[I]n these type of contracts, partnering is very important. It always struck me that both parties had rushed to an adversarial approach rather early on in the process; didn't really seem to explore their options to at least work out what they'd agreed about before they started working out what they've disagreed about." [*PHT00000009*, page 118.]

23.49 It is not possible to identify the origin of **tie**'s approach to BSC with certainty. However, it appears to me that BSC's demand for a price increase made immediately before signature of the contract and which had led to the Kingdom Agreement, which was discussed in Chapter 11 (Contract Negotiations), and their intimation that they would commence works on Princes Street only once the road closures had been put in place played a large part in destroying any sense of trust.

June 2009

23.50 A further independent peer review was conducted on 25–26 June and a report was issued to **tie**'s TPD on 29 June 2009. The review concluded that:

- the projected out-turn costs of the project were approaching the limits of affordability and value for money;
- BSC had not mobilised to deliver the project;
- BSC had not delivered a valid programme;
- BSC had not engaged constructively with **tie** to deliver the project;
- the **tie** team appeared to be "shell shocked" and needed to be reinforced and re-energised; and
- the mediation process that arose out of the Princes Street dispute offered a last chance for **tie** to proceed within the existing scope and framework [*CEC01012780*, page 0003].

23.51 In the findings and recommendations section of the report the review team noted its surprise that the parties were so far apart from the position that they thought they had reached during the prolonged tender evaluation and award and preferred bidder stages. In relation to the MUDFA works, the review team noted its extreme disappointment at hearing that the overall delay to the balance of the 40 per cent of works due to be completed between July 2008 and January 2009 would be almost a year in some cases, noting that **tie** had been generally positive about the management and progress of the MUDFA works in July 2008. Design was also on the critical path, and the review team recommended that the remaining design and outstanding drawings be reviewed by an experienced design co-ordinator to ensure a proper balance between "buildability", programme and cost [**libid**, pages 0004–0006].

December 2009

23.52 A further peer review was carried out on 22 December 2009 and a short report was provided to **tie** on the same day [**CEC00584282**]. The review team supported **tie**'s willingness to bring the performance and commercial issues to a head within a realistic timeframe, and it commented on the options being considered to deliver the most advantageous outcome, balancing time and cost.

23.53 In a letter dated 5 January 2010 to Mr Jeffrey, Chief Executive of **tie**, Mr Hutchinson expressed concerns about the changing role of the peer review team [**CEC00585164**]. Mr Hutchinson noted that while the independent peer review process for the project had emerged from the gateway reviews required by Transport Scotland, the sponsor, as a prerequisite for its approval of the project and its funding, recently the role of the peer review team had become less clear. Reviews were now sponsored by **tie**'s management team and the style of review was limited to a commentary on presentations by the management team. These developments had resulted in a review that was, in effect, "management directed Consultancy", and conflicted with the concept of an independent peer review as exemplified by the OGC gateway process. While Mr Hutchinson considered that members of the review team had the potential to make a significant contribution going forward, he considered that members of the review team should be employed either as management consultants on the rescue effort for the project or as part of the challenge/peer review team, but not both.

March 2010

23.54 On 4 March 2010, a final meeting with members of the peer review team took place, at which the review team was asked to provide its views on **tie**'s recommendations to the TPB and to identify any flaws in **tie**'s strategy, as well as providing feedback on the structure and presentation of the report. While there is a file note of the meeting, which records the comments of the review team [**CEC00541592**], it does not appear that a formal report was produced. By this point, the involvement of the review team was that of providing ad hoc consultancy-type advice rather than the type of independent peer review carried out at earlier stages [Mr Heath **TR100000044**, pages 0029–0030].

23.55 While Mr Heath felt that the members of **tie**'s management who were interviewed during reviews were giving open and honest answers and believed in the information that they were providing, it appears that the review team began to have concerns about this. Mr Heath gave evidence that the review team slowly reached the conclusion that bad news did not necessarily travel upwards in **tie** and beyond [**libid**, page 0031]. He stated that the obvious example was the MUDFA works, on which the review team had formed the impression that things were going well, and it had

not been disabused of that impression. That clearly was not the case. In relation to design, when the review team was interviewing the people managing the design process, it was hard to get concrete numbers out of them about what the state of progress actually was. That seemed to vary between one report and another in a way that the review team could not really “get to the bottom of” [PHT0000009, pages 108–109]. Mr Heath’s concerns were explicitly mentioned in his email to Ms Clark, dated 21 January 2010. Although this was in the context of the provision of management consultancy services, it provides a useful insight into his concerns about the quality and veracity of information provided by **tie** to the review team and also in relation to the reporting of the review team’s advice to the TPB. In particular in relation to concerns about veracity of information provided to the team, Mr Heath stated:

“We have registered concerns that we have been commenting on information provided by **Tie** management without any way of establishing its scope or veracity.” [CEC00588414]

23.56 In relation to future reports to the TPB he observed:

“If we believe that evidence is wrong or is insufficient or a conclusion has been drawn that is questionable how will that be presented by **Tie** management to the TPB, since, as you know, previous reports have been caveated by **Tie** management.” [ibid]

Conclusions on the OGC reviews after financial close

23.57 As noted above, the expressed intention behind the post-contract peer reviews was to provide assurance in relation to the implementation of the project. Instead, they gradually changed from being independent reviews of the project in the style of a gateway review to reviews providing high-level, or strategic, consultancy-type advice to **tie**’s management, including, in relation to **tie**’s strategy in the dispute with BSC. It seems to be that the driver for this was the concern on the part of the review team that they could not perform the function sought of them when they were not being given full information and were instead being asked to proceed on the basis of presentations. In the period when the process was still akin to a review, the team identified increasing delays with MUDFA and design as well as concerns about the accuracy of information provided to the review team in earlier reviews. I do not consider that the review team can be faulted for not uncovering more. The approach of **tie** in this phase is another example of the intention on the part of its senior management to restrict information flow to give an impression that all was well.

Involvement of Audit Scotland

23.58 The circumstances surrounding the decision in June 2007 by the Auditor General for Scotland, Mr Black, to undertake a review of the project and the subsequent proceedings in the Scottish Parliament were considered in more detail in Chapter 3 (Involvement of the Scottish Ministers). In short, on 4 June 2007 the Cabinet Secretary for Finance and Sustainable Growth, Mr Swinney, asked the then Auditor General for Scotland to carry out a high-level review of the arrangements in place for estimating the costs and managing the Edinburgh Tram and Edinburgh Airport Rail Link (“EARL”) projects [CEC00785541, page 0004, paragraph 1]. The high-level review was to be focused on the overall arrangements and its aims and objectives were to assess: a) whether the Edinburgh trams are progressing in relation to time and cost targets, and b) whether appropriate management systems are in place to promote the successful completion of the Edinburgh trams project [ibid, page 0004, paragraph 2]. While the

Auditor General was not obliged to undertake the review because his position was independent of both Parliament and Scottish Ministers, he nevertheless agreed to do so.

- 23.59** In his evidence Mr Swinney stated that the review was to provide a level of scrutiny about the strategic direction and conditions of the projects to enable Parliament to be informed of issues in advance of any further parliamentary discussion about them [TR100000149_C, page 0026, paragraph 74]. He also frankly acknowledged that he was hoping that Audit Scotland might produce a report "which would do for the trams what it did for EARL", but that did not occur because the report was positive about the project but critical of the EARL project [ibid, page 0028, paragraph 78].
- 23.60** On behalf of the Auditor General for Scotland, Audit Scotland produced its report dated 20 June 2007, in relation to the Edinburgh Tram and EARL projects. The report noted that the high-level objectives of the review were to assess, firstly, whether those projects were progressing in relation to time and cost targets and, secondly, whether appropriate management systems were in place to promote successful completion of the projects. It was noted that the review had examined the process for estimating project costs and project management arrangements for the two projects but did not provide assurances on the accuracy of the estimated project costs. In undertaking the review, interviews had been carried out with senior officials from Transport Scotland, CEC and **tie**, and supporting documents had been considered [CEC00785541, pages 0004–0005].
- 23.61** The report noted that three key bodies were common to both projects – namely, Transport Scotland, CEC and **tie** – all of which had satisfactory high-level governance arrangements in place [ibid, page 0005]. In relation to the Tram project, the report noted the following conclusions:
- the current anticipated final cost of phase 1 in its entirety (i.e. both phases 1a and 1b) was £593.8 million, and estimated project costs had been subjected to robust testing;
 - some slippage in the project had occurred, but **tie** was taking action to ensure that phase 1a was operational by early 2011;
 - arrangements in place to manage the project appeared sound, with
 - a clear corporate governance structure for the project, which involved all key stakeholders,
 - clearly defined project management and organisation,
 - sound financial management and reporting,
 - procedures in place actively to manage the risks associated with the project, and
 - a clear procurement strategy aimed at minimising risk and delivering successful project outcomes;
 - the project was approaching a critical phase leading up to early 2008 when Scottish Ministers and CEC were expected to be asked to approve **tie**'s FBC, which would allow infrastructure construction to commence; and
 - a range of key tasks required to be completed before the FBC could be signed off and, unless work progressed to plan, the cost and time targets might not be met [ibid, pages 0005–0006].

The justification for these conclusions is contained in pages 0014–0020 of the report.

- 23.62** In his evidence to the Audit Committee of the Scottish Parliament on 27 June 2007, the Auditor General explained that, earlier that year, he had decided that Audit Scotland would undertake a review of major capital projects in Scotland as part of its forward work programme. The report on the Edinburgh Tram and EARL projects brought forward work that would have been undertaken anyway, albeit over a longer timescale. He considered that it was in the public interest, and Parliament's interest, that he should make the objective audit evidence available to Parliament on a timescale that fitted in with the decision-making procedures in relation to the projects [[SCP00000031](#)].
- 23.63** The report should be considered in the context of the nature of the review, the short timescale available for the investigation and production of the report and the evidence available to Mr Greenhill of Audit Scotland, whose investigations were confined to the project and who drafted that section of the report. The work undertaken was a very high-level review, reflecting the progress of the project at that time [[TR100000041_C](#), page 0011, paragraph 20]. It focused mainly on management arrangements within **tie**. It looked at the process for estimating project costs and at project management arrangements. It did not provide assurances on the accuracy of the estimated costs and was not intended to provide such assurance. In considering Audit Scotland's expressed satisfaction with the governance arrangements at that time, it should be remembered that at the time Transport Scotland had not withdrawn from the project and the report recorded its involvement in it.
- 23.64** In the limited time available to him, Mr Greenhill was not able to look at the tendering and tender evaluation or the delivery of the project itself. Although the report predated the Infraco contract and the completion and approval of the FBC, the contract for delivery of design was in existence and design work had commenced in terms of that contract. Within the period of 16 days between the report being requested and produced, he spent no more than 5 days on substantive investigations, including looking at documents [[PHT00000009](#), pages 140–143]. The meetings with individuals from **tie**, CEC and Transport Scotland were high-level introductory meetings at which Mr Greenhill advised how the audit would be undertaken and asked the individuals for their account of progress to date. There would also have been discussion of the key documents that Audit Scotland would require to consider [[TR100000041_C](#), pages 0009–0010, paragraph 17]. The contemporaneous records of meetings were no longer in existence, having been discarded in accordance with the document retention policy of Audit Scotland but Mr Greenhill was aware of some of the people interviewed from entries in diaries of engagements that were still in existence.
- 23.65** Mr Greenhill was not made aware of any difficulties or delays with the MUDFA works and he was not informed of there being problems and delays in the production of utilities design and in receiving responses from the utility companies. Nor was he aware that, around May 2007, the programme had been revised to show a five-month slippage in the end date of the MUDFA works. That slippage envisaged completion of the MUDFA works in November 2008, as opposed to the original completion date in May/June 2008, but the Infraco works were still intended to commence at the beginning of 2009. If he had been aware of these matters he would have mentioned them in his report, given the criticality of the MUDFA works being completed in advance of the infrastructure works. He did not examine what had been done since MUDFA was entered into in October 2006, and he acknowledged that he could have done so if there had been more time in which to conduct the review [[PHT00000009](#), pages 167–169 and 187]. I consider below the issue of the responsibility of **tie** to inform him of these matters but there is a separate issue of Audit Scotland proceeding with an investigation and issuing a report in the awareness that there has

not been sufficient time to investigate and consider issues fully. I do not consider that the lack of time to undertake investigations is an acceptable excuse for the failure to inquire about progress. Rather, the failure to do so tends to indicate that the Auditor General undertook the investigation within a restricted timescale that was reflected in the shortcomings of the report.

- 23.66** Fundamentally, however, the report depended for its accuracy on interviewees providing full and frank disclosure of progress in their responses to Mr Greenhill's request for an account of progress up to the date of his interviews with them. It is apparent that only restricted information was provided. Mr Greenhill was not made aware that there were difficulties and delays with design and he said that if he had been told of such difficulties and delays he would have commented on those in the report, because design was an issue of significant importance. The procurement strategy involved the completion of design to provide certainty and confidence to the Infraco contractors, enabling them to provide a fixed price for the infrastructure works. The design contract had been awarded in September 2005, and Mr Greenhill accepted that he could have looked at how the design works had progressed since the award of that contract if he had had more time to undertake the review [*ibid.*, pages 154–157, 187 and 201].
- 23.67** The issue of disclosure of design delays arose in the context of the meeting between Mr Crosse, **tie**'s TPD, and Mr Greenhill. While Mr Greenhill could not recall such a meeting, it is clear that it did take place. It is also clear that Mr Crosse chose not to disclose two Powerpoint slides relating to design delay. In response to a request from Mr Crosse by email dated 8 June 2007, Mr Crawley, **tie**'s engineering director, had provided him with slides for a presentation to brief Audit Scotland in relation to engineering assurance and approvals [[CECo1630025](#); [CECo1630026](#)]. Mr McGarrity, **tie**'s finance director, was asked to review the slides. While he had no problems with the presentation, he considered that Mr Crosse would need to prepare for the following direct questions:
- “Has the design gone according to programme so far – if not why not?”
 - “What has changed which gives you confidence that the design process will deliver to the procurement programme now on the table?” [[CECo1670035](#)].

By email dated 10 June 2007, Mr Crawley advised Mr Crosse that he had updated the presentation with two additional slides that attempted to answer Mr McGarrity's questions [[CECo1674234](#)]. One of the additional slides included a graph showing slippage in design to date and the need for a sharp increase in the rate of design production if the design programme was to be met [[CECo1674236](#), page 0008]. The other additional slide stated that there had been slippage in design for three reasons:

- a logged critical issue;
- a **tie** change notice having the effect of changing the scope; and
- slippage due to the performance of the design contractor.

The slide explained that these issues were now well understood, that the principal blockers (critical issues) were being removed systematically, that all stakeholders were represented, that matters were being managed in detail on a weekly basis and that there was demonstrable progress in their removal [*ibid.*, page 0009]. Mr Crawley stated in his email that Mr Crosse would require to take a view on the slides. In response, by email dated 11 June 2007, Mr Crosse advised Mr Crawley that he had decided to “stick with” the original slides, that the two new slides begged a lot of

questions and that if Audit Scotland wanted to understand more about current and past progress, “we can respond when asked” [CECo1670035].

- 23.68** Mr Crawley stated that while he had no recollection of these emails, the graph in the additional slides indicated that there required to be something akin to a doubling of design deliverables for the design programme to be met. He stated that he did not recall being involved in the briefing on design to Audit Scotland, but that if he had been asked by Audit Scotland about the progress of the design works he would have shown it the additional slides and would have advised it of the difficulties and delays that had been experienced with design. If Audit Scotland had asked him whether design was likely to be delivered to programme, he would have replied in the negative [PHT00000014, pages 57–60]. Mr Crawley shared the post of **tie**'s engineering director with Mr Glazebrook. Mr Glazebrook gave evidence that while he did not have any involvement in the briefing to Audit Scotland, he would have advised it that it was impossible in June 2007 for design to be produced in accordance with the programme if he had been asked about that [*ibid.*, page 161]. I accepted their evidence on this matter.
- 23.69** Mr Greenhill gave evidence that if he had been shown the two additional slides noted above, or if he had been advised of their content, he would have followed that up in discussion with the relevant individual in **tie** who was responsible for managing the design contract with a view to understanding what was going on [PHT00000009, pages 162–163]. Mr Greenhill considered that one interpretation of the email from Mr Crosse was that **tie** had deliberately withheld information from him. If that had happened he would take a very dim view of that. In his experience he had never seen that happen or, at least, had never been aware of it happening. He expected and relied on people to be open and transparent with him in order that he could produce an accurate report [*ibid.*, page 166]. In my view it is clear that the information was deliberately withheld from Audit Scotland in order to avoid difficult questions and to conceal difficulties with the project which it was known would be of interest to Audit Scotland's investigator (Mr Greenhill).
- 23.70** A further example of manipulation of the provision of information arose in relation to a claim that was being made by Parsons Brinckerhoff (“PB”). In a PB internal email dated 15 June 2007, Mr Ayres, of PB, reported on the outcome of a meeting that he had with **tie** and advised Mr Reynolds, PB's project director for the SDS contract, that a prolongation claim by PB had been acknowledged by **tie** as being well presented and worthy of consideration and that Mr Gilbert, **tie**'s commercial director, was taking legal advice. However, Mr Ayres also recorded that PB had been asked not to run the final claim through document control until after the Audit Scotland report had been submitted to the Cabinet in the middle of the following week [PBH00025674]. As was discussed in Chapter 6 (Design (to May 2008)), in late May/early June 2007 PB submitted a claim to **tie** for an extension of time of 40 weeks and an additional payment of £2,248,517 in respect of prolongation and additional services between 3 July 2006 and 9 April 2007 [CECo2085580]. Although Mr Reynolds speculated that the claim was less important than other aspects of the Audit Scotland review, I do not consider that to be a plausible explanation for **tie** asking PB to delay submission of the claim through the formal document control system until after the Audit Scotland report had been submitted to the Cabinet. Rather, I consider that it is further evidence of **tie**'s attempt to conceal from Audit Scotland the difficulties and delays in relation to design and their effect upon the programme and cost of the project.

- 23.71** Concerns about the accuracy of the information provided to Audit Scotland were also expressed in the memorandum dated 21 June 2007 from Nadia Savage, Head of Programme Management in Transport Scotland, to Mr Reeve. This was discussed briefly in Chapter 3 (Involvement of the Scottish Ministers), in the context of its non-disclosure to the Inquiry by officials within Transport Scotland, and my assessment of Mr Reeve's evidence in this regard. The memorandum contained concerns that Transport Scotland and **tie** had information that did not support the information that had been presented to Audit Scotland [[SWT00000056](#)]. Key discrepancies included those in relation to the cost estimate, where the figure set out in the Audit Scotland report was dependent on over £43 million of savings. Transport Scotland had not been provided with evidence that such savings were being secured. In addition, the Infraco contract bidder returns were higher than the initial **tie** estimates and, contrary to what had been reported to Audit Scotland, it could not be said that the Infraco contract bids were "firm". It was also noted that Transport Scotland had not received an updated programme from **tie** since January 2007, that the programme at that time was described as having "zero float", that there had been slippage in design and MUDFA progress, and that it was unclear what actions had been taken by **tie** to mitigate the five-month delay on a zero-float programme. Mr Reeve stated that he could not recall receiving Ms Savage's memorandum or what, if anything, had been done in response to it [[PHT00000012](#), pages 111–128]. As was indicated in Chapter 3 (Involvement of the Scottish Ministers), I did not find Mr Reeve to be a credible witness in this respect. The Inquiry did not find any evidence of action by officials within Transport Scotland to inform Scottish Ministers or Audit Scotland of the apparent inconsistencies between the information available to Transport Scotland and what had been provided to Audit Scotland. Although Ms Savage's memorandum was dated the day after publication of the Audit Scotland report, prompt action by Transport Scotland would have alerted Scottish Ministers and Audit Scotland to these issues in advance of the appearance of the Auditor General before the Audit Committee of the Scottish Parliament and of the debate in Parliament on 27 June 2007.
- 23.72** Mr Sharp, Head of Projects, Transport Scotland, gave evidence that he provided Audit Scotland with documents requested by it, but he was not interviewed as part of the review. If he had been interviewed, and asked about his views on the project, he would have stated that there were issues and concerns in relation to the programme for the project. He would also have shared with Audit Scotland the various concerns that Transport Scotland had previously reported to CEC and **tie** – for example, in Transport Scotland's comments on the draft FBC in March/April 2007 [[TRS00004145](#); [CECo1559061](#)]. It does not appear that these issues and concerns were shared with Audit Scotland. It was unclear to me why Mr Sharp, as a relatively senior and experienced civil servant within Transport Scotland, had not volunteered the information in his possession to Audit Scotland, either directly or through his superiors, particularly as the project was being funded by the public purse.
- 23.73** Mr Sharp considered that it was reasonable for Ministers to seek an independent review of the project from Audit Scotland. However, given Transport Scotland's experience and expertise in large infrastructure projects and its officials' involvement in the project from the outset, he agreed that, in addition to the review by Audit Scotland, it would have made sense for Ministers to have requested a review of the project, or a factual briefing relating to it, from relevant officials in Transport Scotland with involvement in, and knowledge of, the project. Had they done so, Ministers would have been able to take a more informed decision [[PHT00000015](#), pages 109–115]. I formed the impression that Mr Sharp was aware that Ministers would have other information apart from the report from Audit Scotland and that Scottish

Ministers could have requested a review or factual briefing about the project from relevant officials within Transport Scotland if they had wanted that, but it does not appear that Mr Sharp or other officials offered such a briefing to Scottish Ministers. As was explained in Chapter 3 (Involvement of the Scottish Ministers), Mr Swinney suggested that there might have been presentational difficulties in requesting Transport Scotland to undertake the review in June 2007. Nevertheless, the consequence of his decision to invite Audit Scotland to do so without also seeking a report from Transport Scotland was that factual information in the possession of civil servants and the expertise then available within Transport Scotland was not provided to Scottish Ministers.

23.74 In relation to the governance arrangements for the project, Mr Greenhill stated that it would have been a matter of concern if he had been told that there had been no formal delegation of authority to the TPB at the date of his investigations [PHT0000009, page 188]. Mr Greenhill said that he had understood that Mr Renilson was the SRO for the project. He would have been concerned to have heard of Mr Renilson's claim that he was only the SRO for the operational phase of the project, because the consequence of that would have been that there was no SRO during the procurement or construction phases [ibid, pages 191–192]. Although the report referred to a clear corporate governance structure for the project, which involved all key stakeholders, Mr Greenhill stated that that conclusion was intended to refer only to the governance structure in relation to the TPB and that he had not looked at the governance structure for the whole of the project [ibid, pages 203–204]. I found this explanation difficult to understand, but have concluded that it may be simply another indication of the limited value of a performance audit by the Auditor General of a current major capital project within the timescale allowed in this case. In his evidence to the Audit Committee on 27 June 2007 about the report on the project, the Auditor General stated that he could offer the committee and the Parliament a positive assurance about the strength of the management systems and control systems that were in place for the project [SCP00000031, page 0012, column 21]. That evidence, and the report itself, should be considered in light of the evidence mentioned above.

Conclusions in relation to the 2007 Audit Scotland review

23.75 Although the report by Audit Scotland provided a degree of independent assurance in relation to the project, I consider that it ought to have been treated with a degree of caution, for the following reasons:

- (a) Audit Scotland usually undertook reviews of completed projects, and it was unusual for it to undertake a review of a project part-way through its development;
- (b) the review was undertaken in an unusually short period of time and, by necessity, could be only a very high-level review;
- (c) the review was restricted to whether appropriate procedures, processes and systems were in place. Importantly, it was not within the scope of the review to consider in any detail the delivery of the project to date or whether the project was being, or was likely to be, delivered on time and to budget.
- (d) I consider that **tie** was not entirely open with Audit Scotland in relation to a number of key issues. Had Audit Scotland been aware of these difficulties and delays it seems likely that it would have made further investigation of these matters and mentioned them in its report, including the risk that these difficulties and delays posed to the delivery of the project on time and within budget.

(e) In preparing Audit Scotland's report Mr Greenhill was aware of the involvement of officials in Transport Scotland in the project, and in his evidence to the Audit Committee of the Scottish Parliament on 27 June 2007 the Auditor General anticipated the continued involvement of Scottish Ministers in the project after that date [[SCP00000031](#), page 0012, column 22].

- 23.76** Had it been known that the involvement of Transport Scotland in the project would cease it might have influenced Audit Scotland's conclusion, in the time available to it, that high-level governance arrangements were satisfactory. I do not consider that the organisational and governance arrangements for the project were, in fact, satisfactory. Instead, in my view, in 2007 (both before and after Transport Scotland's withdrawal) those arrangements were both confused and confusing, and had not fully been implemented.
- 23.77** Officials in Transport Scotland were aware of difficulties and delays with design and with the utilities diversion works and had previously expressed concern about the programme for the project. As was noted in Chapter 3 (Involvement of the Scottish Ministers), both Dr Reed and Mr Sharp were of the view that Transport Scotland would have been better placed than Audit Scotland to give an in-depth report on the project at that time [[PHT00000013](#), page 123; [PHT00000015](#), page 113]. In my view, their input should have been obtained in addition to the involvement of Audit Scotland. If the Scottish Ministers had requested a review, or factual briefing, of the project from officials in Transport Scotland, or if such officials had elected to provide such a briefing to the Scottish Ministers, it is likely that the Scottish Ministers and, in turn, Parliament, would also have become aware of these matters. In any event, once Ms Savage expressed her concerns in the memorandum dated 21 June 2007, action should have been taken by officials in Transport Scotland prior to the meeting of the Audit Committee and the debate in the Scottish Parliament on 27 June to alert the Scottish Ministers and Audit Scotland to these concerns.

Later publications by Audit Scotland

- 23.78** Audit Scotland published two other documents of relevance to the project. The first publication, in June 2008, was its review of major capital projects in Scotland [[CEC01318113](#)]. A summary of the key messages arising from the review was also published [[CEC01318765](#)], together with a supplement to the report, comprising a good practice checklist for public authorities [[CEC01318764](#)].
- 23.79** The good practice checklist noted that good project planning required proper organisation and strong leadership. It said that clarity about the various roles and responsibilities for a project were essential, with a need for clear and agreed reporting lines. Extensive advice on project organisation was available from the Scottish Government and the OGC. The key roles were summarised in an appendix and included a senior responsible owner, project sponsor and project manager [*ibid.*, pages 0008 and 0020]. It was noted that there should be effective change control at the design and construction stages, that changes may not be able to be made economically once construction began and that the approach to risk management should consider how change would be controlled and managed [*ibid.*, page 0008].
- 23.80** The appendix outlined the importance and function of the SRO in the following passages:
- "The Senior Responsible Owner is ultimately accountable for the success of the project"; and

"While the SRO is not involved directly with the project team, he or she will chair the Project Board, own the business case, act as a senior advocate and hold the project team accountable for their actions. Ultimately, the success of the project is their responsibility. Only they can redefine the scope, or decide to close the project if it becomes clear the project objectives are unattainable." [ibid](#), page 0020.]

- 23.81** It seems to me that the above observations about the role of the SRO simply expressed what was already recognised to be his or her functions in the OGC Guidance applicable at the time [see Chapter 22 (Governance), paragraphs 22.14–22.15]. In that event it illustrates the inadequacies of the Audit Scotland review in June 2007. I am of the view that it was not sufficient for the auditor to inquire about the governance arrangements, including whether an SRO had been appointed; the SRO ought to have been interviewed to ascertain his understanding of his role and the procedures in place to assist him to fulfil his duties. It is understandable that the limited time available for the review may have prevented this more detailed investigation, but this simply highlights my view that the Auditor General ought not to have undertaken the review within such a restricted timescale, particularly as there was a risk that the report would give a false sense of security to its readers despite the caveats within it and the qualifications expressed by the Auditor General to the Audit Committee of the Scottish Parliament.
- 23.82** In any event the advice from Audit Scotland in June 2008 ought to have been followed by Mr Renilson as SRO from that date. He remained in post as SRO until he left the project in or about December 2008 and was replaced by Mr McGarrity as interim SRO [[CECo1053908](#), page 0006, paragraph 6.1; [PHT00000040](#), page 70]. Mr Renilson had a duty to comply with the guidance in that document about the role of the SRO. This publication highlights the significance of Mr Renilson's failure to perform his duties as SRO and the failure of CEC and **tie** to ensure that the governance arrangements included the appointment of a SRO who was chairing the project board and holding the project team accountable for their actions. The failures of Mr Renilson, CEC and **tie** in this regard are discussed in Chapter 22 (Governance).
- 23.83** The guidance in the publication in June 2008 also noted the challenge of obtaining assurance about contractor and project team performance and likely outcomes. It said that while there was value at key stages in using an independent team with relevant expertise to undertake gateway reviews of the project, SROs should not rely on such reviews to indicate if a project was in difficulty. The gateway review simply represented a point in time assessment and was only one of several sources of information to help assess performance of the project [[CECo1318764](#), page 000g].
- 23.84** The second publication by Audit Scotland, between the conclusion of the Infraco contract and the commencement of passenger services on the truncated line, was the interim report on the Edinburgh Trams, issued on 3 February 2011 [[ADS00046](#), Parts 1–2]. That report followed a review of the project by Mr Greenhill over a period of approximately 10 weeks between the middle of November 2010 and the publication of the report [[TR100000041_C](#), page 0034, paragraphs 78 and page 0036, paragraph 82]. This review had been undertaken by the Auditor General and the Accounts Commission jointly, for their respective interests, against a background of media and public concern about the dispute between **tie** and BSC and the related disruption. Unlike the position with the earlier review in 2007, the decision to conduct it had been taken without any intervention by Scottish Ministers.

- 23.85** The February 2011 Audit Scotland report noted the contractual dispute between **tie** and BSC and stated that the report did not include a detailed review of the various contracts that were in place, nor was any opinion expressed on the management of the project, the cause or cost of time overruns or the performance of any of the contractors involved [ADS00046, Part 1, pages 0004–0005]. Key messages included that the original plan to have trams operational by summer 2011 would not be achieved. The utilities work was now 97 per cent complete, and good progress was being made with the delivery of the tram vehicles. Greater than anticipated utilities and disputes with the infrastructure contractor had delayed progress, and it was possible that trams would not be operational until at least 2013. The dispute between **tie** and BSC showed no sign of abating, and significant disagreement between those parties remained about the interpretation of elements of the infrastructure construction contract. Some 28 per cent of infrastructure construction works had been completed against an original plan of 99 per cent by the end of December 2010 [ibid, page 0006].
- 23.86** It recorded that **tie** had spent a total of £402 million on phase 1a to the end of December 2010. The cost of resolving the infrastructure dispute was unknown, and it was unlikely that all of phase 1a could be delivered for £545 million. The current situation between **tie** and BSC was complex, and the outcome of mediation talks would help inform the options to be taken forward.
- 23.87** In relation to governance, it was noted that CEC's governance arrangements for the project were complex and were intended to allow the work of **tie** to be subject to scrutiny while keeping councillors informed of the project's progress. It said that the commercially sensitive nature of the dispute with BSC had meant that the information presented to councillors who were not involved with the project had been limited and that this had caused frustration [ibid, pages 0006–0007]. It suggested that CEC required to consider the scope for a wider review of governance arrangements while the project was in the construction phase. In particular, CEC required to satisfy itself that the membership and remit of each element of the governance framework contained sufficient scrutiny of the project's progress and risk management arrangements. CEC also required to consider the best ways to ensure that councillors were kept informed about the project while having due regard to the requirements of legislation relating to companies and any commercial confidentiality of the issues under consideration [ibid, page 0009]. For the reasons that were discussed in Chapter 22 (Governance), I consider that the governance arrangements for the project were complex, confused and ineffective throughout the life of the project (at least until the changes made to the governance arrangements following the Mar Hall mediation).
- 23.88** The report considered it to be imperative that CEC, **tie** and BSC worked together to establish a clear way ahead for the project. Care required to be taken to ensure that any negotiated solution secured value for money for the public purse. If a satisfactory solution could not be found through mediation, CEC and **tie** would require to consider fully the consequences of alternatives, including terminating the contract with BSC [ibid, page 0008].
- 23.89** Importantly it stated that officials in Transport Scotland already monitored project spend, the Scottish Ministers had a significant financial commitment to the project and required to consider Transport Scotland's future involvement in providing advice and monitoring the project's progress. In particular, the Scottish Ministers should consider whether Transport Scotland should use its expertise in managing major transport projects to be more actively involved and assist the project in avoiding possible further delays and cost overruns [ibid, page 0009]. As was discussed in

Chapter 3 (Involvement of the Scottish Ministers), the expertise of Transport Scotland had been withdrawn from the project following Ministers' reluctant acceptance, for reasons of political expediency, of the decision of the Scottish Parliament on 27 June 2007, that the project should proceed.

- 23.90** I consider that Audit Scotland was correct to have recommended that the Scottish Ministers consider whether Transport Scotland, with its expertise in managing major transport projects, should be more actively involved in, and assist, the project in avoiding possible further delays and cost overruns. Indeed Transport Scotland should not have been withdrawn from the project and ought to have remained actively involved throughout. Had that occurred, it is probable that a review of the contract documentation by a firm of solicitors experienced in the drafting and interpretation of construction and engineering contracts would have been commissioned prior to the signature of the contract. The disputes that arose shortly after the signature of the contract centred principally on two related sets of provisions in the Infraco contract: (1) the provisions relating to entitlement to additional payments in SP4; and (2) the provisions in clause 80 as to what should happen in relation to execution of the works when it was considered that a change was being made to those works. Prior to the signature of the Infraco contract Mr C MacKenzie, a solicitor with CEC, had concerns about the terms of SP4 despite lacking the experience and legal expertise to be found in solicitors specialising in construction and engineering contracts. In the course of negotiating the Infraco contract Mr Laing, the solicitor for Infraco who did have such experience, had drawn attention to the possibility of an immediate notified departure because the pricing assumptions were based upon an earlier version of design than would exist at the date of contract signature. In advance of contract signature he also identified the problems that might arise, and ultimately did arise, if the change procedure in clause 80 of the Infraco contract were applied to notified departures and he questioned the appropriateness of using clause 80 in such circumstances. The views of Mr C MacKenzie and Mr Laing were not formed with the benefit of hindsight and I have concluded that a review of the contract documentation by solicitors experienced in the drafting and interpretation of construction and engineering contracts would have identified the problems associated with the terms of the Infraco contract before it was signed. Accordingly, there would have been an opportunity for CEC to consider delaying signature of the contract to enable design and diversion of utilities to be completed in accordance with the procurement strategy or limiting the scope of the project to a shorter route that could be constructed within the available budget or even cancelling the project altogether. In making that observation I recognise that the cancellation of the project would have resulted in wasted expenditure already incurred and that would be a relevant consideration to be taken into consideration by CEC. The determination of the course of action to be taken would have been a strategic one for councillors to make. In any event I consider that there might have been an opportunity for CEC to make a significant saving of public expenditure compared with the ultimate cost of the truncated line 1a.
- 23.91** This report recorded that utilities diversion work was almost two years late but was 97 per cent complete. **tie** had expected that such work would take 70 weeks between July 2007 and November 2008. While it had originally been anticipated that 27,000 metres of pipes and cables would require to be diverted, around 48,500 metres of pipes and cables had been diverted and **tie** now estimated that the final extent of diverted utilities was around 50,000 metres. In **tie**'s view, the remaining utilities diversion work, mainly in the vicinity of Baltic Street, would not prevent infrastructure construction work from going ahead [**libid**, page 0018].

Conclusions

- 23.92** The reviews by the OGC review team and Audit Scotland prior to the signature of the contract were short, high-level reviews and were not intended as a substitute for detailed reviews, instructed by CEC as the client and promoter of the tram scheme, from suitably experienced independent advisers. The issue is not merely that these reviews did not identify the problems. They appear to have given CEC and members of the Scottish Parliament a false sense of reassurance about the project, despite the caveats in the report and in the evidence given by the Auditor General to the Scottish Parliament's Audit Committee. That false reassurance had long-term effects for the project. Had it not been for it, I consider that there would have been greater scrutiny of the project and, in particular, the contracts prior to May 2008.
- 23.93** The conclusions of the Audit Scotland report in 2007 relating to the project depended upon the information provided to Mr Greenhill and should be considered in light of my observations above. Although the review by Audit Scotland in 2007 identified issues with EARL, which merited the cancellation of that project, it was of limited value in relation to the Tram project. It was of such short duration that it failed to identify the delays in design and MUDFA works, as well as fundamental flaws in the governance arrangements, particularly as regards the SRO. It is likely that a longer and more detailed investigation by Audit Scotland would have discovered these issues.
- 23.94** The review in 2007 was undertaken when officials in Transport Scotland were involved in the project, and in his evidence to the Audit Committee of the Scottish Parliament on 27 June 2007 the Auditor General anticipated the continued involvement of Scottish Ministers in the project after that date.
- 23.95** The review in 2007 was inhibited by the failure of **tie** to advise Mr Greenhill of the delays in the progress of design and the unlikelihood of achieving completion of design in accordance with the programme as well as delays in completion of the MUDFA works. Even in the context of a short review, some of these issues would have been discovered had **tie** been frank about problems at that time.
- 23.96** The review in 2007 also contained the factual inaccuracies mentioned in the memorandum from Ms Savage to Mr Reeve, suggesting that incomplete or inaccurate information was provided to Mr Greenhill who prepared the section of the report relating to the project.
- 23.97** The failure of officials in Transport Scotland to advise Audit Scotland or the Scottish Ministers of the inaccuracies mentioned in paragraph 23.77 is inexplicable. Had they done so in advance of the appearance of the Auditor General before the Audit Committee and the debate in the Scottish Parliament on 27 June 2007, Ministers could have asked the Auditor General to consider the implications of that information and to advise the Audit Committee accordingly. Moreover, if that had occurred, CEC would also have been alerted to the problem, although officials there must also have been aware of the issues relating to delays in design and MUDFA mentioned above.
- 23.98** In 2011, **tie** disclosed to Audit Scotland problems relating to the progress of design and MUDFA works, many of which had existed in 2007. The length of time allocated to the review in 2011, compared with that for the earlier review, may explain the difference in results between the two reviews, but this simply reinforces my impression that it was a mistake to undertake the 2007 review in such a short timescale. While that timescale was influenced by the parliamentary timetable, the implications for the public purse of proceeding with the project on the basis of

an inadequately short review outweighed any inconvenience and additional cost resulting from delaying the decision to enable a fuller review to be undertaken.

- 23.99** In any event, the review by Audit Scotland should not have been seen as a substitute for the involvement of officials in Transport Scotland in advising Ministers on the basis of their expertise and knowledge of the project. They should have offered such advice to Ministers, whatever impression may have been given by Ministers about that.
- 23.100** CEC placed too much reliance on the OGC and Audit Scotland reviews prior to the conclusion of the Infraco contract.

Chapter 24

Consequences

24.1 As was noted in Chapter 2 (Establishment and Progress of the Inquiry), my Terms of Reference require me “to examine the consequences of the failure to deliver the Edinburgh Tram project (the “project”) in the time, within the budget and to the extent projected”. Apart from the failure to deliver the benefits associated with a tram line from the Airport to Newhaven and the consequences of the increase in public expenditure, I have considered the impact that the prolonged construction period had on the owners and occupiers of residential and business premises on the route of the tram line as well as on other city residents and on people whose travel arrangements were disrupted due to road closures and construction work. In this chapter, references to construction work include work undertaken to divert utilities in advance of the work to construct the tram line. In the section between York Place and Newhaven, construction work was mainly restricted to the diversion of utilities although Bilfinger Berger, Siemens and Construcciones y Auxiliar de Ferrocarriles SA Consortium (“BSC”) undertook some construction work including the alteration of pavements, much of which had to be reinstated when the decision was taken not to construct that section, while in the section between the Airport and York Place it included the diversion of utilities and the construction of the tram line.

Financial consequences for City of Edinburgh Council

24.2 The most obvious consequences of the failure to deliver the project in the time, within the budget and to the extent projected were the present and future effects of the substantial increase in public expenditure for a limited route. In authorising the Chief Executive to permit **tie** Limited (“**tie**”) to enter into the Infrastructure contract (“Infraco contract”) and the Tram Vehicle Supply and Maintenance Contract (“Tramco contract”) councillors expected that line 1a would be constructed in its entirety within the budget of £545 million. Indeed there was an expectation that the budget might even permit partial construction of line 1b. However, the pricing assumptions in Schedule Part 4 to the Infraco contract, the delays in the diversion of utilities, the failure to transfer design risk to the private sector and generally the departure from the procurement strategy upon which the budget of £545 million relied meant that City of Edinburgh Council’s (“CEC’s”) expectation that line 1a would be constructed within that budget was unrealistic and unachievable.

24.3 The common perception is that the increase in public expenditure attributable to the construction of the line to York Place after mediation was £231 million, being the difference between the project budget in 2011 of £776 million for the restricted line and the original budget of £545 million for line 1a in its entirety. If one wishes to ascertain the total cost to the public purse of the project such an approach is oversimplistic as it omits ancillary expenditure related to the project incurred by CEC as well as expenditure incurred by Scottish Ministers in addition to the grant of £500 million made to CEC for the project. Accordingly, the Inquiry sought assistance from CEC to obtain an account of the project budget and final costs for the completion of the line to York Place.

24.4 In response to the request for assistance from CEC mentioned in paragraph 24.3, Mr Connarty, a qualified accountant and senior manager in CEC reporting to the Head of Finance, submitted a statement to the Inquiry [TR100000153]. Although Mr Connarty had been employed by CEC over the duration of the project, he had no

direct involvement in it. His analysis was based upon a review of the available public reports and the financial management records for the project maintained by CEC following the handover of responsibility from **tie** to CEC during the financial year 2011/12.

- 24.5** As is apparent from the 'Revenue Monitoring 2011/12 – Outturn Report to the Finance and Resource Committee of CEC' on 31 July 2012, reproduced as Appendix 14 to Mr Connarty's statement, the projected spend on the truncated route was £776 million, which comprised both capital and revenue expenditure [**libid**, page 0053]. Mr Connarty's analysis and my calculations have adopted a similar approach, and have not attempted to distinguish between capital and revenue expenditure in arriving at an estimate of the overall expenditure on the project.
- 24.6** Mr Connarty's analysis of the project cost as at 31 March 2017 disclosed that it was £776.7 million, net of contributions and recharges [**libid**, page 0002, paragraph 5.1]. Appendix 6 to his statement discloses that the actual sum was £776,662,473, which Mr Connarty rounded up to £776.7 million [**libid**, page 0023]. I have used Mr Connarty's figure of £776.7 million except when considering additions to the cost of the project mentioned below, where I have used £776.662 million because some of the additional costs mentioned by Mr Connarty are expressed in figures rounded to three decimal points of a million. Mr Connarty testified that the total sum of £776.7 million was not the final figure because there were a small number of outstanding issues including the final settlement with Scottish Water in respect of utility diversions. However, he confirmed that the project costs included provision for CEC's estimated cost of settlement of these issues and that there would be an adjustment to the figure for project expenditure when settlement was achieved [**libid**, page 0003, paragraph 5.4; **PHT00000048**, pages 18–19]. Although he could not confirm the date when the account would be closed following resolution of outstanding matters, Mr Connarty hoped that it would be during "this financial year" i.e. the financial year 2017/18, and he undertook to provide the Inquiry with that final account, although CEC was not anticipating a material change to the numbers that he had provided in his evidence to the Inquiry [**libid**, page 48].
- 24.7** On 4 May 2018, I wrote to the Chief Executive of CEC, seeking a copy of the final account, if it had been prepared and approved, and also seeking other information. In the event that the final account had not been prepared and approved I sought confirmation that it would be sent to the Inquiry team immediately it became available. In his response dated 5 June 2018 the Chief Executive confirmed that certain matters were still outstanding and provided me with confidential information about them. On 19 August 2020, I wrote a further letter to the Chief Executive of CEC, inquiring whether the outstanding matters had been resolved and, if so, at what cost to CEC, to enable me to adjust Mr Connarty's figure of £776.662 million, if necessary. In the correspondence that ensued, the Chief Executive provided me with confidential information about various claims that were outstanding or had recently been settled. These claims included disputes with utility companies and an issue with a land owner about the Sustainable Urban Drainage System and contamination remediation. The Chief Executive confirmed that although provision had been made in the final figure of £776.662 million for some of these claims, no such provision had been made for all of them, including the largest claim in relation to the land owner mentioned above. His best estimate of the additional sum required to settle all claims was £4.456 million. That sum should be added to the figure of £776.662 million, giving a total figure of £781.118 million. CEC hoped that all claims would be settled

in the financial year ending 31 March 2021. To ensure that I was not breaching any confidentiality in respect of the information that the Chief Executive had provided to me I sought and obtained his approval of the content of this paragraph.

- 24.8** On the basis of the evidence, I have concluded that in May 2014 when the restricted line opened for service, any impression that the final cost was within the envelope of the revised budget of £776 million was mistaken and that there was uncertainty about the actual cost of the project. In the first place, the reported cost exceeded the revised budget figure by £0.662 million but more significantly it is apparent from paragraph 24.7 that the provision within the reported cost for the settlement of outstanding claims was inadequate. The inadequacy of the provision for future claims occurred largely because of the settlement of a claim that had not been anticipated but also because of the underestimate of the sum required to settle other claims. However, even when the reported cost is adjusted to £781.118 million net of contributions and recharges to reflect the anticipated additional expenditure of £4.456 million on claims, that does not accurately reflect the actual cost of the project. Although it is remarkable that there should be any continuing uncertainty about the actual cost of a major public expenditure project almost nine years after its completion, that is attributable to the inclusion of certain items of expenditure in other budgets without recharging, or otherwise attributing, them to the Tram project's budget. Even if all relevant expenditure had been properly charged to the Tram project's budget the resulting figure would still have been the best estimate of the cost of the project because of uncertainties attributable to fluctuations in interest rates during the 30-year period for repayment of the capital sum borrowed by CEC to complete the truncated line.
- 24.9** Although all of the expenditure relating to the Tram project that was included in other budgets was properly incurred by CEC or by Scottish Ministers I consider that it is in the public interest to recharge it to the Tram project to assess the best estimate of the final cost of that project. Apart from anything else such an exercise will enable an assessment to be made of the extent to which CEC exceeded the increased budget of £776 million for the truncated line as well as the original budget of £545 million for the entirety of line 1a and potentially part of line 1b.
- 24.10** In undertaking the exercise of recharging expenditure mentioned in paragraph 24.9, for consistency, I have treated the adjusted figure of £781.118 million as the base figure net of contributions and recharges, and have used it for calculations to determine the best estimate of the final cost of the project. Mr Connarty's analysis disclosed that additional tram-related expenditure had been incurred that had been paid either by CEC and allocated to other budgets within CEC or by the Scottish Ministers. In order to gain a more accurate indication of the overall cost of the project to the public purse it is appropriate that the additional tram-related expenditure should be added to the base figure.
- 24.11** The first item of additional tram-related expenditure funded by the Scottish Ministers was the cost of the Scottish Parliamentary process leading to the enactment of the Tram Acts. Although this was expenditure incurred by **tie** for which CEC had ultimate responsibility, the Scottish Ministers provided separate grant funding to CEC to meet the entire cost of this procedure, which amounted to £16.852 million [TR100000153, page 0004, paragraph 6.2; PHT00000048, pages 21–22]. It should be borne in mind that this expenditure was incurred in the initial stages of the project when the Bills to enable the construction of the tram network were introduced in the Scottish Parliament in 2004. If the cost of the parliamentary procedure was not included in the grant of £500 million promised by Scottish Ministers towards the funding of the

project, it should be excluded when comparing costs incurred against the budget of £545 million although it should be added to the cost of the project to ascertain the total cost of the project to the public purse.

- 24.12** Various schemes were introduced to support businesses during the construction work. These included a rateable value reduction scheme for retail properties with a frontage on to the area of the construction work and adversely impacted by it. Under this scheme there was a total estimated reduction of non-domestic or business rates of £6.3 million. This was the second item of expenditure funded entirely by Scottish Ministers but not included in the base figure [TR100000153, page 0004, paragraph 6.4; PHT00000048, pages 26–27].
- 24.13** There was also a separate non-domestic rates Hardship Relief scheme for businesses severely impacted by the tram project. Expenditure totalling £85,469 (£0.085 million) was incurred, of which £64,102 (£0.064 million) was met by Scottish Ministers, with the balance of £21,367 (£0.021 million) being paid by CEC [TR100000153, page 0004, paragraph 6.5; PHT00000048, page 27]. The sum of £0.085 million, including the Scottish Ministers' contribution of £0.064 million, was not included in the base figure.
- 24.14** Thus, in addition to the grant of £500 million the Scottish Ministers contributed £23,216 million, being the sum of its expenditure mentioned in paragraphs 24.11–24.13. That total sum should be added to the base figure, along with the additional sums, mentioned in paragraphs 24.15–24.27 below, which have been or will be incurred by CEC, in order to determine the best estimate of the cost of the project to the public purse.
- 24.15** As mentioned above, there were various schemes designed to provide some financial support for businesses adversely affected by the construction work. Apart from £21,367 (£0.021 million), being its share of the Hardship Relief scheme mentioned in paragraph 24.13 above, CEC incurred expenditure in respect of other schemes such as the "Open for Business" scheme and an additional support scheme for small businesses. CEC's expenditure on the "Open for Business" scheme totalled £990,000 (£0.99 million) and was not included in the base figure. It was funded separately through CEC's revenue budget. In contrast, expenditure of £1.697 million on the additional support scheme for small businesses was included in the base figure. There is no logic in treating expenditure on these support schemes differently, and I have concluded that CEC ought to have included the expenditure on the Hardship Relief and "Open for Business" schemes in the Tram project budget as it did with the expenditure of £1.697 million on the additional support scheme for small businesses. Accordingly the sums expended by CEC on the Hardship Relief and "Open for Business" schemes but omitted from the Tram project budget should be added to the base figure.
- 24.16** In his analysis, Mr Connarty identified various items of expenditure in respect of infrastructure works directly attributable to the Tram project but not included in the base figure. These are listed in Appendix 11 to his statement and include:
- work at Coates Crescent and Atholl Crescent due to damage caused during the construction work;
 - redesign of Morrison Street traffic signal system for traffic management and pedestrian safety, which had been planned and taken forward by the tram project team;

- the purchase of vehicle management signs to cover the amendment of a traffic regulation order at Shandwick Place, planned and commissioned by the tram project team;
- work on Leith Walk and Constitution Street to reinstate pavements and repair damage caused by the incomplete tram works; and
- reinstatement work at St Andrew Square.

The cost of these works totalled £5.38 million and had been charged to CEC's Capital Investment Programme [TR100000153, page 0004, paragraph 6.3 and page 0031, Appendix 11]. Additional expenditure estimated at £1.547 million would be incurred to complete the reinstatement work on Leith Walk and Constitution Street but would be included in the cost of the extension of the line to Newhaven if that took place. Since Mr Connarty gave evidence to the Inquiry, CEC resolved to construct the extension and it is anticipated that it will be completed and open for service in the summer of 2023. Nevertheless, as that expenditure will be incurred for identical reasons to the expenditure of £5.38 million for the reinstatement of other areas in that locality, which are related to the failure to deliver the line to the extent projected, I consider that it is reasonable to include that estimated sum in the cost of the Tram project that terminated at York Place, resulting in the addition of £6.927 million to the base figure. In determining the total cost of the line between the Airport and Newhaven it will be necessary to adjust the cost of the extension to avoid double counting costs of reinstatement work on Leith Walk and Constitution Street.

24.17 A further additional cost identified by Mr Connarty arose from **tie**'s cessation of business following the mediation and CEC's assumption of direct responsibility for managing the project. **tie**'s cessation of business resulted in a liability for voluntary redundancy costs totalling £2.561 million, which was included in the base figure *ibid.*, page 0005, paragraph 6.10]. However, **tie** also had a pension fund deficit as a result of its cessation of business. In terms of the arrangements under the Lothian Pension Fund, CEC was liable for meeting the costs of that deficit. The total cost incurred by CEC in this respect was £4.798 million *ibid.*, pages 0043 and 0045, Appendix 14 and paragraph 2.11]. It was directly related to the project and ought to have been treated in the same way as the redundancy payments. However, it was included in CEC's revenue budget for 2011/12 and should be recharged to the project cost by adding it to the base figure.

24.18 In his statement Mr Connarty also noted that:

"From 2012/13, following a decision within the Tram Project, project revenue expenditure, including CEC tram-related costs previously funded through the Tram project budget, was funded outwith the £776m project budget with this expenditure being met through the Council's overall revenue budget." *ibid.*, page 0005, paragraph 6.12.]

24.19 In the three financial years, 2012/13 to 2014/15, the total expenditure treated in this manner was £9.821 million, consisting of £8.682 million recharged from the Tram project account to CEC's revenue budget and £1.139 million charged directly to that budget. As this expenditure related to the Tram project and expenditure of this nature had previously been recognised as a proper charge to be included in the Tram project budget, it should be added to the base figure.

24.20 The original budget of £545 million anticipated funding from the grant of £500 million from Scottish Ministers, with CEC providing the balance of £45 million. CEC's contribution anticipated receipts from developers totalling £25 million over a period of 30 years. Mr Connarty's analysis disclosed that total contributions of £9.5 million

had been received, leaving a shortfall of £15.5 million to be managed through prudential borrowing. This resulted in increasing the amount borrowed to fund the difference between the budget of £776 million and the original budget of £545 million from £231 million to £246.5 million. However, the cost of servicing the increased loan was within the original estimate of £15.3 million per annum for servicing a loan of £231 million over 30 years, because of lower marginal interest rates. In paragraphs 24.22, 24.24, 24.26 and 24.30 below I consider the financial consequences for CEC of borrowing £246.5 million, but in the meantime it is sufficient to note that the shortfall in developers' contributions resulted in CEC bearing the additional cost of borrowing £15.5 million funded through the prudential borrowing scheme. Although the cost of borrowing the additional sum of £15.5 million should be added to the base figure, as part of the cost of borrowing the larger sum of £246.5 million, the capital sum of £15.5 million should not be added to the base figure because it was already included in the estimate of £545 million.

- 24.21** From the above narrative it will be apparent that the main financial consequence for CEC of the failure to deliver the project within budget was that additional funds had to be procured to pay for the increased cost of the project. This was accepted in the closing submissions on behalf of CEC [[TR100000287_C](#), page 0293, paragraph 7.13].
- 24.22** As noted in paragraph 24.20 above, CEC borrowed £246.5 million using the prudential borrowing framework for local authorities. Local authority borrowing using this framework is carried out on a programme basis through a consolidated loans fund, and it is not possible to specify the actual cost directly associated with the additional borrowing of £246.5 million required to fund the completion of the line to York Place. Despite that constraint, local authorities obviously incur costs of borrowing capital to fund particular projects, and CEC's borrowing of £246.5 million is no different in that respect. I acknowledge that the cost of borrowing over a 30-year period will vary depending on the rate of interest payable at any moment in time and that local authorities can take advantage of reductions in interest rates by restructuring their consolidated loans fund. This involves substituting loans at more favourable rates for existing loans with higher rates of interest when there is a downward movement in long-term interest rates. Although there is uncertainty about the ultimate cost of borrowing of the sum of £246.5 million there is clearly a cost of servicing the loan, and I have estimated that cost on the basis of Mr Connarty's evidence supplemented by his letter dated 30 September 2020 and its appendices [[WED00000656](#)].
- 24.23** Mr Connarty assumed a marginal interest rate of 4 per cent and estimated that the annual revenue cost to CEC of the additional borrowing would equate to £14.3 million per annum over a 30-year period. The annual repayment includes capital and interest as well as management expenses. On that basis, total repayments will amount to £429 million. After deducting the capital sum borrowed (£246.5 million) the interest and management expenses payable over 30 years will amount to £182.5 million. Mr Connarty was an impressive witness who had obviously undertaken his analysis with care and objectivity. I considered that his assumption of a marginal interest rate of 4 per cent was reasonable. It reflected a reduction of 1.1 per cent from the assumed interest rate of 5.1 per cent when CEC was considering funding options for the additional sum of £231 million in August 2011 [[TRS00011725](#), page 0005, paragraph 3.23].
- 24.24** On 16 September 2020, the Inquiry sought clarification from Mr Connarty about the calculations mentioned above, and he responded by letter dated 30 September [[WED00000656](#)]. Various calculations were appended to the letter. Appendix 2 contains the calculations of the loan charges forecast based upon a loan of £246.5 million with a repayment period of 30 years and an interest rate of 4 per cent.

When rounded to the nearest decimal point these figures disclose that the total interest payable will be £181.154 million and total management fees and expenses will be £2.510 million. When added to the sum borrowed the total sum payable will be £430.164 million, representing an annual charge of £14.339 million. On that basis the total interest and management fees and expenses payable over 30 years will be £183.664 million. Nevertheless the interest payable will vary depending upon fluctuations in marginal interest rates over the 30-year period. Taking into account the uncertainty associated with future fluctuations I consider that it is prudent to adopt Mr Connarty's original figure of £429 million as the total sum payable over the 30-year period.

- 24.25** Mr Connarty accepted that, from a lay perspective, and subject to the caveat about the interest rate mentioned paragraph 24.24 above, the cost to the public purse of the line from the Airport to York Place would exceed £1 billion if the total cost of borrowing over the 30-year period of the loan and the additional sums attributable to the Tram project mentioned in his statement and discussed in paragraphs 24.9–24.19 above were added to the project cost of £776.7 million [PHT00000048, pages 39–41]. If the increased base figure of £781.118 million was used instead of £776.7 million the cost in excess of £1 billion would be even greater. However, the total cost of borrowing is based upon a repayment period of 30 years and most of it will be incurred in the future.
- 24.26** As was explained in the report to the CEC on 25 August 2011 [TRS00011725], the annual revenue charge required to repay the capital and interest of the sum borrowed does not take account of the time value of money. That report discussed borrowing £231 million over 30 years at a marginal interest rate of 5.1 per cent, resulting in repayments of capital and interest of £15.3 million that totalled £459 million. To enable a proper comparison of time-related cash flows to be made the United Kingdom Government's discount rate was applied, resulting in a reduction of the cumulative charge from £459 million to £291 million. The equivalent exercise reduces the cumulative charge mentioned in paragraph 24.24 above from £429 million to £272.2 million, resulting in an additional cost to CEC at net present value of £25.7 million in interest payments and management fees and expenses, being the difference between the discounted figure of £272.2 million and the sum borrowed (£246.5 million) [WED00000656, page 0006, Appendix 4; WED00000658].
- 24.27** Table 24.1 illustrates that when that sum of £25.7 million is added to the base figure along with the other additional costs mentioned in paragraphs 24.7, 24.8, 24.11–24.13 inclusive and 24.15–17 and 24.19 inclusive above the best estimate of the total cost to the public purse of the Tram project terminating at York Place is £852.591 million and the cost to CEC is £329.375 million after deducting grants and other payments made by the Scottish Ministers. Based upon these figures, a fair comparison of the final estimated cost of the restricted project terminating at York Place with the original budget of £545 million for the line extending to Newhaven requires an adjustment of the final cost to reflect the fact that the cost of the parliamentary process (£16.852 million) was expenditure incurred beforehand and might not have been included in the original budget. Thus, as opposed to the budgeted cost of £545 million for the line between the Airport and Newhaven, the best estimate of the final outturn cost of the project resulting in the line terminating at York Place is £835.739 million, being the total cost of £852.591 million less the expenditure of £16.852 million on the procedure relating to the enactment of the Tram Acts. The contributions of Scottish Ministers and CEC towards the cost of £835.739 million were £506.364 million and £329.375 million respectively. The most striking result of these calculations is that

CEC spent £329.375 million as its share of constructing the line from the Airport to York Place as opposed to its budget of £45 million representing its share of constructing the line from the Airport to Newhaven.

Table 24.1: Estimated cost to public purse

	Project Costs (£m)		
	Paid by SM*	Paid by CEC	TOTAL
1. Costs as per Appendix 6 of TRL00000153	500	276.662	776.662
2. Additional costs of resolving outstanding disputes (best current estimate)	-	4.456	4.456
3. Base Figure (sum of 1 and 2 above)	500	281.118	781.118
4. Additional costs			
• Scottish parliamentary process**	16.852	-	16.852
• Rateable value reduction scheme for retail properties	6.300	-	6.300
• Hardship Relief scheme	0.064	0.021	0.085
• "Open for Business" scheme	-	0.990	0.990
• Reinstatement works St Andrew Sq	-	5.380	5.380
• Reinstatement works Leith Walk and Constitution St	-	1.547	1.547
• Pension Fund deficit	-	4.798	4.798
• CEC Revenue budget recharge	-	9.821	9.821
• Estimated cost of borrowing (NPV)	-	25.700	25.700
Total additional costs	23.216	48.257	71.473
5. TOTAL (sum of 3 and 4 above)	523.216	329.375	852.591

* Scottish Ministers

** This should be excluded if comparing actual expenditure with budgeted expenditure of £545 million.

- 24.28** In the longer term, a better indication of the increase in cost over the estimated cost of £545 million for a tram line from the Airport to Newhaven will be obtained when the final cost of the route to Newhaven is known. At that stage CEC should have more accurate information about the total cost of that section, including the cost of any necessary borrowing. In calculating the cost of the extension CEC should ensure that all of the associated costs are included in the Tram project expenditure and not attributed to other CEC budgets. CEC should also adjust the calculation of costs to avoid double counting the cost of the reinstatement work mentioned in paragraph 24.16. Although uncertainties about the final cost of borrowing £246.5 million will remain, a more accurate estimate of the cost of the section to York Place should be possible because of the knowledge of fluctuations in interest rates between 2014 and the date of completion of the line to Newhaven. In the meantime an estimate of the cost of the line from the Airport to Newhaven can be made based upon the Business Case for the extension to Newhaven that was submitted to CEC's Transport and Environment Committee on 28 February 2019. The estimated cost for that section was £207.3 million, including risk, support for business and optimism bias [CECo2087287, page 0059, paragraph 5.17]. If that sum is added to the current best estimate of £835.739 million for completing the line to York Place, the estimated cost of the line from the Airport to Newhaven is £1,043.039 million (£835.739 million + £207.30 million) and is the best current available comparator for the estimated cost of £545 million although the cost of any borrowing to complete the line to Newhaven will need to be added to the total cost. Once the extension has been completed, the actual cost can be ascertained and added to the adjusted cost of the section from the Airport to York Place.
- 24.29** The report to the CEC meeting on 25 August 2011 confirmed that CEC would be able to honour its existing capital commitments even if CEC borrowed the then proposed sum of £231 million at a marginal interest rate of 5.1 per cent [TRS00011725, page 0007, paragraph 3.32]. That is hardly surprising because I presume that CEC had allocated funding for its existing capital commitments from its capital budget and, if necessary, secured any shortfall in that funding from other sources – including, but not restricted to, prudential borrowing. As the cost of the overspend on the tram project was to be funded from additional borrowing it is self-evident that the overspend would not impact on CEC's other capital commitments. I also accept the evidence of Councillors Dawe, Henderson and Hinds (mentioned in paragraph 7.20 of the closing submission on behalf of CEC [TR100000287_C, page 0296]) that they could not remember any other capital project being delayed as a result of the increased capital expenditure on the Tram project.
- 24.30** However, as the above report acknowledged, the most significant financial consequence of the increased expenditure was the opportunity cost to CEC of borrowing £246.5 million. It noted that the allocation of revenue streams to service that loan represented

"an opportunity cost for the Council and will therefore reduce the options available to meet future service pressures in the context of demographic changes, price inflation and reduced government funding" [TRS00011725, page 0007, paragraph 3.32].

That observation will apply to the servicing costs of all sums borrowed by CEC whichever borrowing scheme is used. Increased borrowing increases the commitment of future revenue expenditure to enable sums borrowed to be repaid with interest. A consequence of that commitment is that CEC will be unable to provide the level

of service to the community that it would otherwise have been able to fund from its revenue account without such a commitment. The annual revenue charge of £14.3 million required to repay capital and interest of the sum borrowed to complete the tram line to York Place represented 1 per cent of CEC's gross expenditure. That is an indication of the money that would have been available annually over a period of 30 years to fund services in the City of Edinburgh. The allocation of that money to the various services provided by CEC would have been a matter for councillors to determine in the context of the annual budget for each financial year. The annual cost of borrowing to fund the extension to Newhaven will result in a further opportunity cost to CEC resulting in a reduction of available funds for future expenditure on public services within the local authority area of the City of Edinburgh.

Communication with those affected by the construction work

- 24.31** In considering the issue of the impact on others it must be borne in mind that the project would have resulted in some disruption to the public generally, and to local residents and businesses specifically, as well as to residents in streets through which traffic had to be diverted, even if the project had been delivered on time and to the extent projected. Such disruption normally includes noise as well as vehicular and pedestrian access issues associated with major construction work. It results in an adverse effect upon the amenity of affected streets, including those used by diverted traffic as well as those where construction work is being undertaken. That is simply a consequence of living and working in a city during such works. However, there is a reasonable expectation on the part of the public that they will be kept informed of changes that are about to affect them and that such disruption will be kept to a minimum by ensuring reasonable access to homes and businesses during the work and by completing the work on time.
- 24.32** I will consider the impact on others of the delayed project and the failure to complete the line to Newhaven, but before doing so it is appropriate to consider the question of communication with those affected by the construction work. In doing so I recognise the need for effective communication with the public generally about such issues as road closures, diverted routes for traffic, altered public service routes and timetables, and changes to the location of bus stops. However, the greatest need for regular and effective communication is in the immediate locality of the work where it is essential to keep residents and businesses informed in advance of changes to access to their premises and of other changes that they will experience. A particular problem with this project was that for a significant period of time after work had started no progress was made owing to the disputes described in more detail in Chapter 15 (Contractual Disputes: May – December 2008) and Chapter 16 (The Princes Street Dispute). During that time there could be no certainty for those affected by the disruption when or, indeed, if it would end and little, if any, information or reassurance was provided to those affected.
- 24.33** As part of the revised governance structure introduced following its meeting on 30 June 2011, CEC established a Stakeholder Forum. It was intended to enable CEC and the contractors to manage key relationships with stakeholders directly affected by the project [[CEC02044271](#), page 0016, paragraph 3.91]. The introduction of such a forum is an indication that the earlier arrangements for informing residents and business owners in advance of construction work that might affect them and discussing possible mitigation measures had not been successful. That is certainly the impression that I gained from responses from members of the public, indicating that changes to the work affecting access to properties often occurred without prior notice. Even when notice was given, it did not necessarily reflect what actually occurred.

- 24.34** Although the composition of the Stakeholder Forum included representatives of local communities affected by the project, it is clear from the list in paragraph 3.91 that it mainly related to the concerns of major companies and business organisations [\[ibid\]](#). In his written evidence to the Inquiry, Mr C Smith observed that the efforts made by CEC to engage with stakeholders had not worked effectively because it excluded a significant section of the public such as “members of the public, neighbours, as in domestic neighbours, to areas of work and small businesses and shopkeepers and the like”. Some months after work recommenced following mediation, those defects were recognised and addressed [\[TR100000143_C, pages 0096–0097, paragraph 335\]](#).
- 24.35** I recognise that with a project of this nature and scale some disruption is inevitable, and that such disruption can lead, at least in the short term, to a loss of business. However it is also important to demonstrate to affected people that their concerns are being taken seriously and, where possible, will be addressed. Equally it is also important to recognise that not all concerns can be addressed, but the fact of listening to concerns and explaining why action cannot be taken to mitigate their effect may provide some reassurance to aggrieved residents and business owners.
- 24.36** I accept Mr C Smith's evidence that, prior to his appointment, and even several months after work re-commenced after the mediation settlement, this matter may not have been given the attention that it deserved. If, as appears to have been the case, the arrangements for consultation and communication with those members of the public most adversely affected by the construction work were deficient in 2011, it would appear that the arrangements by **tie**/CEC during the construction work prior to mediation were woefully inadequate. My views in that respect are reinforced by the acknowledgement in the closing submission on behalf of CEC that:
- “inadequate road closure notifications and late communication of work plans by **TIE** Communications team impacted on local retailers and communities and restrictions on work and consequent delay in progress” [\[TR100000287_C, page 0375, paragraph 12.18\]](#).
- 24.37** Although CEC attributed blame to the **tie** communications team, CEC cannot avoid all responsibility for communication failures. It could have influenced the timing of road closures to ensure that the public had adequate notification of them. Moreover, it is unlikely that councillors in affected wards were unaware that their constituents were aggrieved by the poor standard of prior communication, and CEC ought to have intervened to ensure that **tie** improved its communication with those likely to be directly affected by the construction work.

Impact on the public generally

- 24.38** On 12 May 2015, in a formal call for issues and evidence the Inquiry invited members of the public to inform the Inquiry about how they were affected by the failure of the project. In total, 91 responses were received and considered as part of the evidence to the Inquiry. These responses have informed my understanding of the impact suffered by the public as a result of the delays to the project and its curtailment at York Place.
- 24.39** Before considering the evidence of disruption to business proprietors and residents along the route of line 1a, I wish to acknowledge that the delay to the construction work had an adverse impact on the public generally. The comments about noise, disturbance and difficulties of access mentioned in paragraph 24.43 below in the context of local residents and businesses apply equally to those members of the public visiting those parts of the city affected directly by the construction work.

Indeed the impact of the construction work was not confined to the areas of the construction work or to visitors to those areas. There was an indirect effect on most areas of the city due to the re-routing of traffic, increased travelling times and alterations to bus services. These difficulties were compounded for those with disability. In that regard Mr Thomas observed:

"During the works it was virtually impossible for the disabled to access large areas of town. Closed roads and diversions meant it closed the city to all but the able bodied." [CZS00000082]

The prolongation of the construction work by three years meant that the exclusion of the disabled from large areas of the city continued for that extended period.

- 24.40** The first experience of putting in place substantial traffic management plans involved the closure of the Mound on 1 October 2008. That had resulted in "an absolute snarl up of the greatest order" and councillors did not want that to be repeated [Councillor Dawe [TR100000019_C](#), page 0108, paragraph 415]. Although the gridlock experienced on that occasion was not repeated commuters by public transport experienced increased journey times because of delays, route diversions or changes in the location of bus stops, which often occurred without prior notice. Some journeys to work that normally took an hour were extended by 20 minutes, adding 40 minutes to travelling time taken by commuters each day [Mr Goodall [CZS00000069](#)]. Had the project proceeded on time, such increases in journey time during construction might have been understandable and tolerable to the travelling public as a consequence of living in a vibrant city where major works were occasionally necessary. However the prolongation of that disruption by almost three years was unacceptable. Although the evidence in this regard was given by Mr Goodall, a witness living in the south-west of the city it was supported by the evidence of Ms Amos [[CZS00000031](#)] and Ms Bruce [[CZS00000034](#)], both of whom lived in the vicinity of Leith Walk. Each of them spoke of similar issues relating to public transport experienced by Mr Goodall. Ms Bruce observed: "You were never sure where the buses were going as they were diverted a lot of the time and the bus stops were moved regularly" [*ibid*]. Ms Amos referred to the bus services being "COMPLETELY disturbed" [[CZS00000031](#)] from 2008 onwards, and she only knew that bus stops had been moved when she left her flat in the morning, resulting in her being late for work or hospital appointments.
- 24.41** Having regard to the areas affected by the construction work, it is reasonable to conclude that delays to journeys were experienced by commuters from outside Edinburgh as well as those within Edinburgh, whether they used public transport or travelled by car. Allowing for delays to commuters that would have been expected had the project proceeded on time and to the extent projected, I consider that the economic cost of the increased duration of the construction work reflected in the increased daily journey times will have been significant when one considers the number of people likely to have been affected and the increased period of the disruption.
- 24.42** After the conclusion of the public hearing sessions, CEC decided to construct the extension of line 1a from York Place to Newhaven and construction is expected to be completed in the summer of 2023. During the construction of that extension the travelling public will have experienced increased journey times attributable to delays occasioned by traffic diversions and re-routed public service vehicles as occurred over the many years leading to the opening of the curtailed route for service. The additional disruption to journey times and consequent economic disadvantage attributable to the work on the extension to Newhaven will be a direct result of

the failure to complete the project as originally planned. Had the project been completed on time, the disruption would have ended in 2011, when it was expected that the trams would be operational throughout the entirety of line 1a.

Impact on residents

- 24.43** Apart from the impact upon members of the public generally, those most seriously affected by the failure to deliver the project in the time and to the extent projected were the residents and businesses along the route of line 1a during the construction work. They lived and worked beside a construction site and were exposed to noise, disruption, difficulties of access and general loss of amenity for several years longer than anticipated. Although that impact might appear to be self-evident to all residents of, and visitors to, Edinburgh at that time, who witnessed for themselves the disruption caused by the construction work, some respondents elaborated upon the scale of the impact on themselves and on their businesses. I have no doubt that their experiences also reflected the impact upon many others at that time.
- 24.44** The delay of almost three years in opening even a part of the route for service resulted in an unacceptable burden on those affected residents and businesses. Even that inordinate delay did not end the disruption in the section of the line between York Place and Newhaven. The decision to terminate the line at York Place necessitated reinstatement work beyond York Place, with its inevitable disruption. Moreover, as a result of the construction work on the extension to Newhaven residents and businesses along that route and in streets accommodating diverted traffic will have been the most severely affected by the consequent disruption. That should be seen as a consequence of the failure to complete the project as originally planned.
- 24.45** In considering the impact on residents along the route of the construction work, I have included within this category those residents living in residential streets through which traffic was diverted to accommodate the work, as well as residents living in streets directly affected by the construction work. I will consider the residents in streets accommodating diverted traffic later but, before doing so, I wish to consider those residents in streets where construction work was undertaken. As with Edinburgh residents generally, residents in this category also suffered the difficulties of access to other parts of the city and increased journey times mentioned above, but in addition they experienced the adverse impact of living immediately adjacent to the construction work for many years. In the section between the Airport and York Place the period of disruption was six years, ending with the commencement date of the operation of the trams. That exceeded the planned period of construction work between the Airport and Newhaven by at least three years. The period of disruption between York Place and Newhaven will ultimately exceed that three-year period by several years. The total period of construction work will be longer in that section because the diversion of utilities started in that area in 2007, and work on the reinstatement of Leith Walk and Constitution Street was incomplete in 2017 [TR100000153, page 0031, Appendix 11]. Although the disruption due to the reinstatement of Leith Walk and Constitution Street was probably of a much lesser magnitude than that experienced during the construction work in that locality, and was probably more localised, nevertheless it compounded the adverse effects experienced by residents there during the diversion of utilities. To that prolonged period of 10 years when some work was under way in that locality, including reinstatement work, one should add the work on the extension that CEC plans to be open for service in 2023. On that basis the disruption to residents and businesses in that section and to the general public will cover a period of approximately 16 years. That should be compared with the planned period of four years between 2007 and

2011 when it was expected that the trams would be operational along the entirety of line 1a.

- 24.46** Residents in the vicinity of the construction work experienced noise and disturbance normally associated with such work generally but, as noted in paragraph 24.45, endured such disturbance for several years longer than had been planned. The increased duration of that disturbance varied according to the location of the residents, but it was at least three years in the west end of the city and much longer in the north-east.
- 24.47** Access difficulties were a common theme of the evidence submitted by members of the public. In short, pedestrian access to houses and shops in the streets along the route of the tram was difficult because of the barriers erected between the site of the construction work and the buildings to which pedestrians were seeking access. The barriers were left in place even when no work was being undertaken. They were altered overnight without any prior notice. Crossing the road was also problematic because of high Heras fences or other barriers and the distance between crossing points [see, e.g., [CZS00000007](#); [CZS00000013](#); [CZS00000026](#); [CZS00000030](#); [CZS00000032](#); [CZS00000033](#); [CZS00000034](#); [CZS00000038](#); Dr C Mackenzie [CZS00000064](#)]. Dr C Mackenzie, whose evidence I will discuss in paragraphs 24.61 and 24.62 below in the context of the effect of the construction work on business, spoke of an account given at a public meeting of an undertaker having to carry coffins hundreds of yards due to ongoing delayed construction work.
- 24.48** Dr Herbert, a resident in the west end, on the route of the tram, compared the disruption caused by the construction work with his experiences as a schoolboy in London during World War 2. He said that as he made his way to the venue for his exams in 1944 the route differed each day and he "had to negotiate holes, rubble and debris" [[CZS00000038](#), page 0003]. He summarised his experience of the construction work as follows:
- "... there were such frequent changes of barriers that routes and access could change from day to day. Rubble, material and heavy equipment would suddenly appear to block the way. Familiar bus routes became unfamiliar and it was sometimes necessary to walk a long distance to find a stop – which might have changed next time." [ibid](#)
- He illustrated the scene in the vicinity of his home that he witnessed over these years by submitting photographs covering the period between 2008 and 2013 [[CZS00000039](#)–[CZS00000044](#)]. He also explained the difficulty that he experienced in the delivery of kitchen units because of the unexpected and unannounced overnight alteration of barriers outside his home [[CZS00000038](#), page 0003].
- 24.49** As I indicated at the commencement of this section, I have included within the class of residents affected by the failure to deliver the project on time and to the extent planned those who resided in streets through which traffic was diverted. Although traffic diversions are necessary in many situations to enable major works to be undertaken, they undoubtedly result in increases in the volume and nature of traffic in the streets accommodating the diversions. In most situations such increases can have an adverse effect upon the amenity of those streets, particularly if they are residential. That appears to have occurred in 2007 as part of the Tram project, with the diversion of traffic along Randolph Crescent affecting the amenity of that street, Great Stuart Street and Ainslie Place, all of which are residential streets in Edinburgh's New Town.

- 24.50** Mr Renfrew was of the view that the introduction of that traffic into Randolph Crescent resulted in a substantial reduction in the sale price of his house there [CZS00000072; CZS00000035]. Although I am unable to reach the conclusion that this was the sole cause of the difficulty that he experienced in selling his property, the amenity of an area in which a house is situated is a relevant consideration for many house purchasers. As will be noted in paragraph 24.53 below, noise, vibration and air pollution associated with traffic, particularly heavy goods vehicles, adversely affects amenity. However, the temporary diversion of traffic into residential streets in the New Town was a necessary consequence of the construction work in the west end at that time. It was not – and cannot be – attributed to the delay in the project or failure to deliver it to the extent projected. Although some people might consider the extended duration of the displacement of traffic following the temporary traffic regulation order a consequence of the delay in the project, because the construction work lasted at least three years longer than planned, Mr Renfrew sold his house in 2009, which was within the anticipated timescale of the work. Moreover, any conclusion about traffic displacement has to be seen in the context of other measures taken by CEC to divert traffic from the city centre as part of its vision for the city. Mrs Frame, whose evidence is discussed in paragraph 24.53 below, approved of that policy but acknowledged that one of its consequences has been the redistribution of traffic into residential streets in the New Town. That issue is not part of my remit and ought to be raised in another forum.
- 24.51** The evidence submitted by the Moray Feu Residents' Association ("MFRA") confirms that traffic displacement had occurred in the west end of the city prior to 2008, under a temporary traffic regulation order [CZS00000051]. That order was necessary to permit the diversion of traffic to enable the construction work to be undertaken between Shandwick Place and Haymarket. The diverted traffic included lorries and buses that had previously used more suitable routes for their journeys. Mr Ditchburn, also a resident in a New Town street affected by diverted traffic, accepted that the temporary traffic regulation order was just "one of those things", and he believed that the wording of the notices meant that the traffic levels would revert to the status quo when the construction work was completed. However, he subsequently learned of CEC's intention to replace the order after the completion of the construction work with a permanent traffic regulation order "cementing the traffic displacement in place" [CZS00000022, page 0002]. Although I can understand Mr Ditchburn's expressed concerns about the manner in which CEC behaved in this regard, it is beyond the remit of the Inquiry to investigate this issue. I am unable to conclude that the subsequent permanent traffic regulation order was a consequence of the delay to the project or the failure to complete it; it is more likely to have been related to other measures taken by CEC to divert traffic from the city centre as part of its vision for the city centre, as mentioned by Mrs Frame (paragraph 24.53 below). If that is correct, it tends to suggest that the displaced traffic in Randolph Crescent, Great Stuart Street and Ainslie Place after CEC made the permanent traffic regulation order was not caused by the delay to the construction work or by its cessation at York Place but was attributable to other CEC policies.
- 24.52** As indicated in the evidence submitted by MFRA, air pollution from traffic has a severe adverse impact upon health, and to that extent that evidence is relevant to the effect on the amenity of residential streets caused by increased traffic. The remainder of the MFRA submission is not within the scope of the Inquiry. It relates to the question whether the shortened tram line should have terminated at Haymarket as opposed to York Place. My remit is concerned with the delivery of the project, which included the proposal to build the line from the Airport to Newhaven and why

that project was delayed, exceeded projected costs and delivered a much shorter tram line. In Chapter 19 (Mediation and Settlement) I have considered the decisions taken by CEC in June, August and September 2011, but only in the context of implementing the settlement agreement and the reasons for, and costs associated with, changing its decision taken in August 2011 to terminate the line in the meantime at Haymarket.

- 24.53** Between July 2012 and September 2013, York Place was closed to traffic to facilitate tram construction works there. During that period further diversions were introduced, resulting in diverted traffic being channelled along the Abercromby Place/Albany Street corridor in both directions [CZS00000009]. The increased volume and nature of traffic in that corridor impacted adversely on the amenity of these residential streets, which are also located in the New Town. Mrs Frame, a resident in that locality, summarised that adverse impact as follows:

"It was a very difficult time with noise, air pollution, structural damage to some properties and a change of ambience in what is supposed to be a protected National Heritage Site. The CEC team told us that there was no alternative and residents would have to bear the pollution and inconvenience. Our window frames and sills became black during this period and we were not able to open the windows due to noise." [CZS00000050, page 0002.]

Despite that evidence, the extension of time taken to deliver the curtailed route did not result in, or exacerbate, the adverse impact recorded above. It simply resulted in that impact occurring at a later date than if the project had been delivered on time.

- 24.54** During the period when the traffic was diverted along Abercromby Place/Albany Street, traffic flows of 1,200 vehicles per hour were recorded. CEC officials advised residents that nothing could be done at that time to reduce these levels but that traffic flows would return to pre-diversion flows after completion of the construction work. Residents have undertaken monitoring of traffic flows following the commencement of the tram service to York Place. Although traffic flows have reduced to 500 vehicles per hour, they have not returned to pre-diversion flows [libid; see also Mr Brown CZS00000067]. I regret that this is not an issue within the remit of this Inquiry. For that reason it is not one upon which I am able to express any views. If residents and the New Town Broughton Community Council wish to pursue their complaints about it they should continue to lobby politicians to seek a solution to the use of residential streets as a "rat-run" by vehicles, including heavy goods vehicles. Residents also expressed concerns that similar diversions would occur during the construction of the extension of the tram line to Newhaven. Loss of amenity due to future diversions along that corridor to accommodate work associated with the extension of the line to Newhaven could be a consequence of the failure to complete the project on time and to the extent projected but the construction of the extension commenced after the conclusion of the public hearings and there is no evidence available to the Inquiry on this matter.

Businesses

- 24.55** Another common theme in the public responses was the effect on businesses along the route of the tram, particularly in the corridor between Haymarket and Leith Walk/Constitution Street.
- 24.56** Although businesses in Princes Street and St Andrew Square probably suffered loss of trade as a result of the disruption caused by the construction work, the retailers in those locations tended to be major retail outlets and did not respond to the call for

evidence. The implication that I take from their silence is that any loss of trade was more manageable than was the case for smaller businesses.

24.57 The Inquiry considered evidence from, or on behalf of, business owners operating at the relevant time in Haddington Place, Leith Walk and Constitution Street to the north-east of the city, and in Rose Street and from Shandwick Place to Haymarket to the west. From that evidence it is clear that there was significant disruption to trade and consequent loss to the business owners in those areas caused by the construction work. The delays to the work exacerbated these losses and prolonged the disruption that would normally have been anticipated, assuming that the work was completed in the time originally projected. Indeed, with the termination of line 1a at York Place instead of Newhaven, the businesses in the areas to the north-east of the city suffered losses associated with the work that was never completed as originally planned. It is probable that businesses in that location will have been exposed to further disruption and will have suffered additional loss due to the work to complete line 1a from York Place to Newhaven. The nature of some of the difficulties experienced by business owners was illustrated by a number of witnesses, as will be discussed in paragraphs 24.59–24.70, inclusive, below.

Businesses on Leith Walk

24.58 This section is intended to address issues raised by, or on behalf of, business owners in the section between York Place and Newhaven, and for ease of reference I have described them as businesses on Leith Walk.

24.59 Ms Marshall was a founder member of the Leith Business Association, which was established in April 2008 in response to the effect on businesses as the construction work on Leith Walk became more intrusive. In September 2007 she had started a business selling handmade arts and crafts from 115 Leith Walk. Although not busy, her shop had been frequented by a reasonable number of people before any significant construction work began, and she had been reasonably happy with her initial sales figures. However, her sales decreased as construction work intensified. In August 2008 she took a stall at the Edinburgh Festival Fringe to promote her business and to raise some income that could be used to support it. When she returned to the shop after the Festival it was surrounded by metre-high Heras fences, with a narrow path to the door. Mechanical diggers were digging deep holes in the ground just inches from her shop window, adversely affecting access to her shop and restricting the ability of customers to move freely from one shop to another, as a result of which customers to all affected businesses elected to shop elsewhere. Her financial position deteriorated and her mental and physical health suffered. She considers that she lost a good business as a result of the prolonged work in the vicinity of her shop [[CZS00000032](#)].

24.60 While Ms Marshall's experiences illustrate the effects of the construction work on a relatively new business, the evidence given by Mrs Johnstone concerned the effect that it had had on a long-established successful business located on Leith Walk near Pilrig Church, a location which she described as being at the heart of major road works associated with the Tram project. Her husband, who died in 2004, had established a business selling and installing fireplaces and heating systems in 1981. The company employed six people, including her son, who aspired to running the business in the future. When construction work commenced there was very little communication or co-operation between the Council and local businesses. Her reference to "the Council" is indicative of the public perception that CEC was responsible for every act or omission associated with the project. Poor communication was also the responsibility of **tie**, which was responsible for management and progress of the work. Contrary to

initial assurances that there would be minimal disruption to businesses and that plans would be put in place to ensure "business as usual", traffic on Leith Walk was restricted to a single lane and weekly deliveries to her business of bulky, heavy goods such as granite and marble slabs, central heating boilers, fires or fire surrounds could not be offloaded. Without these materials the company had to cease trading, resulting in the dismissal of its employees [CZS00000030]. Mrs Johnstone's account of the roadworks preventing deliveries of essential bulky goods was supported to some extent by the evidence of Dr C Mackenzie about problems with deliveries at his business premises in Haddington Place and that of Dr Herbert mentioned in paragraph 24.48 above, although the latter referred to a single delivery to his home in the west end of the city.

- 24.61** From the evidence submitted by Dr C Mackenzie it is apparent that the construction work adversely affected his family business [CZS00000064]. Dr C Mackenzie was the managing director of Hi-Fi Corner (Edinburgh) Limited. It had retail outlets at 1 Haddington Place (which is at the corner of Leith Walk, opposite Gayfield Square) and at 121 Rose Street (which is situated parallel to Princes Street and at the west end of the city centre). In addition, the company traded from premises in Falkirk. Apart from his experiences related to the company's outlets in Edinburgh during the construction works, Dr C Mackenzie attended a public meeting at which other business proprietors recounted their experiences. He recalled a restaurateur having to make his employees engaged in home deliveries redundant because of access issues to the restaurant premises.
- 24.62** As part of the construction work, the loading bay near the shop at Haddington Place had been moved, and there were resultant difficulties with loading and unloading goods. **tie** offered help to load and unload goods but in the event those allocated to help apparently refused to move goods because of "health and safety" reasons [libid, page 0003]. Moreover, couriers would not wait, with consequent loss of deliveries and uplifts. As a result of the trading difficulties at Haddington Place caused by the construction work on Leith Walk, the company took a conscious decision to move the business to its premises in Rose Street. However, when the construction work extended to the west end of the city-centre customers stopped going there because of access issues. Despite a substantial rent reduction, the company was unable to continue trading there. After more than 20 years of successful trading at that location, trading at Rose Street ceased on 30 April 2011 resulting in staff redundancies. Dr C Mackenzie gave evidence that he lost rental income at Haddington Place. He owned the shop premises and a flat nearby, and he rented the former to the company and the latter to a tenant. Throughout the period of the construction work he did not charge any rent for the shop premises and reduced the tenant's rent for the flat because of disturbance caused by the works. He reported that he suffered a personal loss of £40,000, which had been intended for his pension provision.
- 24.63** Apart from the personal loss mentioned in paragraph 24.62 above, Dr C Mackenzie reported a steady decline in the net assets of the company until the cessation of tram works, at which point the business started to recover. He estimated the loss of the company's retained profits accumulated over many years to be in the order of £300,000. He attributed the losses to the construction work. In addition, as a result of the closure of the premises in Rose Street the company lost at least three employees – and potentially more, as it would have been in a position to recruit further people had business not been interrupted.

24.64 Mr Steedman, the managing director of an accountancy firm whose clients are predominantly small-to-medium-sized businesses, also gave evidence about the effect on businesses on Leith Walk [TR100000082; CZS00000066]. He referred to four businesses in that location each of whom had suffered a reduction in turnover because of the construction work in the vicinity of their premises that caused access problems to their business premises for customers. In the case of a hairdresser the loss of custom during the construction work had a long-term effect because it was difficult to entice some customers back if they had found a satisfactory alternative service. He had direct knowledge of the reduction in turnover because of his professional involvement with these businesses in preparing their accounts.

Businesses in the west end of the city

24.65 Businesses in the west end of the city centre suffered in a similar manner to those on Leith Walk. The increase in the time taken to complete the construction work meant that the financial loss suffered by them was extended over a period of three years in excess of the period originally planned had the line been operational by 2011.

24.66 I have already mentioned Dr C Mackenzie's evidence of the effect of the construction work upon the retail outlet of Hi-Fi Corner (Edinburgh) Limited in Rose Street, which ultimately resulted in its closure. Mr Steedman also referred to the adverse impact of the construction work on businesses in the west end near Haymarket for which he had acted in a professional advisory capacity. One of these businesses ceased trading altogether, and he considered that the disruption caused by the construction work was a contributory factor in the closure of that business.

24.67 Ms Adamson's evidence about the effect on her business near Haymarket was to a similar effect. Her business suffered a "huge financial burden during the construction process" due to the "failure of CEC and Contractors in allowing our customers safe access to our business premises during the entire tram construction project". Even when no construction work was being carried out, she was unable to get the barriers removed to allow easier local access. After the completion of the works her business and neighbouring businesses had difficulty in encouraging customers back to the area. She also considered that the financial assistance of £3,000 or £4,000 offered to small businesses depending on turnover was totally inadequate [CZS00000013]. Mr Steedman shared that view. Bearing in mind the prolonged period of disruption to businesses in this locality and on Leith Walk, and the associated losses incurred by them, I consider that there may well be merit in that complaint.

24.68 Mr Johnson, the owner or part-owner of several commercial properties in Stafford Street and Alva Street in the west end of Edinburgh, explained that "six years of indecisive tramway construction" had contributed to the destruction of that area "as a shopping area, full of lovely small specialist shops". Subsequent traffic measures making it difficult for vehicular traffic to access the area had also contributed to the area's decline as a location for specialist shops. Although the latter issue is not within the terms of my remit, Mr Johnson's evidence about the effect of the construction work is relevant when considering the consequences of the delay to the project. As a landlord he witnessed a significant decline in the area's prosperity. He said that small specialist shops closed and the cost to his company was "in six figures" [CZS00000075].

24.69 Although I acknowledge that the calculation of losses suffered by businesses in Edinburgh that are directly attributable to the construction work is complicated by the effects of the recession following the banking crisis at that time, I am satisfied

from Dr C Mackenzie's evidence that the company suffered significant financial loss as a result of the inordinate delay in the construction works that affected both of its business outlets along the route of the tram. His experience is mirrored by that of other businesses on Leith Walk and in the west end. The evidence as a whole has persuaded me that the delay in the construction work and the associated disruption were significant contributors to the losses incurred by businesses at that time. Many members of the public who responded to the Inquiry's call for evidence referred to access difficulties in the vicinity of their homes and businesses. In particular, Ms Paterson stated that Leith Walk was blocked off with Heras fencing for years and that "[m]any shops went out of business because the street was fenced off and the crossing places sited so far apart" [CZS00000026]. It is self-evident that difficulty in accessing business premises that rely on passing trade is likely to have a detrimental effect on the turnover and profitability of that business, and it is unsurprising that some businesses ceased trading if access was constrained to the extent mentioned by Ms Paterson. Access issues are distinct from any loss of trade related to the recession. Indeed, it is clear that CEC recognised that the financial difficulties experienced by businesses were caused to a significant extent by the construction works. CEC introduced the various schemes designed to support affected businesses that are mentioned in paragraphs 24.12–24.15 above. No equivalent schemes were introduced in other parts of the city to compensate businesses for losses suffered as a result of the recession.

24.70 As an indication of the generality of the impact on businesses, Mr Clarkson, a resident in the west end of Edinburgh at the time of the construction work, observed:

"The extended timescales caused huge disruption to traffic routes locally and led directly to many businesses closing down along the route. Barriers, noise, lack of access, unsightly ditches, etc. all made for an unpleasant experience. This last effect made me go shopping elsewhere (malls out of town) in order to drive and park without hassle." [CZS00000007]

Although that was the perception of one member of the public, I have no doubt that it reflected the views of many others. From consideration of the evidence in its entirety it is clear that there was undoubtedly a significant adverse impact on businesses and residents, particularly in the west end and in the section from York Place to Newhaven.

Unnecessary costs

24.71 As was recognised in the closing submission on behalf of CEC, one of the consequences of the failure to complete the line to Newhaven as projected was that CEC incurred costs unnecessarily. In summary, these included:

- the costs of the design of the line between York Place and Newhaven;
- the costs of all construction work undertaken beyond York Place (inclusive of all professional and management fees); and
- the purchase of an excessive number of trams (which CEC estimated at between seven and ten) which it was unable to resell or to lease to other tram operators [see, e.g., Mr C Smith PHT00000053, page 177]. In a report to CEC dated 16 May 2011 the surplus was estimated at between six to ten vehicles [CEC01914650, page 0009, paragraph 3.20].

- CEC's purchase of material and equipment from Infraco, which it had in preparation for the construction of the line beyond York Place and the cost of their storage, as well as compensation payments made to businesses on Leith Walk and beyond.

The inclusion of the compensation paid to businesses on Leith Walk in the list of wasted costs is a recognition that such expenditure would have been unnecessary if the line had terminated at York Place and no work had been undertaken beyond that point.

- 24.72** As noted in paragraph 24.71, senior counsel for CEC acknowledged that the cost of the design between York Place and Newhaven was wasted costs. Although part of the mediation settlement figure required BBS to complete the design for that section of the line, CEC later instructed BBS to stop work on that design at no cost saving to CEC. This was discussed more fully in Chapter 20 (Post-Mar Hall).
- 24.73** On the evidence available, I have been unable to evaluate the unnecessary costs but on any view the excessive costs relating to tram vehicles ranged between sums in excess of £12 million and £20 million being 22 per cent and 37 per cent respectively of the original contract price of £55,041,624.88 [BFB00053258, page 0032]. Obviously the figures for these excessive costs will increase when account is taken of the additional £6,636,003 paid to Construcciones y Auxiliar de Ferrocarriles SA ("CAF") which I mentioned in Chapter 20 (Post-Mar Hall), some of which related to the storage in Spain of tram vehicles that CAF was unable to deliver because the depot was not completed on time [TR100000290_C, pages 0086–0087, paragraphs 246–250]. As discussed in paragraph 24.76 the unnecessary costs associated with tram vehicles will be mitigated when all of the vehicles are brought into service following the opening of the extension to Newhaven but there will still have been an element of wasted costs relating to vehicles.
- 24.74** Apart from the above wasted costs which were acknowledged on behalf of CEC, **tie** incurred expenditure on the design of line 1b and on compensation of £3.2 million paid to Bilfinger Berger because the construction of line 1b did not proceed. This was also wasted expenditure.
- 24.75** Taking into account the additional expenditure incurred in relation to tram vehicles and the nature of the other elements of wasted costs mentioned above, particularly all expenditure on design and on the diversion of utilities as well as other construction work, inclusive of all professional and management fees, I consider that a reasonable estimate of the total figure for wasted costs would certainly amount to several tens of millions of pounds.
- 24.76** The completion of the extension and the commencement of the service to Newhaven should result in the use of the trams that were surplus to requirement when the route terminated at York Place. That does not mean that there would have been no unnecessary costs associated with these trams. Despite the completion of the extension CEC will have incurred storage and maintenance costs of the extra vehicles when they were surplus to requirements as well as wasted financial costs associated with purchasing them nearly a decade prior to their use. However, on the evidence available to me, I am unable to reach any view about those possible costs. As a generality, it is not possible for me to determine at this stage the extent to which the unnecessary costs will be mitigated. Such determination will need to await the completion of the extension and the publication of its final costs. These should indicate the extent to which the cost of the various items mentioned in paragraphs 24.71–24.73 above has been subsumed into the cost of the extension.

24.77 In the closing submissions on its behalf, senior counsel for CEC observed that the agreement to transfer material, equipment and design as part of the settlement agreement was sensible and would benefit CEC if it decided to proceed with the extension to Newhaven, although he recognised that:

“a number of utilities conflicts remain especially in Picardy Place and Leith Walk and that any materials retained would need to be carefully checked before being re-used” [TR100000287_C, page 0306, paragraph 7.49].

While that is correct, it risks being an over-simplification of the extent to which the unnecessary costs will cease to be wasted costs as a result of the extension. By implication from the quotation mentioned above CEC recognises that it may not be possible to use all the material and equipment that it acquired following the mediation settlement. If that occurs, the cost of any unused material and equipment will have been unnecessary. However, as was noted in Chapter 19 (Mediation and Settlement), much of the material and equipment that CEC purchased following the settlement was utilised by Infracore in constructing the section to York Place, and Siemens managed to reduce the items to be transferred to CEC by cancelling some of its orders for material and equipment. In its closing submissions Siemens estimated £3 million as the cost to CEC of items transferred to it but unused in the section to York Place. To the extent that such material cannot be utilised it will remain unnecessary expenditure. Moreover, irrespective of whether all such material is capable of being used in the construction of the extension to Newhaven, CEC will have incurred the cost of its storage between the implementation of MoV4 in 2011 and the date of its use or disposal. That will also be an unnecessary cost, which will be ascertainable only after the completion of the extension.

24.78 As was discussed in Chapter 5 (Procurement Strategy), **tie**'s strategy involved diverting utilities in advance of the tram construction works. This had the claimed advantage of enabling the construction of the tram line to proceed unencumbered by the existence of utility pipes or cables. On that basis, one might think that the residents and the owners of businesses north of York Place could have a reasonable expectation that the construction work for the extension to Newhaven should proceed expeditiously because of the efficient diversion of all utilities in that location during the prolonged period of disruption already experienced by them. Nothing could be further from the truth. As was noted in paragraph 24.77 above, in the closing submissions on behalf of CEC senior counsel acknowledged that a number of utilities conflicts remain, especially in Picardy Place and Leith Walk. That would appear to be an understatement if one takes into account the additional work required to divert utilities in the west end, which was discussed in Chapter 20 (Post-Mar Hall) It is not possible to quantify that unnecessary expenditure at this stage, but it will be reflected in the final cost of the extension.

24.79 A further item of unnecessary expenditure resulting from the termination of the line at York Place has been incurred in the construction of the tram stop at that location. The extension involves the removal of that tram stop and its relocation to Picardy Place. Had the line been built to the extent projected, there would have been no need for the tram stop at York Place.

Unrealised benefits

24.80 As already noted, the expectation had been that the entire route from the Airport to Newhaven would be completed within the same construction period, and that the tram service along that entire route would have been operational by 2011. Mr Coyle estimated the loss of revenue from the trams at approximately £4 million per annum as a result of the shortening of the route. Leith Walk was expected to be a significant trip generator, especially given the foot of Leith Walk's status as a major public transport interchange [[TR100000144_C](#), page 0132]. Although that consequence is expressed from the perspective of the tram operator, CEC would have benefitted as the sole shareholder of the tram operator from the profit derived from that lost revenue. Mr Coyle's evidence in this respect highlights the removal of a mode of public transport that residents in that locality and the public generally had been promised as a benefit of the project. Mr Drysdale, who responded to the public call for evidence, observed:

"The most striking consequence of the failure to construct the full tram network has been the lack of any improvements to public transport services in North Edinburgh, where the tram would have provided many new journey opportunities, much faster links between North Edinburgh and West Edinburgh ... better access to the airport, and improved mobility for people living across a large part of North and North West Edinburgh." [[CZS00000014](#), page 0003, paragraph 11.]

24.81 Related to the lack of improvements to the public transport network was the loss of the anticipated benefit of a tram service as a catalyst for the development and regeneration of the Leith and Newhaven areas. In that regard Mr Balfour MSP, who had been a councillor since 2005 and was Conservative group leader at CEC between May 2010 and May 2012, observed:

"The shortened tram line demonstrated that the Tram Project had failed to meet the objectives and benefits of the Final Business case. One of the main reasons for the tram system was to provide a link to Leith and Ocean Terminal. I believe there was a requirement to provide a better transport system for the north of Edinburgh. This would have supported regeneration of the area." [[TR100000016](#), pages 0032–0033, paragraph 95.]

Other witnesses expressed similar views about the loss of the support of the tram service for the regeneration of the area [see, e.g., Councillor Donald Anderson [TR100000117_C](#), pages 0131–0132, paragraph 349; Councillor Wheeler [TR100000092_C](#), page 0085, paragraph 190].

That in turn resulted in a loss of developer contributions, mentioned in paragraph 24.20 above, although the economic downturn from 2008 may also have been a contributory factor in the loss of these contributions.

24.82 I consider that a further consequence of the shortened tram line was its impact upon CEC's obligation to provide value for money. In any major capital transportation project in the public sector it is essential to undertake a technical and economic assessment of the project prior to deciding to proceed with it. **tie**/CEC undertook such assessments at various stages of the process, from which it appeared that the Benefit to Cost Ratio ("BCR") was greater than 1, indicating that the project would deliver value for money. Moreover, such a conclusion satisfied a condition of the grant of £500 million from Scottish Ministers. The Atkins report mentioned in paragraph 24.84 below noted that a BCR of "less than one suggests that the

economic return would be less than [sic] the investment, even when appraised over 60 years" [CEC02044271, page 0034].

- 24.83** In April 2011, CEC commissioned Atkins, Engineering and Project Management Consultants, to undertake an independent review of the Business Case for the Tram project. The main focus of the audit was a review of the work of the Joint Revenue Commission ("JRC") in assessing the benefits of the introduction of a tram system. Among the documents considered by Atkins were the Final Business Case version 2 (2007) and the Business Case Update (2010), as well as an updated Transport Economic Efficiency ("TEE") analysis by JRC of three route options also commissioned by CEC in April 2011. The options analysed by JRC were the complete phase 1a from the Airport to Newhaven, a truncated route from the Airport to St Andrew Square, and a truncated route from the Airport to the foot of Leith Walk.
- 24.84** In its report, Atkins noted that if one took account of the full costs and benefits the BCR was less than 1 for each of the three routes mentioned above. However, to abandon the scheme would represent a zero return on a very large investment. The consequences for CEC of having no asset in exchange for the capital expenditure incurred prior to 2011 would have been catastrophic and were discussed in Chapter 19 (Mediation and Settlement). JRC had considered the future cost of each option without taking into account the spent costs. In that situation, the BCR in each case exceeded 1. JRC's relevant table illustrating the BCR for each option when spent costs are taken into account and when they are omitted was reproduced in Atkins' report and is reproduced in Table 24.2 [ibid, page 0035].

Table 24.2: Updated TEE Outputs (Source – JRC, June 2011)

	Revised Phase 1		St Andrews Square		Foot of the Walk	
	Full Costs	Minus Sunk Costs	Full Costs	Minus Sunk Costs	Full Costs	Minus Sunk Costs
Public transport user benefits	541	541	340	340	493	493
Other road user benefits	-196	-196	74	74	-156	-156
Private sector provider effects	81	81	68	68	60	60
PV of Scheme Benefits	427	427	482	482	397	397
PV of Scheme Costs	760	321	658	219	762	323
Net PV	-334	106	-176	263	-365	74
Benefit to Cost Ratio to Government	0.56	1.33	0.73	2.20*	0.52	1.23

*Please note that following an update on the treatment of sunk costs in relation to St Andrew Square, the BCR for St Andrew Square should now read 1.85.

24.85 From Table 24.2, the BCR of the route from the Airport to St Andrew Square is 0.73 if one includes the costs incurred prior to 2011, and 1.85 if these costs are excluded. I recognise that it is appropriate to ignore sunk costs when faced with a decision as to which future option to take. However, when looking at the cost of the project overall it is clear that if the outturn figure had been known at the outset and a BCR of 0.73 had been reported, Scottish Ministers would not have made the grant of £500 million towards the project. In that event it is probable that the project would not have proceeded until CEC could establish a positive economic case in its support.

Reputational damage

24.86 In its closing submissions CEC noted that several witnesses had acknowledged that the cost over-run and delay had an adverse impact on CEC's reputation and on the city in general [TR100000287_C, page 0308, paragraph 7.54]. The prolonged nature of the work, the escalating costs and the curtailment of the route, as well as the difficulties experienced by Edinburgh residents and businesses and visitors to the city alike, were well documented in the media. I have little doubt that the experience of visitors to the city – and the legitimate media scrutiny of the consequences of the failure of the project to deliver what had been promised within, or approximate to, the allocated budget – had some effect on the perception of others on the competence of CEC as a local authority. However, it is difficult to establish and quantify any resulting damage that may have been caused to the city's reputation. In his evidence to the Inquiry Mr Harries expressed his view that:

"what Edinburgh has now is an excellent tram system. It operates well. It's reliable. And technically it is good. So I think Edinburgh is in a good place now."
[PHT00000016, page 44.]

24.87 The quality and efficiency of the existing tram service are not within the scope of the Inquiry but may be relevant considerations for those seeking to invest or establish businesses in the city. Whether the existence of the tram system will reduce any reputational damage caused to the city or whether it will feature in the history of the city as a reminder of the mismanagement of the project will be determined in the distant future.

Conclusions

24.88 A consequence of curtailing the route at York Place is that it is not possible to assess by how much the cost of line 1a will exceed the budget of £545 million. What is undoubtedly the case is that the cost of line 1a will be at least £1,043,039 million if the extension to Newhaven is completed on time and within budget, resulting in an overspend of at least £498 million to construct line 1a.

24.89 Although the decision to reject the abandonment of the project in 2011 is understandable – because that would have resulted in wasted expenditure in excess of £500 million, for which CEC would have received no asset – CEC's decision to construct the line to York Place at a cost substantially in excess of the budget for the entire line resulted in CEC failing to receive value for money if one takes into account the total expenditure on the line from the Airport to York Place.

24.90 A consequence of failing to deliver the project on budget was the need for CEC to borrow £246.5 million to complete the section to York Place, with the result that CEC had to commit future revenue over a 30-year period to meet repayments of capital and interest. That commitment will result in future lost opportunities for CEC to provide services to the citizens of Edinburgh throughout that period of 30 years.

- 24.91** The current best estimate of the extent of the commitment of future expenditure is 1 per cent of CEC's annual revenue budget over a 30-year period. However, if any borrowing has been required to complete the extension to Newhaven that commitment will increase, resulting in more lost opportunities in the future. Any additional borrowing will also have been incurred as a result of CEC failing to deliver the project within budget.
- 24.92** A consequence of curtailing the line at York Place is that CEC has incurred unnecessary costs amounting to several tens of millions of pounds relating to the section between York Place and Newhaven. Although the extent of these costs may be mitigated by the completion of the extension to Newhaven, the extent of any mitigation cannot be determined until after the completion of the extension.
- 24.93** The failure to deliver the project on time and to complete the line to Newhaven has also resulted in a loss of revenue of about £4 million per annum for a period of about 10 years and has deprived residents in that locality and the public generally of the improvements to public transport that they had been promised.
- 24.94** The failure to deliver the project on time and to complete the line to Newhaven also removed the claimed benefit of having a tram service as a catalyst for the development and regeneration of the Leith and Newhaven areas.
- 24.95** The failure to deliver the project on time extended by several years the period of disruption, inconvenience and loss of amenity suffered by the public generally and by residents along the length of the route, particularly those living in the west end of the city and between York Place and Newhaven.
- 24.96** The residents between York Place and Newhaven will have continued to suffer such disruption, inconvenience and loss of amenity during the construction of the extension to Newhaven, which itself is a consequence of the failure to deliver the project to the extent projected.
- 24.97** Businesses in the west end and on Leith Walk suffered loss for several years longer than anticipated because of the failure to deliver the project on time. Businesses between York Place and Newhaven will have continued to suffer loss because of the construction of the extension to Newhaven, which is a result of the failure to deliver the project to the extent projected.

Chapter 25

Findings in Fact and Recommendations

(a) Findings in fact

Background

- 25.1** The construction of the Edinburgh Tram Network ("ETN") was identified as a proposal in the City of Edinburgh Council's ("CEC's") New Transport Initiative ("NTI"), a long-term project involving a number of proposals to be funded by congestion charging. After the abandonment of congestion charging in 2005, CEC retained the ETN as a major construction project. The procurement and delivery of the ETN was to be undertaken by **tie** Limited ("**tie**"), a company incorporated, and wholly owned, by CEC to deliver the proposals in NTI, including the Edinburgh Tram project (the "Tram project").
- 25.2** The Tram project was the largest capital project undertaken by CEC in living memory. CEC had a budget of £545 million for the project, consisting of a grant of £500 million from the Scottish Ministers, with the balance being funded by CEC. The budget included the purchase of tram vehicles to operate on the network as well as the construction of the network itself.
- 25.3** The contracts for the construction of the network infrastructure ("Infraco contract") and for the tram vehicle supply and maintenance contract ("Tramco contract") were to be negotiated separately as part of the procurement strategy but were to be signed simultaneously as each of them was an integral part of the project. By separating these contracts the intention was that the risks associated with each of them were allocated to the company or consortium best able to manage these risks. There was the added advantage that **tie** was not bound to accept the vehicles selected by a consortium including Infraco and Tramco and could benefit from the competition between different vehicle manufacturers and suppliers. In accordance with that strategy, **tie** negotiated these contracts separately with the consortium of Bilfinger Berger UK Limited ("BB") and Siemens plc ("BBS") and Construcciones y Auxiliar de Ferrocarriles SA ("CAF") respectively.
- 25.4** The strategy involved the novation of the Tramco contract to BBS at the date of signature of the Infraco contract, but on 7 February 2008 in the Rutland Square Agreement mentioned in findings 25.79-25.81 and 25.104 below **tie** confirmed that it had no objection to CAF joining the consortium of BBS either before or following the signature of the Infraco contract and the novation of the Tramco contract. Following the signature of the Infraco contract on 14 May 2008, which included the Tramco contract as a separate schedule, the consortium included CAF and became known as BSC.
- 25.5** Planned construction and financial appraisal of the project were based upon a phased approach consisting of phase 1a (Edinburgh Airport to Newhaven) and phase 1b (the Roseburn spur from Haymarket to Granton Square).
- 25.6** On 20 December 2007, by a majority, CEC approved the second version of the Final Business Case ("FBCv2") and delegated to the Chief Executive the power to authorise **tie** to award the Infraco contract and the Tramco contract, subject to price and terms being consistent with the Final Business Case ("FBC") and subject to the Chief Executive being satisfied that all remaining due diligence was resolved to his satisfaction.

- 25.7** Price certainty was important for CEC and its decision on 20 December 2007 to enter into the necessary contracts for the project was taken on the basis that phase 1a at least was to be constructed and opened for service in the summer of 2011 within the budget of £545 million, with an expectation that part of phase 1b might also be constructed within that budget.
- 25.8** CEC councillors based their decision on 20 December 2007 to proceed with the project upon both the FBC prepared by **tie** and reports from senior officials in CEC that reassured them that line 1a, at least, could be completed within available funds and would provide a Benefit to Cost Ratio ("BCR") greater than 1, indicating that the project provided value for money.
- 25.9** After a delay of almost three years, line 1a of the ETN was opened for revenue service on 31 May 2014, although its extent was restricted to a line from the Airport to York Place (the "restricted line 1a") rather than to Newhaven as had been the intention in the FBC.
- 25.10** The total outturn cost of the works by BSC under the Infraco contract was £427,206,309.52 for the restricted line 1a, compared with the original construction works price of £238,607,664 for a line between the Airport and Newhaven (the "entire line 1a").
- 25.11** There is uncertainty about the final total cost of completing the restricted line 1a. Following the mediation at Mar Hall the projected budget for doing so was £776 million. In March 2017, CEC reported the cost of completing the restricted line 1a as £776.7 million. This was not, however, an accurate statement of the total cost, because:
- it underestimated outstanding claims by third parties;
 - CEC was unaware of a substantial claim that had not been intimated at that time;
 - it did not include certain costs of the project such as the cost of other infrastructure works undertaken by CEC directly attributable to the Tram project but allocated to other CEC budgets;
 - it failed to include a pension fund deficit arising from the cessation of **tie**'s business;
 - it omitted compensation payments to businesses and the Net Present Value of the cost of borrowing the additional £246.5 million needed to complete the restricted line 1a.
 - Taking these items into account, the best estimate of the total cost of the restricted line 1a is £835.739 million.
- 25.12** The full cost of the entire line 1a, and the extent to which it has exceeded the budget of £545 million, will only be known once the extension from York Place to Newhaven has been completed and its cost added to the £835.739 million cost of the restricted line 1a. In undertaking that exercise the cost of the extension should not be understated for reasons similar to those mentioned in the preceding finding or for any other reason that omits to include all expenditure incidental to the construction of the extension.
- 25.13** Based upon the estimated cost of £207.3 million, including risk, support for business and optimism bias in the business case submitted to CEC in 2019 in support of the extension from York Place to Newhaven, the total expenditure on line 1a will exceed £1,043 million – nearly double the original estimated cost. Obviously, the increase

in price of the entire line 1a above the estimated cost of £545 million will be even greater if CEC has borrowed money to fund the extension or if the estimated cost for the extension is otherwise exceeded.

tie's procurement strategy and failures in its implementation

- 25.14** CEC was the promoter and owner of the project but did not have the necessary expertise to procure and manage it. It therefore appointed **tie** to do so.
- 25.15** As a newly formed company, **tie** had no corporate experience of delivering any major project. It had no knowledge of, or experience in managing, the particular difficulties associated with the construction of a tram or light rail system through the centre of a city in the United Kingdom.
- 25.16** Although some senior personnel in **tie** had prior experience of the construction of a tram line in the UK, the majority, including those in the most senior positions, did not.
- 25.17** **tie** recruited senior staff as consultants rather than as employees, and on contracts with relatively short notice periods. There was a significant turnover of staff, including those in senior positions. Between 2006 and 2008, four different individuals had filled the senior role of Tram Project Director ("TPD"). Loss of experienced staff resulting from the short-term contracts was exacerbated by **tie's** replacement of experienced staff with redeployed staff who had previously worked on the Stirling-Alloa-Kincardine railway ("SAK") project or the Edinburgh Airport Rail Link ("EARL") project after **tie's** involvement with these projects ceased.
- 25.18** The most significant change of TPD occurred early in 2008 with the replacement of Mr Crosse, who had prior experience of tram projects, with Mr Bell, who had none.
- 25.19** The ostensible reason for the removal of Mr Crosse as TPD was to enable him to focus on managing the final stages of the appointment of the Infraco contractors with the assistance of Mr Gilbert and Mr Dawson. Mr Crosse left before the completion of the contract negotiations and Mr Gilbert assumed the role of principal negotiator until he was replaced by Mr McEwan. The frequent changes in personnel at the critical stage of finalising the pricing schedule of the Infraco contract was not in the best interests of **tie** or CEC and was in stark contrast to the approach of BBS, which retained the same personnel for negotiations throughout.
- 25.20** Bearing in mind CEC's desire for price certainty, **tie's** procurement strategy was intended to take active steps to manage risk out of the project. Apart from the separation of the procurement of the Tramco contract and the Infraco contract mentioned in finding 25.3 above, these included:
- prior to the conclusion of the Infraco contract, providing the infrastructure contractor ("Infraco") with completed designs with all necessary approvals and consents subject to the population of these designs with specific systems and components chosen by Infraco;
 - completing the diversion of utilities in advance of the infrastructure work; and
 - novating the design contract to Infraco at the date of signature of the Infraco contract.
- 25.21** The procurement strategy was a sensible response to the difficulties experienced elsewhere in the UK in the construction of light rail systems. The failure of the Tram project was caused by the failure to implement the procurement strategy in a number of respects considered in the following findings in fact.

Design

- 25.22** In implement of its procurement strategy, **tie** concluded various contracts, the first of which was the contract for System Design Services ("SDS") with Parsons Brinckerhoff ("PB") on 19 September 2005, for design and technical services in relation to both phases 1a and 1b (the "SDS contract").
- 25.23** The scope of design to be carried out by PB depended on the element of works in question. In relation to the civil engineering elements, PB was to produce the design up to the detailed design stage. In relation to the electrical and mechanical elements, PB was to develop specifications of the functionality and technical elements required and the infrastructure required to support them. The detailed design of the electrical and mechanical elements would then be completed by the appointed infrastructure contractor depending on the particular components and systems that formed part of its bid.
- 25.24** Completion of the design was delayed. At the date of signature of the Infraco contract, design was incomplete and subsequent development of the design, treated by the contract as change, was inevitable. The effect of this, combined with the terms of the contract relating to change mentioned in findings 25.88 and 25.89 below, was inevitable delay and additional expense.
- 25.25** The strategy relating to completion of design was intended to provide potential infrastructure contractors with an informed basis for pricing their bids, thereby reducing the need for risk premiums and increasing the probability of achieving the price certainty that CEC sought.
- 25.26** Concluding the Infraco contract while the design was incomplete was a material departure from the procurement strategy and failed to transfer risk to Infraco to the extent upon which the FBC was based, meaning that the desire for certainty as to price could not be achieved.
- 25.27** The primary responsibility for design delay lay with **tie** for mismanaging the SDS contract, but PB's failure, before commencing design, to engage with CEC to discuss CEC's design requirements also contributed to the delay.
- 25.28** Some examples of **tie**'s mismanagement of the SDS contract are:
- For three months between December 2005 and March 2006, **tie** failed to notify PB of significant changes made to the original plans and sections submitted to the Scottish Parliament during the parliamentary process for approval of the Tram Bills, with the result that PB continued with the preparation of design on the basis of the wrong baseline.
 - **tie** failed to involve CEC and third parties at an early stage in the design process to determine their wishes and requirements and to manage their expectations. The result was frequent and belated requests for changes to design including the reconsideration of options that had already been rejected.
 - Different teams within **tie** requested that PB prioritise different items of design, at different times, in a manner that lacked co-ordination, resulting in an inefficient process for the production of design.
 - **tie** failed to provide PB with instructions on critical issues, resulting in PB ceasing work on the SDS contract between February and June 2007.
 - A misalignment between **tie**'s Employer's Requirements and the design produced

by PB arose as a result of **tie**'s procurement team amending the Employer's Requirements to take account of its discussions with Infraco bidders without reference to PB. PB continued to develop the design for the tram network on the basis of the unamended requirements. In early 2007, it became evident that the proposals received from the Infraco bidders, the Employer's Requirements and the SDS design did not align.

25.29 Although the primary responsibility for design delay was attributable to **tie**'s mismanagement the SDS contract failures by CEC officials, referred to as CEC's failures, were a major contributor to such delay. Some examples of CEC's failures in that regard are:

- Its failure to clarify its own requirements and the requirements of interested third parties before the commencement of design: for example, it failed to determine land uses in the vicinity of the Picardy Place junction and thereby prevented the design of that junction. Moreover, although, around December 2005, it did produce the Tram Design Manual [[CEC00069887](#)], which gave some guidance on design principles, that guidance was of a very general nature. In April 2008, a month before contract close, it produced the draft Tram Public Realm Design Workbook [[PBH00018590](#); [CEC02086917](#); [CEC02086918](#); [CEC02086920–CEC02086934](#)]³⁵, which was intended to supplement the guidance in the Tram Design Manual [[CEC00069887](#)] and the Edinburgh Standards for Streets [[CEC00669586](#)] and to assist PB in developing the details of the designs for the City Centre to obtain consents and approvals. Such guidance was produced too late and ought to have been available prior to the award of the SDS contract.
- Prior to the settlement of disputes between **tie** and BSC following mediation in 2011, CEC failed to work in a collaborative manner to resolve design issues swiftly and with clarity or to provide a focus on enabling the project to proceed smoothly.
- The lateness and sheer volume of its comments on design caused delay and expense.
- It commented on design with a number of voices, representing different departments within CEC with their own responsibilities, in which each of them focused only on what the ideal position would be for its own particular responsibilities rather than a single, considered voice. Had there been someone with responsibility to oversee and co-ordinate the response from CEC to the many requests for approvals and consents and to take into account the significance of the project and its benefits for Edinburgh and the wider community, as well as departmental responses, it is likely that the responses would have been more proportionate, focused and reasonable and would have avoided much of the delay that occurred in the production of design and the obtaining of consents and approvals.

Novation of SDS contract to Infraco

25.30 The procurement strategy included the novation of the SDS contract to Infraco when the Infraco contract was signed. The strategy was based upon the expectation that design would have been completed by PB to the extent specified in the SDS contract and that PB would have obtained all necessary consents and approvals. On that basis, the risk of the cost of making design changes after the signature of the Infraco contract would be transferred to Infraco unless the change was made at the request of **tie**.

³⁵ CEC were unable to provide the Inquiry with the "Tram Public Realm Design Workbook" as a single document [[CEC02087292](#)].

- 25.31** The novation of the SDS contract to Infraco did not have the effect of transferring the risk of design change to Infraco as intended, because at the date of signature of the Infraco contract design was incomplete and not all consents and approvals had been obtained.
- 25.32** The incomplete design and the fact that not all the necessary consents and approvals had been obtained had to be reflected in the terms of the Infraco contract. The result was that the risk of design development was not passed to Infraco as intended.
- 25.33** **tie** retained a significant risk of design change after the award of the Infraco contract, with consequential increases in the cost of the project.
- 25.34** By insisting upon the novation agreement when design was incomplete, **tie** transferred control of completion of the design process to BSC but retained the significant risk of increased cost associated with it.
- 25.35** The novation agreement also removed the absolute obligation imposed upon PB in the SDS contract to obtain all necessary consents and approvals. Instead, PB would not have to bear the costs of amendments required by any approval body where the requirements were:
- inconsistent with or in addition to the Infraco proposals or the Employer's Requirements;
 - not reasonable given the nature of the approval body; or
 - not reasonably foreseeable within the context of the Infraco proposals or the Employer's Requirements.

Utilities

- 25.36** The need to divert underground utilities from the path of the proposed tram lines was recognised as a particular problem for the construction of any tram line through a city centre. There were usually uncertainties about the extent and precise location of utilities as records kept by utility companies were often incomplete or inaccurate. There was also unrecorded redundant apparatus relating to disconnected utilities that contributed to the congestion under ground, limiting the space available for relocation of utilities.
- 25.37** The diversion of utilities tended to be an expensive part of tram or light rail schemes. Following the experience of earlier schemes for contracts to construct tram networks through city centres, tenderers were not willing to take the risk of bearing the costs of diverting utilities without adding substantial premiums to their bids.
- 25.38** The procurement strategy required the diversion of utilities in advance of the infrastructure works, to remove the uncertainty and disruption to the programme for these works that undiverted utilities would otherwise cause for the infrastructure contractor.
- 25.39** The strategy relating to the diversion of utilities would have provided potential infrastructure contractors with an informed basis for pricing their bids, reduced the need for risk premiums and increased the probability of achieving the price certainty that CEC sought.
- 25.40** Instead of having utility companies diverting their own apparatus, **tie** planned to conclude an agreement with a single contractor who would have responsibility for the diversion of all utilities, except high-pressure mains and high-voltage power

cables or other apparatus requiring the specialist involvement of the utility company owning the apparatus.

- 25.41** At that time, this was the largest multi-utility project ever undertaken in Europe.
- 25.42** Following a tendering exercise, on 4 October 2006, **tie** entered into the Multi-Utilities Diversion Framework Agreement ("MUDFA") with Alfred McAlpine Infrastructure Services Limited. That company later changed its name to Carillion Utility Services Limited.
- 25.43** When MUDFA was signed it was recognised that it was not possible to make an accurate assessment of the work that would be required. Accordingly, the contract did not provide a fixed price for the diversion of utilities but instead stipulated rates that would be payable for whatever work was required.
- 25.44** **tie** did not have the experience or skills to manage such a complex project. The programme in MUDFA envisaged that the pre-construction services would be undertaken between October and December 2006 and the MUDFA construction works would thereafter take approximately 14 months between March 2007 and June 2008. This allowed for a gap of approximately seven months between the programmed completion of the MUDFA works and the planned commencement of the works under the Infraco contract.
- 25.45** In March 2007, prior to the Scottish Parliament election in May, there was uncertainty whether the project would proceed because the Scottish National Party ("SNP") was committed to abandoning it. Accordingly, a revised MUDFA programme was agreed, which provided for the MUDFA construction works starting in July 2007 and finishing by the end of 2008, i.e. a period of approximately 18 months, with almost no buffer between then and the start of the Infraco works.
- 25.46** Even this new period for the works for the diversion of utilities was not realistic and was inconsistent with the experience of other light rail projects in the UK. In projects in both Manchester and Birmingham, where the on-street works had been of a significantly shorter length, the diversion works took about two years to complete.
- 25.47** There were delays in obtaining information from utility companies about the location of their apparatus, which resulted in delays in the preparation of designs to be issued to the MUDFA contractor.
- 25.48** The utilities programme kept slipping and the cost of the MUDFA works increased due to the discovery of additional utility apparatus and unexpected underground obstructions. Each revised programme was too optimistic and was based on levels of production that had never been achieved previously. When additional apparatus was encountered the absence of any allowance for slippage in the programme meant that there was likely to be delay.
- 25.49** The MUDFA works were not completed before the signature of the Infraco contract.
- 25.50** When Bilfinger Berger ("BB") started work on Leith Walk in 2008 it encountered difficulties that prevented it from working in an efficient manner. These included lack of unrestricted access to designated work areas due to continuing MUDFA works in those locations, and the existence of utilities that had not been moved despite the MUDFA contractor ostensibly having completed the MUDFA works in that location.
- 25.51** Following difficulties in the implementation of MUDFA it was terminated early, by agreement, in December 2009. Two further contractors were appointed to carry out the remaining required works to utilities.

- 25.52** By the date of the mediation at Mar Hall in 2011, the MUDFA works were still incomplete. This included areas in which Carillion Utility Services Limited had ostensibly completed its works. For example, in the 700 metres of Shandwick Place, there were 302 utilities within the designated working area that had not been moved despite the alleged completion of the MUDFA works there.
- 25.53** Changes to the design of the infrastructure works after the diversion of utilities also caused delay because further consultation with, and the agreement of, utility companies was required to relocate the apparatus that had already been diverted.
- 25.54** Slippage in the SDS contract and MUDFA was principally the result of deficiencies in **tie's** ability to manage contractors and their programmes and to deliver projects on time and within budget.

Contract negotiations with Infraco

- 25.55** On 3 October 2006, **tie** issued an ITN to pre-qualified bidders, and tender submissions were required by 9 January 2007. On 9 January 2007, **tie** issued Supplemental Instructions to Tenderers, which required them to return as much as possible of the tender submission on 12 January 2007, with any outstanding, amended or updated tender information to be submitted as part of consolidated proposals on 16 April 2007.
- 25.56** The quality of the information provided by **tie** to tenderers was extremely poor. It was incomplete and was insufficient to enable tenderers to produce a firm price. The design and scope information provided during the bid phase was incomplete and immature. Although the Supplemental Instructions to Tenderers referred to the detailed design of structures, there was none. Even at the stage of signature of the contract, the final design was absent.
- 25.57** **tie** received bids from two consortia, one of which was BBS. Both bidders made substantial amendments to the proposed terms and conditions of the Infraco contract in order to protect their risk position pending receipt of more detailed design information and the completion of due diligence. Both bidders were nervous about the designs produced, and to be produced, by PB.
- 25.58** The state of design impacted on the intention, as part of the procurement strategy, to novate the design contract to Infraco. The strategy had been devised in the expectation that the design would be complete by that stage, and there was concern that the contract should not be novated at a time when the designs were still incomplete. **Tie** recognised that at least critical design must be completed before contract award if novation was to be achieved.
- 25.59** The tender submitted by BBS was heavily qualified because of the incomplete design. It included a large list of qualifications and clarifications, some of which were maintained until contract award.
- 25.60** In 2007 it was clear that **tie's** procurement programme was becoming increasingly unachievable as a result of the delays with design and MUDFA works. There was no recovery plan for the design or for the utilities contract. No arrangements, such as additional payment or instructions, were in place to accelerate progress on these matters.
- 25.61** DLA Piper Scotland LLP ("DLA") were appointed as legal advisers to **tie** in November 2002. The scope of their work included advice on procurement and strategy options. In 2005 DLA recognised CEC as a joint client with **tie** but despite the fact that CEC

was the client for the project and bore the responsibility for any cost overruns, DLA gave primacy to the obligations owed to **tie**. It also deemed **tie**'s instructions to be the same as any that would be given by CEC. As noted in findings 25.76 and 25.77 below when the interests of **tie** and CEC diverged, DLA did not advise CEC separately of its views concerning the premature publication of the Notice of Intention to Award ("NIA") the Infraco contract and the Tramco contract in March 2008 or of the apparent divergence of Interests between CEC and **tie** at that date.

- 25.62** For a period in 2007, while negotiations were being carried out with the Infraco bidders, **tie** dispensed with the services of DLA. It did so to save costs. For part of the period **tie** did not have any legal adviser. From June 2007, it had the benefit of only a junior solicitor whom it employed. It was a material error of judgement to proceed without legal advice – particularly in a critical phase of negotiations.
- 25.63** In June 2007, the Tram Project Board ("TPB") accepted that, because of the delay with the designs, it would be necessary to seek tenders on the basis of design information that was incomplete. This was a change of strategy, but councillors were not advised of this change and its implications for their desire for price certainty.
- 25.64** In late 2007, it was the intention that CEC should formally approve the FBC and authorise conclusion of the contracts at its meeting on 20 December that year. However, by December it was apparent that the efforts to have BBS firm up its price entirely to accord with the procurement strategy had been unsuccessful and that both the MUDFA works and the design were materially behind schedule.
- 25.65** The delays in the MUDFA works and the design meant that a decision was required as to whether to continue with the timetable for contract signature as planned or to postpone it to permit a return to the procurement strategy. There was a concern at this time within **tie** that if there was delay to the conclusion of the contract, the prices would rise and it would not be possible to implement the project within the funding available. **tie** was also concerned about the continued availability of the grant funding from the Scottish Ministers if the signature of the Infraco contract was delayed beyond the end of the financial year in which funding was to commence. The withdrawal of grant funding would almost certainly have resulted in the abandonment of the project which was the only remaining project in which **tie** was involved. As a result, **tie** insisted on adhering to the planned timetable. This decision was a major component in the difficulties that were to follow.
- 25.66** There was no factual basis for **tie**'s concern about the continued availability of grant funding mentioned in finding 25.65. In particular no information was sought from the Scottish Ministers about the availability of funding if the signature of the Infraco contract was delayed. In the event payments of grant were made even although the signature of the Infraco contract occurred after the end of the financial year in which it had been planned.
- 25.67** The political and financial implications of delay, including the potential loss of grant allocated to the then current financial year, and any relevant strategic decisions were matters for the consideration and determination of councillors, not CEC officials or **tie**. Despite that, councillors were not advised of the options of proceeding to contract signature as planned or of postponing signature until the procurement strategy could be implemented or of amending or cancelling the project.
- 25.68** By December 2007 there was an aspiration that was almost akin to desperation by **tie** to conclude the Infraco contract early in 2008. This was manifested in the decision to use the pre-arranged routine meeting on 13 December 2007 in Wiesbaden as a

high-level meeting, involving principals, to seek to progress to a conclusion of the contract. It was also manifested in the correspondence from Mr Gallagher prior to that meeting, in which he threatened to advise CEC to withdraw from the project unless his objectives were achieved. In an attempt to have the price finalised in time for CEC's meeting on 20 December 2007, negotiations between Mr Gallagher and Mr Crosse (representing **tie**) and representatives of BBS took place on 13 December 2007 in Wiesbaden, Germany.

- 25.69** Neither Mr Gilbert, the person at **tie** with responsibility at that time for negotiating the contract with Infraco, nor **tie**'s legal advisers attended the meeting in Wiesbaden.
- 25.70** In Wiesbaden, at a private meeting between Mr Gallagher (of **tie**), Dr Enenkel (of BB) and Mr Hofsaess (of Siemens), a conditional oral agreement was reached that the price for the infrastructure works would be increased by £8 million and that BBS would bear any additional costs arising from changes to the design after 25 November 2007 – the date of the design on which BBS had based its pricing. The acceptance of risk of design change had to be approved by relevant committees in BB and the agreement was conditional on their approval. In the event, BB did not accept the unquantified risk of design change.
- 25.71** The price agreed in the private meeting between Mr Gallagher, Dr Enenkel and Mr Hofsaess mentioned in finding 25.70 equated to the figure in the draft preferred bidder agreement as a limit for the Infraco contract price, above which **tie** was not obliged to award the contract but could do so at its discretion. It was also similar to the price included for infrastructure works in the total price of £498 million for the project in the version of the Business Case approved by CEC in October 2007 and the version to be approved by it on 20 December 2007.
- 25.72** Following the meeting in Wiesbaden, an agreement between **tie** and BBS was signed on 20 December 2007 in respect of the price for the delivery of phase 1a of the Tram project (the "Wiesbaden Agreement"). The effect of this was different from the conditional oral agreement, in that BBS would not bear the whole of the costs arising from changes in design after 25 November 2007. As it was clear that the design had changed since that date and was continuing to change, that meant that the price would increase above the sum stated. On this basis, certainty as to price was removed. This was not brought to the attention of councillors as a whole at the Council meeting on 20 December 2007, or at any stage prior to the signature of the Infraco contract.
- 25.73** Between December 2007 and May 2008, negotiations were undertaken to finalise the terms of the Infraco contract as to price.
- 25.74** On 18 March 2008, **tie** published the NIA. The NIA is a precursor to the award of a contract indicating that the award of the contract is imminent and that the parties have concluded all permitted negotiation. It affords the parties a short period to reflect upon the terms of the negotiated deal before formally committing to it.
- 25.75** It was contrary to normal procurement management practice to issue an NIA when the parties were still in negotiation over central contractual documentation, as was the case on 18 March 2008. At that date there was no agreed contract price, no milestone payment schedule, no bills of quantity, no agreed master construction programme and no agreed post novation design delivery programme.
- 25.76** The premature issue of the NIA strengthened BBS's negotiating hand and is an indication of the divergence of interests between **tie**'s desire to conclude the Infraco

contract without delay and CEC's desire to do so only if it resulted in the opening for service of line 1a from the Airport to Newhaven within the available budget of £545 million.

- 25.77** Despite DLA's awareness that the premature issue of the NIA was contrary to normal procurement management practice and strengthened BBS's negotiating hand, and its advising **tie** to that effect, it did not advise CEC of its views in that regard or of the divergence of interests between **tie** and CEC that arose from **tie**'s insistence on issuing the NIA contrary to DLA's advice.
- 25.78** **tie**'s insistence on issuing the NIA contrary to DLA's advice is another manifestation of its desperation to conclude the Infraco contract and of its placing its own interests ahead of the interests of CEC.
- 25.79** Following the Wiesbaden Agreement mentioned in finding 25.72 above three further agreements were concluded prior to the signature of the Infraco contract on 14 May 2008. These were the Rutland Square Agreement, the Citypoint Agreement and the Kingdom Agreement, dated 7 February 2008, 7 March 2008 and 14 May 2008 respectively. Each resulted in an increase in the price.
- 25.80** The Rutland Square Agreement contained a clause in terms of which BBS could lose preferred bidder status if it did not adhere to its terms, including the requirement that there be no further claims for additional payment, but **tie** neither used nor threatened to use this sanction when the increased prices were sought and obtained by BBS in the later Citypoint and Kingdom Agreements. **tie**'s failures in this regard indicated to BBS its desire to award the Infraco contract to BBS irrespective of repeated price increases and, as with the premature issue of the NIA, represented a divergence of interests between **tie** and CEC and was a sign of **tie**'s weak negotiating position, which BBS was able to use to its advantage.
- 25.81** The Kingdom Agreement arose out of a last-minute demand on 30 April 2008 from BBS for an additional £12 million, coupled with a threat to refuse to sign the Infraco contract. The signature of the contract had been planned for the beginning of May 2008, after the Council meeting on 1 May at which the Chief Executive of CEC (Mr Aitchison) reported the increase of £10 million in the contract price to £508 million resulting from the Rutland Square and Citypoint Agreements and sought, and was granted, refreshed delegated powers to authorise **tie** to enter into the necessary contracts. At that meeting councillors were not advised of the demand for the additional sum of £12 million.
- 25.82** Following negotiations between BBS and **tie** about BBS's claim for the additional sum of £12 million, agreement was reached as a result of which the contract price increased by £4.8 million with an additional £3.2 million if phase 1b did not proceed. The Chief Executive of CEC reported the increased costs to a meeting of the Policy and Strategy Committee on 13 May and sought and obtained refreshed delegated powers to authorise **tie** to enter into the necessary contracts.
- 25.83** The price increases resulting from the agreements mentioned in finding 25.79 were included in the construction works price in the contract signed by Infraco on 14 May 2008. The construction works price was £238,607,664. This figure is analysed in Table 25.1, which has been reproduced from Appendix A1 in Schedule Part 4: Pricing of the Infraco Contract ("SP4") [[USB00000032](#), page 0015].

Table 25.1: Construction Works Price Analysis

A1 Construction Works Price Analysis		
Lump Sum Firm and Fixed Price		£231,797,342
Deduct Identified Value Engineering	Taken To Firm Price (See Appendix C)	£9,965,006
Firm Price		£221,832,336
Deduct Further Value Engineering	(see Appendix D)	£2,670,000
Sub Total		£219,162,336
Add Defined Provisional Sums	(see Appendix B)	£11,434,316
Add Undefined Provisional Sums	(see Appendix B)	£8,011,012
Construction Works Price		£238,607,664

- 25.84** The deductions for value engineering and the exclusion of provisional sums resulted in a net construction works price of £219,162,336, apparently achieving **tie**'s objective of a target price in the region of £219 million excluding provisional sums.
- 25.85** The deductions for value engineering were unrealistic, unlikely to be achieved, and failed to take into account the cost of design changes to achieve them or the cost of associated delays. They were a device to reduce the construction works price to a figure approximate to one that would enable **tie** to claim that the project could be delivered within budget. They were properly described by Mr McFadzen, of BB, as "financial engineering".
- 25.86** When finalised, the Infracore contract included several pricing assumptions in SP4. They represented assumptions on which it was agreed that the price had been given. It was also agreed that if there was a divergence from these assumptions, it would constitute a change – termed a "Notified Departure" – under the contract. Where this occurred, the terms of the contract as to entitlement to additional payment and additional time to complete the works applied.
- 25.87** When the contract was signed, it was known by both parties that some of the pricing assumptions did not reflect the true factual position and that Notified Departures would therefore arise with the consequent entitlement on the part of BSC to additional payment. This situation was expressly recognised in the wording of the contract.
- 25.88** Although senior employees of **tie**, including Mr Bell and Mr McEwan, were aware of the inevitability of Notified Departures that would increase the price of the project, **tie**

did not make any detailed assessment of the likelihood of such price increases or the effect on the contract price.

- 25.89** Undertaking such an assessment would have been appropriate and prudent rather than proceeding by accepting an unquantified risk in order to conclude the deal. In concluding the Infraco contract, which anticipated Notified Departures immediately after its signature without a clear picture of the risk that was being taken, **tie**'s actions were reckless.
- 25.90** In general, changes, including their cost consequences, were regulated by clause 80 of the contract. Any departure from the pricing assumptions in SP4 would constitute a Mandatory **tie** Change and engage this clause. A Mandatory **tie** Change meant that it was not within the discretion of **tie** to decide that the scope of work should be revised to obviate the need for a change.
- 25.91** Clause 80 stated that Infraco could not commence the work in respect of any change, including a Mandatory **tie** Change, until **tie** had issued a Change Order under the contract. Issuing such an order would mean that **tie** accepted that the situation was one in which a change had arisen. The issue of such an order required that there had been agreement between the parties as to the cost consequence of the change. BB was to provide an estimate of costs when it gave notification of the change. If this could not be agreed, the matter required to be addressed in accordance with the dispute resolution procedure in the contract. There was an exception to the need for agreement where it was necessary that the work proceed as a matter of urgency. In that situation Infraco was entitled to payment on a demonstrable cost basis. In other words, Infraco would be paid based on a re-measurement of the actual time, resources and materials spent carrying out the works rather than an agreed price for the change.
- 25.92** **tie** had a quality assurance scheme in place in respect of the documents that had to be signed to conclude arrangements for construction to commence. It required that a named individual or individuals within **tie** carry out a main quality control review of the document in question and that a further named individual or individuals carry out a secondary quality control review. It also required that all elements should be subject to a full legal quality control review by DLA. In relation to SP4, neither the secondary quality control review nor the legal quality control review was carried out.
- 25.93** The terms of the Infraco contract that was ultimately signed were inconsistent with CEC's desire for price certainty and were the primary cause of the project costing considerably more than originally budgeted for and delivering significantly less than was projected through reductions in scope.
- 25.94** The combination of the provisions in SP4 and clause 80 meant that where Infraco considered that there was a departure from the pricing assumptions in SP4, construction work would be delayed until agreement was reached about both whether there was such a change constituting a Notified Departure *and* the increase in sums payable under the Infraco contract in respect of such change.
- 25.95** As soon as the works commenced, Pricing Assumption 1 ("PA1") gave rise to demands for additional payment under the Infraco contract and, when taken with the requirement in clause 80 of the contract to agree the cost implications of a change prior to works commencing, it resulted in significant delays to the progress of the works, with consequential increases in cost.

Assessment of risk

- 25.96** In the period up to the end of February 2008, **tie** carried out activities to manage and assess risk that were appropriate. Risks were identified and assessed and included in a risk register, which was reviewed. On the basis of the contents of the register, a quantitative risk analysis ("QRA") was carried out. The output from this was then analysed further to provide a probabilistic assessment. This made it possible to determine the allowance that should be made for risk to achieve various degrees of confidence.
- 25.97** Based upon the above process, the estimated cost of phase 1a in the versions of the FBC approved by CEC in October and December 2007 amounting to £498 million in each case included a risk allowance of £49 million. It was considered that when this was added to the further £47 million available within the funding limit of £545 million there was an adequate allowance for risk and contingencies.
- 25.98** Official guidance available up to May 2008 also required that, when assessing the likely cost of a project, an allowance be made for optimism bias. Optimism bias is an innate human tendency to underestimate costs.
- 25.99** The guidance suggested uplifts that should be made depending on the type of the project and the stage at which the assessment of cost was being made. The suggested uplifts were derived from data from past projects, grouped into reference classes. Although the reference classes in the guidance did not mention light rail or tram projects specifically, they are statistically similar to heavy rail projects and the data relative to heavy rail projects should have been used in determining the uplift to be applied to the quantification of risk.
- 25.100** In the draft Interim Outline Business Case ("IOBC") in 2005, **tie** applied an optimism bias. This was not based on the most up-to-date available guidance, reductions had been made on a subjective basis and it used the wrong reference class.
- 25.101** Had **tie** used the then current Department for Transport ("DfT") guidance for optimism bias in preparing the draft IOBC in 2005 and used the correct reference class, the allowance for optimism bias would have had the effect that the cost estimate exceeded the available funding even if **tie** had adopted an 80 per cent percentile confidence level.
- 25.102** An 80 per cent confidence percentile means that there would be a 20 per cent chance that the cost of the project would exceed the stated sum. At the time, **tie** had made statements that there was 95 per cent certainty that it could deliver the project within the budget envelope, meaning that there was only a 5 per cent risk of exceeding it. Had the correct position been reported in the IOBC, there would have been an awareness within **tie** and CEC of the risk that costs would exceed the available funding. This would have led to a greater focus on the costs and on means of mitigating them. More care would have been taken before approval was sought for the Infraco contract and/or consideration would have been given to the possibility of constructing a restricted line or abandoning the project. The last two options were strategic decisions for councillors to take, but they were not given the opportunity to do so.
- 25.103** **tie** did not apply any uplift for optimism bias in either of the two versions of the FBC. This was contrary to the guidance current at that time.
- 25.104** In 2008, cost increases in the Infraco contract resulting from the Rutland Square, Citypoint and Kingdom Agreements were offset in the cost estimates by reductions

to the risk allowance that did not have a proper objective basis. This gave a misleading impression that the estimated cost of line 1a of the project, including risk allowance, remained constant.

25.105 Since the publication of the guidance relating to optimism bias, much more empirical data has become available and the guidance is now out of date. It should be updated to reflect the additional data collected since 2004 and thereafter updated on a regular basis every five years to reflect additional empirical data collected in the intervening period.

Governance

25.106 The governance structure for the project was unduly complex. There was a lack of clarity regarding the respective roles of the various bodies and persons. In general, there was no clear analysis of the concepts of responsibility, accountability, authority, powers, reporting, oversight and undertaking. Often the various matters were fudged and the result was a lack of clarity as to what would happen or who was to perform particular tasks.

25.107 The governance structure did not accord with any established model.

25.108 The creation of a TPB as the principal decision-making body was inconsistent with the guidance in the PProjects IN Controlled Environments ("PRINCE2") model that a Project Board should not have directive power.

25.109 Following an Office of Government Commerce ("OGC") review, Mr Renilson was appointed Senior Responsible Owner ("SRO") in May 2006. This is a key role and the SRO should be personally responsible for project delivery. However, Mr Renilson considered that his role as SRO related only to the period when the tram would be operational and not the construction period. This was not noted or commented on at the time. It had the result that no one was performing the SRO role before and during the construction phase until Mr McGarrity assumed it in December 2008, seven months after the Infraco contract was signed.

25.110 Between August 2006 and his resignation in late 2008, Mr Gallagher was Executive Chairman of **tie**. Having one person serve as both Chairman and Chief Executive does not comply with the code on good corporate governance derived from the Cadbury and Greenbury Reports [[The Combined Code, Principles of Good Governance and Code of Best Practice](#)].

25.111 The quality of reporting by **tie** was generally poor and was the subject of complaints by CEC and Transport Scotland.

Progress of Infraco works

25.112 After the signature of the Infraco contract, the progress of work under that contract was poor. Issues arose because of BBS's inability to access sites that were still in the possession of the MUDFA contractor and an inability to progress the infrastructure works because of the existence of utilities that had not been diverted or of other unexpected obstructions.

25.113 **tie** and BBS failed to work in a collaborative manner to seek to resolve problems as they arose or were anticipated; instead, they each adopted an adversarial approach.

25.114 Based upon the price increases demanded by BBS prior to the signature of the Infraco contract, particularly the last-minute demand for an additional £12 million that led to the Kingdom Agreement, **tie** considered that BBS's behaviour was

opportunistic and that it was engaging in brinkmanship. **tie** considered that the cost estimates provided in respect of Notified Departures were inflated. On the other hand, within **tie** there was not a proper understanding of the contract.

- 25.115** Infrastructure works were carried out on Leith Walk in 2008. There was considerable disruption to these as a result of discoveries of undiverted utilities and other obstructions. BB considered that it had sustained financial loss as a result.
- 25.116** In early 2009, shortly before Infraco was due to start work on Princes Street, there was a dispute because of **tie**'s requirement for the retention of a bus lane. The original plan had been to close Princes Street to all traffic to enable the infrastructure works to be undertaken. However, after extreme traffic congestion resulting from the implementation of measures to effect this, a decision was taken to retain one lane open for buses. The difference between the parties as to the cost of that change was less than £1,500. After the experience in Leith Walk, however, BB was unwilling to start work on Princes Street because it anticipated that it would encounter unexpected obstructions. It wished to be paid on a cost-plus basis rather than the basis set out in the Infraco contract.
- 25.117** After Princes Street had been closed in readiness for the works, BB indicated that it would not start them until it had an agreement as to costs. In doing so it was in breach of the contract between **tie** and BSC. It was entitled to stop work only when it actually encountered obstructions and agreement had not been reached about the cost of the change associated with dealing with these obstructions.
- 25.118** BB's refusal to start work on Princes Street put great pressure on **tie**. It resulted in the parties entering into the Princes Street Supplemental Agreement ("PSSA"), in which **tie** agreed to BB's demand for payment for work there on a cost-plus basis.
- 25.119** The disputes between **tie** and BSC about the proper interpretation of the contract continued throughout 2009 and 2010 and resulted in various adjudications under the dispute resolution procedure, the decisions in which were issued between October 2009 and August 2010.
- 25.120** BSC had a substantial measure of success in the determination of the legal principles referred to adjudication although, as a generality, **tie** succeeded in reducing estimates submitted by BSC in relation to change notifications by substantial amounts.

CEC's involvement

- 25.121** CEC is a statutory body consisting of councillors responsible for formulating policy and taking strategic decisions based upon advice given by paid officials whose responsibility also includes implementing CEC decisions.
- 25.122** Although **tie** was the vehicle by which CEC sought to implement its plan to construct a tram network serving the City of Edinburgh, CEC was the client and funded the project from public funds. It received a grant of £500 million from the Scottish Ministers towards the cost, with the balance being paid from CEC's own funds. CEC bore the entire risk of any cost overruns.
- 25.123** As Chief Executive of CEC until his retirement in December 2010, Mr Aitchison had overall responsibility for ensuring that the decisions of councillors relating to the project were implemented and that CEC's interests were protected. In fulfilling that responsibility he relied upon advice from two directors responsible for the project: the Director of Finance (Mr McGougan) and the Director of City Development (Mr Holmes until 31 March 2008, and thereafter Mr David Anderson), as well as the Council Solicitor (Ms Lindsay).

- 25.124** The responsible directors and the Council Solicitor in turn relied upon senior personnel within their respective departments to undertake detailed scrutiny of the project and to report to them. Members of the group of senior personnel mentioned in the preceding sentence were known as the "B team".
- 25.125** CEC had no effective remedy against **tie** in the event of **tie**'s mismanagement of the project resulting in loss to CEC because **tie** was wholly owned and funded by it. CEC was unable to obtain insurance against such loss because of the relationship between it and **tie**.
- 25.126** The exposure to risk on the part of CEC was such that, through its officials, it ought to have exercised oversight of **tie**'s procurement and management of the project, including commissioning regular detailed reviews by a suitably experienced firm of multi-disciplinary engineering, transport and project management consultants.
- 25.127** The Infraco contract was a bespoke contract. To assess the risks that it presented, prior to authorising **tie** to sign it, CEC's officials should also have instructed a firm of solicitors experienced in construction contracts to review the terms of the final draft of the contract and to advise it of any issues arising from the contract terms.
- 25.128** CEC's senior officials failed to take either of the courses of action mentioned in findings 25.126 and 25.127 to protect CEC's interests despite recommendations from members of the "B team" to do so.
- 25.129** The "one family" approach advocated by the Chief Executive (Mr Aitchison) wrongly assumed that there was no difference in position or interests between CEC and **tie** and that there should be the appearance of little or no challenge by CEC of **tie**.
- 25.130** As a result of the "one family" approach, CEC officials failed to give sufficient consideration to the adequacy of the governance procedures to protect CEC's interests. In particular, they ought to have been aware of the fact that nobody was performing the duties of SRO, including reporting to CEC as client on a regular basis.
- 25.131** Another consequence of the "one family" approach was that the responsible directors within CEC deferred to **tie**'s wishes rather than follow the advice of the officials in the "B team", as a result of which the FBC was not subjected to independent scrutiny from the perspective of CEC's interests.
- 25.132** In September 2007, on the recommendation of the "B team", CEC invited tenders for the appointment of external consultants with experience of similar large-scale infrastructure projects in the transportation sector to review and quantify the risks to CEC arising from the proposed Infraco contract. CEC identified Turner & Townsend for this role. **Tie** vociferously opposed such an appointment and persuaded the responsible directors in CEC that a review of risk should be undertaken by OGC.
- 25.133** It was inappropriate for **tie** to seek to influence the identity of the organisation undertaking a review of **tie**'s assessment of CEC's risk exposure.
- 25.134** A peer review undertaken by external consultants such as Turner & Townsend would have involved more detailed scrutiny of the risk assessments made by **tie** than was possible for OGC.
- 25.135** Although CEC officials followed the "one family" approach to management of the project, both before and after signature of the Infraco contract, **tie** did not. The attitude of **tie**'s senior management towards CEC's officials is illustrated by the instruction to Mr Hamill, of **tie**, to adjust the QRA after financial close to reduce the allowance for general programme delay by £1.3 million, for reasons that were not

explained to him, and his response to that instruction. He altered the relevant figure manually and sent the amended QRA to CEC officials. In doing so, he advised Mr Bell, Mr McGarrity, Ms Clark and Mr Murray, of **tie**, that he had "pockled the spreadsheet" and that it solved the problem and helped them to "get the final result past CEC as I doubt they will notice what I have done". Although Mr McGarrity stated that he would have wanted CEC officials to know what had been done if there was a manual adjustment to the QRA, he did not respond to Mr Hamill's email to make that suggestion. Neither he nor any of the other senior employees of **tie** to whom Mr Hamill had sent his email responded to it, from which I have inferred that they approved of Mr Hamill's actions and his attitude towards CEC officials.

- 25.136** Senior management within **tie** failed to understand or to accept that CEC's officials had a duty to question them to ensure that CEC's interests were being protected and resented any challenge to their approach from members of the "B team". They adopted an adversarial approach in dealings with CEC's officials.
- 25.137** Following meetings where there had been such challenges, senior managers in **tie** requested the responsible directors directly, or indirectly through the Chief Executive, to speak to the member of the "B team" to discourage him or her from pursuing the matter. The responsible directors did so and, in one case, requested that the official (Ms Andrew) not attend any future meetings. By deferring to **tie** in this respect CEC's senior officials failed to protect CEC's interests as the promoter and funder of the project.
- 25.138** Reports by the Chief Executive and by the responsible directors to councillors were often based upon unchallenged information provided to them by **tie** and were misleading, both before and after the signature of the Infraco contract, either because they included statements that were false or because they omitted relevant information to enable councillors to take informed strategic decisions.
- 25.139** Prior to the signature of the Infraco contract, misleading reports to councillors created the impression that there was little risk that the project would not be delivered within budget. For example, the report by the Chief Executive for the Council meeting on 1 May 2008 stated that 95 per cent of the combined Infraco and Tramco costs were "fixed", with the remainder being provisional sums. Moreover, the report included a statement that the utility diversion works along the tram route were "progressing to programme and budget". Both of these statements were false.
- 25.140** After contract signature, officials continued to submit misleading reports to councillors. For example, Mr N Smith of CEC's legal department accepted that reports to councillors on 24 June and 14 October 2010 were inaccurate in stating that the outcomes of disputes that had been referred to adjudication were "finely balanced" "in terms of legal principles". He had been responsible for the inclusion of that false statement in the report. As a solicitor within CEC's legal department, he would or should have been aware that the signatories of the report, who were not legally qualified, would act upon his advice on a legal matter such as the categorisation of adjudication decisions in terms of legal principles. His explanation that he was responding to pressure from Mr Jeffrey, of **tie**, does not detract from the fact that he must bear responsibility for misleading councillors.
- 25.141** As noted in finding 25.6 the exercise of the Chief Executive's delegated powers to authorise **tie** to enter into the necessary contracts was conditional on the price and terms being consistent with the FBC and subject to the Chief Executive being satisfied that all remaining due diligence was resolved to his satisfaction. When councillors refreshed the Chief Executive's delegated powers on 1 and 13 May 2008

respectively the only variation to the conditions related to the increases in the price specified in findings 25.81 and 25.82 that had been negotiated since the FBC.

- 25.142** The decision to award the contracts was a strategic decision that was properly one for councillors to take, independently of any views expressed by **tie**. As was noted in finding 25.6, councillors delegated their power to authorise **tie** to award the Infraco contract and the Tramco contract to the Chief Executive of CEC. As was explained in finding 25.74, the issue of the NIA was a precursor to the award of the contract indicating that the award of the contract was imminent and that the parties had concluded all permitted negotiation. **tie** also required the Chief Executive to exercise his delegated power to permit it to issue the NIA on 18 March 2008.
- 25.143** In exercising his delegated power to authorise **tie** to issue the NIA on 18 March 2008 and to sign the Infraco contract and the Tramco contract on 14 May 2008, the Chief Executive of CEC required to act independently of **tie**.
- 25.144** Before authorising **tie** to issue the NIA and subsequently to sign the Infraco contract and the Tramco contract the Chief Executive sought advice from the Director of Finance and the Director of City Development at the relevant date as well as the Council Solicitor, who were also required to be satisfied independently of **tie** that it was appropriate to issue the NIA and that the draft contract reflected CEC's objectives, including price certainty.
- 25.145** By 17 March 2008, a number of necessary critical contractual decisions were still outstanding in respect of the Infraco contract, including the Employer's Requirements, value engineering, pricing and funding and SDS assurances. In the absence of agreement about these critical decisions it was impossible for the Chief Executive to be satisfied that the price and terms were consistent with the FBC or that all remaining due diligence had been resolved. In these circumstances he should not have authorised the issue of the NIA on 18 March.
- 25.146** In May 2008, the Director of Finance was aware that Ms Andrew, a senior official in the Department of Finance to whom he had delegated the responsibility for considering the proposals and attending meetings with other officials and reporting to him, still felt uncomfortable that she did not have full understanding of the risks relating to the Infraco contract. Moreover, the Director of Finance also had concerns about risk at that time, but he took comfort from the positive Audit Scotland and OGC reviews, despite the fact that these had been undertaken in June 2007 and October 2007 respectively prior to the existence of the FBC and the draft Infraco contract including SP4.
- 25.147** Reports to the Chief Executive's Internal Planning Group ("IPG") from January 2008 onwards showed the status of the various deliverables, also called "critical contractual decisions", necessary to enable the Chief Executive to use his delegated powers to authorise **tie** to award the Infraco contract. A number of necessary critical contractual decisions were still outstanding when the Chief Executive exercised his delegated powers to authorise **tie** to enter into the Infraco contract. This indicates a lack of diligence in protecting CEC's interests on his part and on the part of the responsible directors and the Council Solicitor when they advised him that he could authorise **tie** to enter into that contract.

25.148 There was a lack of mutual respect between the Solicitor to the Council and the solicitors working directly on the Tram project, particularly Mr C MacKenzie and Mr N Smith. Communication was poor, as will be illustrated below.

- Mr MacKenzie's various requests for a copy of the Letter of Engagement of DLA signed by the Council Solicitor did not result in its delivery to him.³⁶
- In August 2007, Mr C MacKenzie sent an email to Mr N Smith, advising him that he had been directed by the Council Solicitor that Mr Smith should review the draft Infraco contract and prepare a report on its implications for CEC within two days. Although Mr C MacKenzie's email had been copied to Ms Lindsay, Mr Smith responded to Mr C MacKenzie alone, refusing to undertake such a task as he considered that he lacked the necessary expertise and considered that the timescale for completion of the task was unrealistic.
- Mr C MacKenzie did not advise Ms Lindsay of Mr Smith's response, and she remained unaware of that reaction until the Inquiry provided her with a copy of Mr Smith's email. This reflected poor management on her part as well as a lack of communication within the department.
- In April 2008, Mr C MacKenzie received and considered a draft of SP4 from which it was evident to him that clauses 2 and 3 of SP4 excluded a fair amount from the certainty of the lump sum, fixed and firm price of the construction works price and which increased his concerns about the adequacy of the risk allowance.
- Although both the Council Solicitor and Mr N Smith each received the draft of SP4 at the same time as Mr C MacKenzie, neither of them read it. Each of them recognised the difficulties that SP4 had for CEC's desire to have price certainty as soon as they read it after the contract was signed.
- Having regard to her numerous other duties, it was understandable for the Council Solicitor to rely upon reports from Mr C MacKenzie and Mr N Smith to advise her about the terms of SP4 and of any concerns that they may have had about it.
- There was no justification for Mr N Smith failing to read SP4. Had he read it he would have recognised the difficulties that it had for CEC's desire for price certainty and could have advised the Council Solicitor of these difficulties before 1 May 2008.
- Before going on holiday on 2 May 2008, Mr C MacKenzie failed to advise the Council Solicitor of his concerns arising from the terms of SP4, although he left a note dealing with other issues. Had he expressed his concerns about SP4 to the Council Solicitor at that time she could have considered the terms of SP4 in light of his concerns and would have recognised the difficulties that it posed for CEC's desire for price certainty.

25.149 As a result of the failures of Mr C MacKenzie and Mr N Smith relating to SP4 mentioned in finding in fact 25.148, the Council Solicitor was not in possession of any report from solicitors within her department about the implications for CEC of the terms of the draft Infraco contract before advising the Chief Executive that he could authorise **tie** to sign the Infraco contract and the Tramco contract.

³⁶ No signed copy was produced to the Inquiry. CEC stated that a signed copy could not be found in its records.

- 25.150** Had the Council Solicitor been aware of Mr C MacKenzie's concerns about SP4, or had Mr N Smith read it and made her aware of his concerns, or had she herself read SP4 and become aware of the concerns that she had when she ultimately read it after signature of the contract, and had she been exercising the care expected of a reasonable solicitor, she could not have advised the Chief Executive to authorise **tie** to sign the Infraco contract and the Tramco contract.
- 25.151** **tie** and CEC are jointly responsible for the failure of the Infraco contract to implement the strategy designed to achieve price certainty. Officials failed to advise councillors of departures from the strategy which had been set out in the FBC approved by members in December 2007, particularly in relation to the failure to implement the planned transfer of risk to BSC.

Mediation

- 25.152** By the middle of 2010, parties had been embroiled in dispute resolution procedures for several months. **tie** had been unsuccessful, in terms of legal principle, in most of the adjudications that had been determined, but had legitimate concerns about the estimates produced by BSC in relation to change notifications.
- 25.153** By late 2010, work on the project had effectively ceased.
- 25.154** The parties had been in discussion about a proposal known as Project Carlisle, in which a new contract would be agreed for a fixed price but for a reduced scope of works. Despite offers and counter-offers, no agreement had been reached.
- 25.155** By that time **tie** had issued Remediable Termination Notices ("RTNs") with a view to applying pressure to BSC. However, **tie** had not carried out the necessary forensic analysis to establish that BSC was in fact in default and **tie** was unable to enforce the RTNs.
- 25.156** The Cabinet Secretary, Mr Swinney, intervened in November 2010 and told CEC to take the dispute to mediation. There were then discussions involving representatives of BSC and CEC, including the leader of the administration (Councillor Dawe). As a result, it was agreed that parties should seek to resolve their differences at mediation.
- 25.157** In preparation for mediation, CEC/**tie** explored two options: (i) termination and re-procurement of the Infraco contract and (ii) continuing with the same contractors to complete the project.
- 25.158** In the analysis undertaken in advance of mediation, the first of these options was substantially cheaper than the second, although there were uncertainties about the level of risk associated with re-procurement.
- 25.159** On the eve of the mediation, £150 million was added to the estimated cost of the termination and re-procurement option. As a result, CEC's preferred option of allowing BSC to continue with the project was the cheaper option.
- 25.160** No detailed support for the additional sum of £150 million was presented to the Inquiry. Having regard to the timing of the addition of that sum to the estimate of the cheaper option and its consequences, it is difficult to avoid the inference that its purpose was to provide a further justification for the acceptance of a mediation settlement that permitted BSC to resume work on the project.
- 25.161** The mediation took place between 8 and 10 March 2011 at Mar Hall, with a further two days of discussions immediately afterwards.

- 25.162** CEC's negotiating team was led by its Chief Executive (Dame Sue Bruce) and included the chairman of **tie** (Mr Emery) and Mr McLaughlin, of Transport Scotland.
- 25.163** At and immediately after the mediation, agreement about the basis for settlement was reached. This was subject to ratification by councillors. That agreement for settlement was thereafter recorded in two Minutes of Variation ("MoV4" and "MoV5") to the Infraco contract.
- 25.164** MoV4 provided for payment of £49 million to BBS, consisting of £25 million for the purchase of Siemens' materials and equipment, £12.5 million for BB's mobilisation and £11.5 million for Siemens' mobilisation. Payment of these sums was to be made in instalments against certificates issued by Mr C Smith of Hg Consulting.
- 25.165** CEC officials instructed **tie** to make certified payments under MoV4 totalling £36 million before it was signed. This resulted in payments being made without CEC obtaining a legally binding commitment from the recipient. As such, it was a serious breach of governance by senior CEC officials. The fact that they were confident that the paperwork "would catch up" and that their confidence was ultimately realised does not justify their decision or detract from the recklessness of paying substantial sums of public money without the necessary signed agreement.
- 25.166** Payments under MoV4 were also made in the absence of approval of councillors for that variation. When councillors ultimately authorised the signature of MoV4 on 30 June 2011, it was conditional on payments made under it not taking **tie** beyond the expenditure limit of £546 million for the project that the members had previously approved, being the budget of £545 million plus £1 million that **tie** was permitted to incur without seeking further prior approval from CEC. Councillors were not advised that payments under MoV4 had already been made and took **tie** beyond those limits when added to expenditure already incurred and contingent liabilities in respect of compensation payable if MoV5 were not signed and the Infraco contract was terminated. These payments were unauthorised payments and would have remained so, if councillors had not subsequently ratified MoV5.
- 25.167** MoV5 provided for the route to be completed from the Airport to St Andrew Square/ York Place. It included a fixed price of £362.5 million for off-street works and a target price of £47,384,510 for the remaining on-street works. It was signed in September 2011, following the approval of that settlement by councillors. MoV5 also made significant changes to the Infraco contract, including the variation of clause 80 so that where there was a change notice BBS was permitted to continue working before agreement was reached about the cost of such change.
- 25.168** **tie** senior employees present at the mediation considered that the settlement figure offered by CEC and accepted by BBS was excessive, and expressed that view before it was offered as a settlement figure. The figure was not based upon detailed calculations that could be verified, and in their evidence to the Inquiry was described by CEC's representatives, including Dame Sue Bruce, as a "horse trade".
- 25.169** There is some support for the concerns of the **tie** senior employees when one considers the contribution made by the project to Bilfinger's profit and overheads. The projected figure for its profit and overheads at contract close in 2008 was 11.07 per cent; following conclusion of the settlement agreement in September 2011 it was 7.23 per cent; but the actual figure for its profit and overheads on conclusion of the project was 21.21 per cent.

Completion of the line to York Place

- 25.170** Following CEC's approval of MoV5, the budget for completion of the line to York Place was fixed at £776 million.
- 25.171** When the line was completed and ready for service, councillors were advised that the project had been delivered within the revised budget. However, as indicated in finding 25.11 above, this was inaccurate, and the best estimate of the cost of constructing the tram line from the Airport to York Place is in excess of £835 million, excluding expenditure of £16.8 million on the parliamentary procedure to obtain the necessary private legislation underwritten by the Scottish Ministers.
- 25.172** Following the recommencement of work after mediation, **tie** was no longer involved in the project and its role was assumed by CEC with the assistance of Turner & Townsend and Mr C Smith of Hg Consulting. A different culture was adopted by all parties. Instead of the confrontational approach adopted by BSC and **tie** before mediation there was a collaborative approach towards resolving any issues that arose in the completion of the line to York Place..

Involvement of the Scottish Ministers

- 25.173** The Scottish Ministers were supportive of the project until the Scottish Parliament election in May 2007. Until then, they took an active role in the following capacities:
- as funders
 - in having their officials consider and comment on various drafts of the business cases
 - in a supportive and facilitative role
 - through participation of their officials in the TPB
- 25.174** The Scottish Ministers were the principal funders for the project, having committed a grant of £500 million (being the original committed sum of £375 million with indexation).
- 25.175** Before the election of the SNP minority Government in 2007, the previous Administration had made it clear that no further sums would be made available to CEC for this project.
- 25.176** Although there was no experience in modern times of the construction of a tram line in Scotland, the Scottish Ministers had access to advice initially from officials in the Scottish Executive and, after 1 January 2006, from officials in Transport Scotland following the creation of that body as an executive agency of the Scottish Executive. These officials had relevant expertise in large-scale transport infrastructure projects originally in their role as trunk roads authority, which subsequently expanded to include heavy rail projects.
- 25.177** As with other major public-sector construction and civil engineering contracts in which it was involved, Transport Scotland engaged external consultants to advise on particular aspects of the project, including, but not confined to, its economic appraisal.
- 25.178** The election manifesto for the SNP in the May 2007 Scottish Parliament election included a commitment to cancel the Tram and EARL projects. The SNP was elected to form a minority Government. Thereafter the Scottish Ministers requested that the Auditor General prepare a report on both projects before the debate in the Scottish Parliament about them that was scheduled for 27 June 2007.

- 25.179** On 27 June 2007, the Scottish Parliament resolved to continue the existing support for the Tram project. Although not bound to do so, but with a view to the risk of losing a vote of no confidence if they did not accede to the will of Parliament, the Scottish Ministers accepted that resolution.
- 25.180** Following the vote and their decision to continue to provide financial support to the project, the Scottish Ministers decided to “scale back” their involvement in the project. The decision was made prior to there being any clear agreement on, or understanding, of what was meant by the phrase “scale back”.
- 25.181** The main changes that were made were that Transport Scotland would no longer have a nominee on the TPB, Transport Scotland would no longer play a facilitative or supporting role and the conditions on which the grant for the project was to be made available to CEC were varied. Those changes meant that Transport Scotland lost its veto on governance arrangements, the project hold points included in the conditions attached to the offer of grant funding were removed and the assessment of the FBC to see whether it met the requirements to proceed was to be carried out only by CEC.
- 25.182** Thereafter, the involvement of Transport Scotland officials was restricted to meeting CEC officials on a four-weekly basis to receive progress reports and to receiving confirmation on a quarterly basis that grant conditions were being complied with.
- 25.183** In accordance with the revised grant conditions, Transport Scotland officials did not scrutinise the draft FBCs submitted to CEC for approval in October and December 2007. Nor did they subject the draft Infraco contract to scrutiny by lawyers experienced in major construction and engineering contracts, as they normally did in projects where Scottish Ministers were providing substantial sums of grant funding. Had they done so, it is likely that the problems with the contract would have been identified.
- 25.184** The decision of the Scottish Ministers to scale back the involvement of Transport Scotland officials in the manner outlined above resulted in the failure of the Scottish Ministers to protect public funds of £500 million committed to the project. Had the original grant conditions remained in place and the normal reviews been undertaken of the FBC and of the draft Infraco contract before its signature, the Scottish Ministers would have been aware that the tram line from the Airport to Newhaven could not be delivered within the budget of £545 million and they could have instructed a further economic appraisal of it.
- 25.185** Instead of a tram line from the Airport to Newhaven at a maximum cost of £545 million, which produced a Benefit to Cost Ratio (“BCR”) greater than 1 (indicating value for money), the Scottish Ministers’ grant of £500 million towards the cost of the project only resulted in a truncated line ending at York Place, which cost in excess of £835 million, excluding the expenses of securing private legislation.
- 25.186** If the reported cost to CEC of £776 million for the truncated line had been known prior to CEC’s signature of the Infraco contract, and had it been subjected to an economic analysis at that time, it would have resulted in a BCR of less than 1, indicating that the Scottish Ministers and CEC would fail to obtain value for the public money to be spent on the project. Such value for public money would have been even less if the ultimate cost in excess of £835 million had been known in advance of the decision to proceed.
- 25.187** There was no acceptable explanation provided to the Inquiry for the decision of the Scottish Ministers to continue to fund the project to the extent agreed by their predecessors but to remove the safeguards to protect that funding.

- 25.188** In the discussions between senior officials in Transport Scotland about the ministerial decision to “scale back” its involvement in the project, Mr Reeve was sufficiently concerned about it that in order to provide clarity and cover he canvassed the possibility of seeking a ministerial direction that normal governance processes should not be followed. Seeking a ministerial direction is a highly unusual and extreme course of action available to civil servants to emphasise to Ministers their concern about proposed ministerial action and to protect the civil servants from criticism for ministerial actions. Although no such direction was sought, it indicates a concern on the part of Mr Reeve that there could be adverse consequences for the public purse from what was being proposed.
- 25.189** Although in public the Scottish Ministers did not take an active role in the project after May 2007, they did exert influence in the background once disputes between **tie** and Infracore emerged and work on the project ceased. For example, Mr Swinney met the Chairman of **tie** (Mr Mackay) in February 2009 regarding the Princes Street dispute, when he told him to “get it sorted”, following which the PSSA was negotiated and signed between **tie** and BSC.
- 25.190** In 2010, Mr Swinney also had about eight meetings with representatives of CEC and **tie**, culminating in a meeting with CEC in November 2010 when he told CEC to take the ongoing dispute between **tie** and BSC to mediation.
- 25.191** Mr Swinney also had a meeting with representatives of BBS on 8 November 2010 to discuss the disputes between it and **tie**.
- 25.192** Minutes were not taken at any of the meetings between Mr Swinney and representatives of **tie**, CEC or BBS and there is no contemporaneous record of the detail of the discussions.
- 25.193** A senior official in Transport Scotland (Mr McLaughlin) participated in the mediation and acted as one of three negotiators in CEC's/**tie**'s discussions with BSC. Although Mr McLaughlin was a member of the negotiating team, Dame Sue Bruce alone could determine the terms of any negotiated settlement at mediation.
- 25.194** Before CEC/**tie** made the offer that BSC accepted, Mr McLaughlin telephoned Mr Swinney to advise him of the proposed offer in settlement. Although both of them were insistent that the purpose of the call was not to secure Mr Swinney's approval of the offer, no plausible explanation was given by Mr Swinney or Mr McLaughlin to the Inquiry for the telephone call being made at that stage of the mediation proceedings.
- 25.195** Following the mediation settlement, and with the approval of the Scottish Ministers, officials from Transport Scotland assumed a role in the management of the project until the commencement of revenue service on the curtailed line in May 2014.
- 25.196** The actions of the Scottish Ministers during 2009, 2010 and 2011 and in authorising the involvement of officials in Transport Scotland in the management of the project between 2011 and 2014 reinforces my view that the limitations imposed by them on the involvement of officials in 2007 was a serious error and resulted in the failure by the Scottish Ministers to protect the public purse, insofar as their contribution of £500 million was concerned.

Reports by OGC and Audit Scotland

- 25.197** The reports by OGC and the report by Audit Scotland in June 2007 appear to have given CEC and members of the Scottish Parliament a false sense of reassurance about the project, despite the caveats in the latter report and in the evidence given by the Auditor General to the Scottish Parliament's Audit Committee. However these reports were based upon short, high-level reviews and were not intended as a substitute for detailed reviews from suitably experienced independent advisers, instructed by CEC as the client and promoter of the Tram project.
- 25.198** In the OGC report following the signature of the Infraco contract, the team charged with preparing the report expressed surprise to learn that the MUDFA works were only 60 per cent complete, which was much slower progress than it had been led to believe when preparing the reports prior to the signature of that contract.
- 25.199** The review in 2007 by Audit Scotland was inhibited by the failure of **tie** to advise Mr Greenhill, who prepared the section of the report relating to the Tram project, of the delays in the completion of the MUDFA works and in the progress of design and of the unlikelihood of achieving completion of design in accordance with the programme. Even in the context of a short review, some of these issues would have been discovered had **tie** been frank about problems at that time and had Mr Crosse, of **tie**, not withheld two slides from the briefing note to be given to Audit Scotland that showed slippage in the design programme.
- 25.200** As the records of the audit information collected by Audit Scotland had been destroyed after six years from the audit in 2007 in accordance with Audit Scotland's policy relating to the period for their retention, I have been unable to determine whether **tie** positively misled Audit Scotland about delays or simply failed to provide information to that effect which was not requested.
- 25.201** Although officials in Transport Scotland were aware on 21 June 2007 of factual inaccuracies in the Audit Scotland report, suggesting that incomplete or inaccurate information had been provided to Mr Greenhill, they took no action to advise Ministers, CEC officials or the Auditor General prior to his appearance before the Audit Committee of the Scottish Parliament on 27 June 2007 in advance of the parliamentary debate about the Tram project and EARL.
- 25.202** The Auditor General anticipated the continued involvement of the Scottish Ministers in the project after June 2007, as is apparent from his evidence to the Audit Committee of the Scottish Parliament on 27 June 2007. In particular, he envisaged the submission of the FBC early in 2008

"to the twin sponsor bodies, the local authority and Transport Scotland, which would scrutinise it carefully—particularly Transport Scotland, because it is concerned with Parliament's interests. Final approval would then be afforded by the cabinet secretaries." [[SCP00000031](#), page 0012, column 22.]

Consequences

- 25.203** The consequences of the delay in completing the restricted line to York Place and the substantial overspend were far-reaching.
- 25.204** A consequence of failing to deliver the project on budget was the need for CEC to borrow £246.5 million to complete the section to York Place, with the result that CEC has had to commit future revenue over a 30-year period to meet repayments of capital and interest. That commitment will result in future lost opportunities for CEC to provide services to the citizens of Edinburgh throughout that period.

- 25.205** The current best estimate of the extent of the commitment of future expenditure is 1 per cent of CEC's annual revenue budget over a 30-year period.
- 25.206** A consequence of curtailing the line at York Place is that CEC has incurred wasted expenditure relating to the section between York Place and Newhaven, even allowing for the completion of the extension to Newhaven in 2023. The estimate of such wasted expenditure cannot be determined until after the completion of the extension.
- 25.207** The failure to deliver the project on time and to complete the line to Newhaven has also resulted in an estimated loss of revenue of about £4 million per annum for a period of about 10 years and has deprived residents between York Place and Newhaven and the public generally of the improvements to public transport that they had been promised.
- 25.208** The failure to deliver the project on time and to complete the line to Newhaven also delayed the claimed benefit of having a tram service as a catalyst for the development and regeneration of the Leith and Newhaven areas.
- 25.209** The failure to deliver the project on time extended by several years the period of disruption, inconvenience and loss of amenity suffered by the public generally and by residents along the length of the route, particularly those living in the west end of the city and between York Place and Newhaven.
- 25.210** The residents between York Place and Newhaven will have continued to suffer such disruption, inconvenience and loss of amenity during the construction of the extension to Newhaven, which itself is a consequence of the failure to deliver the project to the extent projected.
- 25.211** Businesses in the west end and on Leith Walk suffered loss for several years longer than anticipated because of the failure to deliver the project on time. Businesses between York Place and Newhaven will have continued to suffer loss during the construction of the extension to Newhaven, which is a result of the failure to deliver the project to the extent projected.
- 25.212** The disruption to residents and businesses was aggravated by the fact that it was apparent that, for considerable periods of time, little or no work was being undertaken following the commencement of on-street work, and after streets were closed or access to and from residential and business premises was restricted.
- 25.213** There was also disruption to Edinburgh residents generally and to members of the public travelling to and from the city. Road closures and diversions to accommodate the work lasted longer than they should have; journey times were longer and there was a consequential unquantified economic loss.
- 25.214** CEC's subsequent decision to complete line 1a by constructing the line from York Place to Newhaven will have resulted in wasted expenditure relating to the terminus at York Place. Moreover, the completion of the line to Newhaven will mitigate but not eliminate wasted expenditure already incurred in the tram project. Following completion of the extension to Newhaven wasted expenditure will still include payment for design of the extension that was not required, payment for the design of line 1b, compensation of £3.2 million paid to BBS in respect of their procurement costs relating to line 1b, costs associated with the initial purchase, delivery and storage of surplus trams, and expenditure incurred for remedial works to the work already undertaken to divert utilities between York Place and Newhaven.

25.215 Any associated need for additional borrowing by CEC to complete the line to Newhaven is a consequence of the failure to deliver the project within the budget and to the extent projected. It will result in a further reduction in revenue available for essential services for its citizens over a prolonged period to repay the capital and interest on such borrowing.

(b) Recommendations

25.216 In Chapter 2 (Establishment and Progress of the Inquiry), I made recommendations concerning public inquiries generally. The following recommendations relate to light rail projects or similar major projects promoted by public authorities.

Recommendation 5

25.217 Where the Business Case for any future light rail project is based upon an assumption that, prior to the award of the contract for the construction of the infrastructure, certain matters will have been completed (e.g. design, the obtaining of all necessary approvals and consents or the diversion of utilities), the contract negotiations should be delayed until completion of these matters has been achieved, failing which before any infrastructure contract is signed a new Business Case should be prepared on the basis of the altered assumptions that prevail and should be approved by the promoter and owner of the project.

Recommendation 6

25.218 All versions of the Business Case, including any Business Case required as a result of altered assumptions, should include an assessment of risk that takes account of optimism bias in accordance with the current published government guidance.

Recommendation 7

25.219 The assessment of risk at each stage mentioned in Recommendation 6 should be the subject of a peer review by external consultants with experience of similar large-scale infrastructure projects in the transportation sector who should submit a report of each review to the promoter and owner of the project as well as to the procurement and project manager sufficiently far in advance of the signature of the infrastructure contract to enable the promoter and owner to consider whether to authorise its signature and, as appropriate, to consider any other available options requiring a strategic decision.

Recommendation 8

25.220 The existing Guidance on optimism bias was based on empirical data available almost two decades ago and should be revised to take into account the additional data that is now available. In particular, the reference classes should be updated to include a specific reference to light rail projects and the recommended uplifts for the different reference classes should be adjusted to reflect the additional empirical data that is now available. Thereafter the Guidance should be reviewed and revised to take account of additional data on a regular basis at intervals of not more than five years.

Recommendation 9

25.221 The identification and management of risk should be an integral part of the governance of all major public-sector contracts in future. In identifying and managing risk the following principles should be adopted:

- Probabilistic forecasts rather than single-point forecasts should be used to take account of the risk appetite of funders and project sponsors.
- Funders, sponsors and project managers should be cautious when adjusting uplifts and there should be critical review of claims that mitigation measures have reduced project risk.
- Effective governance needs to provide constant challenge and control of the project, including recording of where the project is compared with its baseline, and reacting quickly to get the project back on track, whenever there are signs that it is veering off course. This necessitates providing senior decision-makers with data-driven reports on project performance and forecasts combined with reports by the management team and independent audits.
- In reporting to governance bodies there should be special emphasis on detecting early warning signs that the cost, schedule and benefit risks may be materialising so that damage to the project can be prevented. If early warning signs do emerge, the project should revisit assumptions and reassess risk and optimism bias forecasts.
- The quality of evidence rather than process is the key to providing effective oversight and validation.

Recommendation 10

25.222 In the interests of protecting the public purse and maximising the benefits from public expenditure on major projects, the Scottish Ministers should contemplate establishing a joint working group consisting of officials in Transport Scotland and representatives of the Convention of Scottish Local Authorities ("COSLA") to consider how best to take advantage of:

- tolerating the risk of cost overrun that is always a possibility in risk assessments by including all public-sector light rail projects in the portfolio of large projects undertaken by the Scottish Government, including those to be constructed wholly within the geographical boundaries of a single local authority;
- the greater experience within Transport Scotland of managing major projects in the public sector; and
- the necessary skills and expertise within Transport Scotland to deliver the project on time and within budget.

Recommendation 11

25.223 The Scottish Ministers and local authorities responsible for funding light rail projects should be mindful at all times of their obligation to protect public funds and to obtain value for public expenditure. In that regard:

- the Scottish Ministers should impose conditions on the payments of grants, similar to the "hold points" imposed on the offer of grant made on 19 March 2007 that enable them to review at each "hold point" whether the scheme is continuing to meet its objectives and to determine whether to continue to support the funding and implementation of the scheme;

- continued financial support from the Scottish Ministers should require their critical review of all versions of the draft Business Case and their approval of the FBC as well as their review, and approval before their signature, of the draft contracts for the delivery of the project;
- the Scottish Ministers should be involved in the delivery of the project as they were before the withdrawal of the support of officials from Transport Scotland in 2007 and following the resumption of infrastructure works after the mediation settlement at Mar Hall; and
- as a condition of the grant the local authority should be obliged to comply with the project monitoring and control procedures of Transport Scotland and should ensure that robust, transparent, externally verifiable project controls for the project are in place.

Recommendation 12

25.224 For reasons of transparency and accountability for public expenditure, the Scottish Ministers should keep minutes of:

- the nature and content of any discussions and the reasons for any decisions taken at all meetings, discussions or telephone conversations, and in email or other correspondence between a Minister and civil servants relating to the nature and extent of any involvement by civil servants in the procurement and delivery of a project funded or to be funded in whole or in part from public funds (including a grant from the Scottish Ministers);
- all discussions between a Minister and representatives of a local authority, the company responsible for the procurement and delivery of a publicly funded project or the company responsible for its construction to record what was discussed and what, if any, decisions were reached and the reasons for any such decision;
- all discussions between a Minister and civil servants including telephone discussions concerning any negotiations, including, but not restricted to, negotiations at mediation, for settling disputes involving contracts funded or to be funded in whole or in part from public funds (including a grant from the Scottish Ministers) to record what was discussed and what, if any, decisions were reached and the reasons for any such decision.

Recommendation 13

25.225 The procurement strategy for any future light rail project should make adequate provision for the uncertainties concerning the location of utilities and redundant equipment belonging to present and past utility companies, particularly in urban centres. In particular, although it is not possible to be prescriptive about the appropriate timescale:

- the procurement strategy should include a requirement that the route of the track should be exposed and cleared of utilities well in advance of the infrastructure contractors commencing their work;
- the procurement strategy should specify the period that should elapse between the exposure and clearance of the route and the commencement of construction, to ensure that the contractors have unrestricted access to the construction site and may proceed with the infrastructure works unencumbered by the presence of utilities; and

- in fixing the period mentioned above, the procurement strategy should take into account the length of the route to be constructed, past experience of the time taken for the diversion of utilities in light rail projects in other parts of the UK and any additional constraints peculiar to the project such as an embargo on work to divert utilities during particular periods such as the festive season or special events (e.g. the Edinburgh Festival).

Recommendation 14

25.226 Although some participants in the Inquiry criticised the use of MUDFA to divert utilities in advance of the infrastructure works and advocated the “bow wave” approach to the diversion of utilities that followed the mediation settlement at Mar Hall, I do not think it appropriate to be prescriptive about how the risks associated with the diversion of utilities are managed. It is sufficient for promoters of light rail schemes to be aware of such risks and to demonstrate that they have adequate proposals for managing them.

Recommendation 15

25.227 In recognition of the various difficulties likely to be experienced in the design and construction of a light rail project through a city centre, the promoter and owner of the project should appoint as its procurement and project manager a company with suitably qualified and experienced permanent employees that has delivered a similar project successfully on time and within budget or can demonstrate that it will be able to do so.

Recommendation 16

25.228 Immediately following the appointment of the designer, and throughout the design of the project, the designer should engage with the promoter and owner of the project, the procurement and project manager, the local planning authority, the utility companies and interested third parties owning land that may be affected by the project to clarify their design criteria. In such discussions throughout the design of the project the promoter and owner of the project should co-ordinate responses to the various stages of design and, in doing so, should take into account the competing interests of different parties and of various departments within any local authority exercising different statutory functions as well as the significance of the project in the context of the community as a whole and should provide all necessary assistance and clear and timeous instructions to the designer to avoid delays and additional expense. In that regard:

- prior to the appointment of the designer the local planning authority ought to produce sufficiently detailed design guidelines to enable the designer to take them into account from the outset when designing the tram network and to improve the prospects of obtaining the necessary consents and approvals without requiring repeated re-submission of designs that will result in delay to the project with resultant expense;
- throughout the project a collaborative approach should be adopted by the promoter and owner to achieve an early resolution of any design issues that arise; and
- the promoter and owner should assume primary responsibility for co-ordinating the local authority's response and for negotiating the resolution of all issues to

enable clear instructions to be issued to the designer and to avoid re-design of sections of the route following reconsideration of matters that have been resolved at an earlier stage.

Recommendation 17

25.229 The governance structure for the delivery of a major project such as a light rail scheme should follow the published guidance and should ensure that there is clarity regarding the respective roles of the various bodies and individuals involved in its delivery. In particular, the chairman of the company responsible for the procurement and management of the project should not also be its chief executive.

Recommendation 18

25.230 As part of their investigations, representatives of OGC undertaking an independent "readiness review" of a publicly funded project and representatives of any person, including representatives of any public body such as Audit Scotland, undertaking a review of the progress of and/or expenditure on a project funded in whole or in part by public funds should interview key personnel involved in the project to ensure that each of them understands his or her role and is performing it effectively. In preparing any list of key personnel to be interviewed, the individuals undertaking the investigations shall include the person designated as SRO.

Recommendation 19

25.231 At all stages of the project there should be a collaborative approach to delivering it. This should include the co-location of representatives from each organisation relevant to the particular stage reached and having an interest in its completion to enable any issues to be addressed and resolved at the earliest opportunity, thereby minimising the risk of the escalation of disputes with associated delays and increased expense.

Recommendation 20

25.232 The directors, employees and consultants of the company responsible for the procurement and delivery of the project as project managers, including an arm's-length external organisation ("ALEO") wholly owned by the local authority that is the promoter and owner of the project, should not submit to the local authority information that is deceptive or reports that are misleading either by the inclusion of false statements or by the omission of references to facts that might influence the strategic decisions of councillors if they were disclosed. In that regard they should recognise and respect the need for local authority officials to scrutinise and challenge the accuracy of information and reports submitted to them and should not seek to frustrate, or interfere with, the instruction of independent consultants to advise officials on the accuracy of the risk assessment in such reports or on the terms of any draft contracts for which they seek authority to sign.

Recommendation 21

25.233 Local authority officials should be mindful at all times of the distinction in roles between them and councillors, who are solely responsible for strategic decisions, and of their duty to provide accurate reports to councillors to enable them to take informed decisions based upon the reality of the situation. Such reports should

not be misleading either by the inclusion of false statements or by the omission of relevant facts. Where officials prepare and submit reports based upon reports to them from an ALEO acting as the procurement and delivery vehicle, they should not assume the accuracy of these reports based upon the adoption of a "one family" approach involving the local authority and the ALEO.

Recommendation 22

25.234 Where a company, including an ALEO, knowingly submits a report or other information to local authority officials that is misleading by reason of the inclusion of false statements or the omission of relevant facts or where such officials knowingly submit misleading information to councillors, whether or not councillors act upon that information, the Scottish Ministers should consider whether there should be an appropriate sanction in damages against the relevant individuals within the company responsible for the false statements or omission of relevant facts, as well as against the company itself, and against the relevant local authority officials involved in misleading councillors.

Recommendation 23

25.235 In addition to any civil liability arising from any sanction introduced in accordance with Recommendation 22, the Scottish Ministers should consider whether there is a need for a statutory criminal offence involving strict liability once it is established that the information and/or report was misleading by reason of the inclusion of false statements or the omission of relevant facts.

Recommendation 24

25.236 The Scottish Ministers should also give consideration to the need for legislation to impose a similar duty of disclosure to that owed by policyholders to their insurers upon a company, its directors, employees or consultants and upon a local authority and its officials towards representatives of OGC or of Audit Scotland undertaking any review of a publicly funded project. Any such legislation should determine the appropriate civil and/or criminal sanctions to be imposed for breach of the duty of disclosure.

Hardie

Appendix 1

Letter of Appointment

Deputy First Minister
and Cabinet Secretary for Infrastructure, Investment and Cities
Nicola Sturgeon MSP



T: 0845 774 1741
E: scottish.ministers@scotland.gsi.gov.uk

Lord Hardie
Edinburgh Tram Inquiry
Waverley Gate
2-4 Waterloo Place
EDINBURGH
EH1 3EG

In 2014 Scotland Welcomes the World



12 July 2014

Dear Lord Hardie

Edinburgh Tram Inquiry

Following your agreement to chair a non-statutory inquiry into the Edinburgh Tram project and the First Minister's subsequent statements to Parliament, I write to confirm your appointment and the terms of reference for the inquiry and to provide an explanation of certain connected matters.

The terms of reference are as set out in the annex to this letter.

The inquiry is a non-statutory public inquiry chaired by a senior independent judge ("the Chair").

It will be for the Chair to adopt such procedures as he considers appropriate for the conduct of the inquiry in order to meet the terms of reference. It will be necessary for the Chair to take account of the Convention rights of all those involved in the inquiry process. The Chair will be aware that decisions, once taken, may in appropriate circumstances be subject to judicial review. The Chair is not invited to opine on the civil or criminal liability of any person, but the inquiry should not be inhibited in the discharge of its responsibilities by any likelihood of liability being inferred from facts that it may determine or recommendations that it may make.

The Chair may, with the agreement of Ministers, appoint an assessor, counsel to the inquiry, a solicitor to the inquiry and such other persons as he considers suitable to provide assistance to the inquiry.

Ministers will pay such remuneration and expenses as are agreed between the Chair and Ministers as having been reasonably incurred by the inquiry in meeting the terms of reference.

Subject to any conditions and qualifications that may be notified by Ministers to the Chair, the Chair may award reasonable amounts to a person by way of compensation for loss of

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time or in respect of expenses incurred or to be incurred in attending, or otherwise in relation to, the inquiry. Such awards may also include amounts in respect of legal representation, where the Chair has agreed such representation as being necessary.

The inquiry is publicly funded. It will be necessary, in adopting procedure, conducting the inquiry and making awards of expenses for the Chair to act with fairness and at the same time to have regard to the need to avoid unnecessary cost to public funds, witnesses or others. At the end of the inquiry, Ministers may publish information concerning the costs of the inquiry.

The Chair should take such steps as he considers reasonable to secure public access to inquiry proceedings and information.

The Chair should ensure that information is handled in accordance with law and take steps to protect the confidentiality of any information where that is claimed, subject to the terms of any applicable law.

The Chair should deliver a report to Ministers at the end of the inquiry, setting out the facts determined by the inquiry and any recommendations. The timing and format of publication of the report in whole or in part will be determined by Ministers, in consultation with the Chair and subject to applicable law on access to information. In the event that the Chair proposes to criticise any person in the report, or he considers that criticism of any person may be inferred from the inquiry proceedings, he should give that person a reasonable opportunity to consider and respond to such potential criticism before the report is finalised. Any communications between the inquiry and any person potentially to be criticised may be treated by the Chair as confidential to the inquiry, as he considers appropriate.

Ministers have not requested that the inquiry reports by a set date, but look forward to it being swift and thorough. The Chair is invited to publish a timeline for the inquiry as soon as is reasonably practicable.

It is recognised that Ministers may issue further guidance to the Chair on the scope, conduct or timing of the inquiry that they have caused and indeed that the Chair may at any time invite Ministers to issue guidance on such matters.

Finally, I thank you for agreeing to accept the responsibility of chairing this public inquiry.

*With my best wishes
Yours sincerely
Nicola Sturgeon*

NICOLA STURGEON
DEPUTY FIRST MINISTER

Annex
Edinburgh Tram Inquiry
Terms of Reference

1. To inquire into the delivery of the Edinburgh Tram project (“the project”), from proposals for the project emerging to its completion, including the procurement and contract preparation, its governance, project management and delivery structures, and oversight of the relevant contracts, in order to establish why the project incurred delays, cost considerably more than originally budgeted for and delivered significantly less than was projected through reductions in scope.
2. To examine the consequences of the failure to deliver the project in the time, within the budget and to the extent projected.
3. To otherwise review the circumstances surrounding the project as necessary, in order to report to the Scottish Ministers making recommendations as to how major tram and light rail infrastructure projects of a similar nature might avoid such failures in future.

Appendix 2

Status of Edinburgh Tram Inquiry



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2-4 Waterloo Place
Edinburgh EH1 3EG

www.edinburghtram inquiry.org

Nicola Sturgeon MSP
Deputy First Minister and Cabinet Secretary
for Infrastructure, Investment and Cities
St Andrew's House
Regent Road
Edinburgh EH1 3DG

30 October 2014

Dear Deputy First Minister

Status of Edinburgh Tram Inquiry

I am writing to request that the Scottish Ministers convert the Edinburgh Tram Inquiry into an inquiry instituted under the Inquiries Act 2005.

Since my appointment as Chairman, work has been underway to set up inquiry premises and office space, to make contact with potential interested parties and to collect documentation. This work has, however, highlighted the limitations inherent in this being a non-statutory inquiry.

In announcing the inquiry the First Minister referred to the assurance given by the City of Edinburgh Council (CEC) of its full co-operation and full documentation of all aspects of the long process of the trams project. CEC has indeed been very helpful and has co-operated with the inquiry as much as possible. It has made available to us certain documents requested by us and, at our request, has written to former CEC and tie employees, asking whether they are willing to co-operate with the inquiry; however it is not able to guarantee the co-operation of its former employees or the former employees of tie, or of other organisations involved in the trams project. Many responses from former employees of CEC and tie are still awaited but already a number of potentially key witnesses have informed us, via CEC, that they are not prepared to participate in the inquiry and the responses received from some of the main organisations tend to suggest a reluctance to become involved.

CEC has informed us that, within the computer records it recovered from tie, it has over 1.2 million documents relating to the trams project and over 200 boxes of hard copies of other material in storage. We understand that its external legal advisors have raised issues concerning data protection in respect of these records and have proposed a data sharing

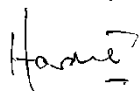
agreement with us but, in my view, that will not absolve CEC of its obligations under the Data Protection Act in respect of that material. Thus there will be, at best, a significant delay in the delivery of this material. These difficulties will not arise under a statutory inquiry, as an order to produce the material would protect CEC against any allegation that it had breached their obligations by delivering the material to the inquiry. It would also avoid the delay in producing material occasioned by the need to resolve the data protection issue.

In my view the costs and amount of time required to run a statutory inquiry would not be increased if there was a change from operating on a non-statutory basis, as the procedures I intend to apply would be similar. There would also be the added advantage that witnesses and members of the inquiry panel, which includes myself, would enjoy immunity from civil suit (section 37 of Inquiries Act 2005). If the inquiry remains non-statutory, this issue will need to be addressed by offering indemnities to protect witnesses and panel members and will result in exposure to a risk of expenditure that would be avoided if the inquiry were converted to a statutory inquiry.

I have therefore come to the view that the most appropriate course is for the inquiry to be converted to a statutory basis as soon as possible. This would enable me to compel the production of evidence, the participation of witnesses, and enable a more robust and useful final report to be prepared.

I would ask that the Scottish Ministers consider this matter, and take the opportunity whilst we are still in the preliminary investigation stage, to convert the Edinburgh Tram Inquiry into one constituted under the Inquiries Act 2005.

Yours sincerely,



Lord Hardie
Chairman



Appendix 3

Notice of Conversion to Statutory Inquiry

INQUIRIES ACT 2005

EDINBURGH TRAM INQUIRY

NOTICE OF CONVERSION TO STATUTORY INQUIRY

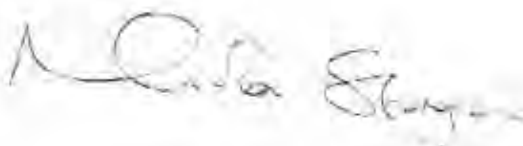
The Edinburgh Tram Inquiry ("the inquiry") was established as a non-statutory inquiry into the Edinburgh Tram project and is chaired by the Right Honourable the Lord Hardie.

The Scottish Ministers give notice in terms of section 15(1) of the Inquiries Act 2005 ("the Act") that they have decided, at the request of Lord Hardie, to convert the inquiry to a statutory inquiry. The date of conversion is the date of this notice.

For the purposes of section 15(2) of the Act, the Scottish Ministers are satisfied that the events being investigated by the inquiry have caused public concern.

The terms of reference of the inquiry are-

- To inquire into the delivery of the Edinburgh Tram project ("the project"), from proposals for the project emerging to its completion, including the procurement and contract preparation, its governance, project management and delivery structures, and oversight of the relevant contracts, in order to establish why the project incurred delays, cost considerably more than originally budgeted for and delivered significantly less than was projected through reductions in scope.
- To examine the consequences of the failure to deliver the project in the time, within the budget and to the extent projected.
- To otherwise review the circumstances surrounding the project as necessary, in order to report to the Scottish Ministers making recommendations as to how major tram and light rail infrastructure projects of a similar nature might avoid such failures in future.



A member of the Scottish Government

St Andrew's House
Edinburgh
7 November 2014

St Andrew's House, Regent Road, Edinburgh EH1 3DG
www.scotland.gov.uk



Appendix 4

List of Core Participants

Core Participant	Legal Representative
Bilfinger Construction UK Limited	Pinsent Masons LLP
Carillion Utility Services Limited*	MacRoberts LLP
City of Edinburgh Council	Pinsent Masons LLP
DLA Piper Scotland LLP	Brodies LLP
Parsons Brinckerhoff Limited	Burness Paull LLP
Scottish Ministers	Scottish Government Legal Directorate
Siemens plc	Eversheds LLP
Richard Jeffrey**	Beltrami & Company Limited
David Mackay**	Beltrami & Company Limited
Steven Bell**	Beltrami & Company Limited
Francis McFadden**	Beltrami & Company Limited
Susan Clark**	Beltrami & Company Limited
Mark Hamill**	Beltrami & Company Limited
Tom Hickman**	Beltrami & Company Limited

* Carillion ceased to be a core participant on **5 April 2018**.

** Selected Ex-Tie Employees (SETE).

Appendix 5

SRWC – Update on Guidance

Transport Strategy and Analysis

Buchanan House, 58 Port Dundas Road, Glasgow G4 0HF
 Direct Line: [REDACTED]
 Alison.Irvine@transport.gov.scot



Gordon McNicoll
Gordon.mcnicoll@edinburghtraminquiry.org
 By email

Date:
 30 August 2021
 Our Ref: 202100217685

Dear Mr McNicoll

EDINBURGH TRAM INQUIRY - NEW ROADS AND STREET WORKS ACT 1991 CODE OF PRACTICE CONCERNING DIVERSIONARY WORKS

Thank you for your letter dated 24 June 2021, to Hugh Gillies, Director of Roads at Transport Scotland. As this matter concerns overall road works policy, it lies within my remit as the Director of Transport Strategy and Analysis to respond to the questions you have posed, and I have been passed your correspondence in that capacity.

Question 1: Would you be able to give an indication of where matters currently stand as regards review of the Code of Practice issued under section 143(2) of the New Roads and Street Works Act 1991 (Measures Necessary where Apparatus is affected by Major Works (Diversionary Works) ("the Code"))?

The Department for Transport have responsibility for producing and publishing this Code, which applies UK wide. I am pleased to confirm that the Department for Transport, supported by industry bodies, the Roads Authority and Utility Committee (Scotland) ("RAUC(S)"), the Highway Authority and Utility Committee for England and Wales and the Northern Ireland Department of Infrastructure, operating together as ('HAUC UK'), convened a working group to review this Code of Practice in April 2021. RAUC(S) is the umbrella group for road works in Scotland, comprising Scottish roads authorities, utility firms with statutory rights to undertake works in the road, and the Scottish Road Works Commissioner.

Transport Scotland and Aberdeenshire Council represent Scottish interests on the group. The group has so far met twice, with further monthly meetings arranged until the end of the year. So far, the group has discussed the mechanisms necessary to provide a UK wide code in a devolved area, the need to first provide an electronic version of the current version of the Code in order to consult on changes (as the document is only available in out of print hard copy) and the need to update the arbitration process, which has been altered by later legislation. It is anticipated that a new draft of the Code may be available by 2022.

The outline of the group's remit includes the following:

"It is [the groups] intention to conduct the review in a transparent and inclusive way, working with the devolved governments in delivering a framework for change balancing the needs of asset owners, authority project delivery and public purse burdens. Ensuring the Code provides clarity,

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fairness and consistency for all parties involved in works. It is clear this is a sizeable task and completion may be 18 months in terms of an agreed document".

*"1. Set up a review task group from within the industry to deliver a review of the COP.
[Completed in April 2021]*

2. Produce an electronic version of the existing code and together with the HAUC Advice note from 2010, circulate to the industry setting out the review plan and guiding all concerned to use the current document and asking for feedback from the industry as a way of getting buy in to the review and the desire to support the Infrastructure needs of the UK. [Complete by July 2021]

3. Review Group to deliver a task plan setting out process and review milestones, including target review and COP publish date. [Originally intended to be complete by October 2021]

Question 2: Is the group giving active consideration to any revised Code making specific provision relating to tram works?

I confirm that Transport Scotland have raised this issue at the most recent meeting of the group. At this stage, it seems the group see no need for making a specific reference to tram works in the revised Code, on technical grounds.

In the Code, tram works currently sit within the 'Major Transport Works' grouping, alongside works to docks, piers, canals, railways and harbours. It is anticipated that the revised Code may follow the same grouping. Initial discussions within the group on this topic suggest the revised Code will not provide more detail on any individual work types (tram, docks, roads etc.) on the basis that the process should be the same for all kinds of major transport work, and that further detail about the aims of the project is not relevant to the relocation costs of the asset owner.

Question 3: Is the working group considering whether redundant underground apparatus might be addressed in any revised Code?

The group intends to keep the base principles of the current Code in place for the new revision, and follow largely the same structure and scope with updated text for the changes which have occurred since it was first published.

The Code applies to assets which are providing a current service ("live") and assets which are no longer in commission ("abandoned"). Abandoned or redundant in this context means 'not providing a supply', rather than no longer maintained or no longer the responsibility of the body which laid them. It is anticipated the revised Code would apply equally to live and abandoned assets. It is also intended that the revised Code would outline, separately for the four nations, what the reporting process should be when there is a failure to adhere to those principles, either in a specific dispute or through general non co-operation. In Scotland this will fall largely to the Scottish Road Works Commissioner.

The separate issue of unidentified buried objects, where no owner can be found at all, is currently handled in Scotland via Advice Note 25¹. These are fairly rare, and in many cases the 'UBO' is removed as part of the works through necessity. It is possible UBOs may form part of the later discussions of the group.

¹ <http://roadworks.scot/sites/default/files/publications/add/RAUC%28S%29%20Advice%20Note%2025.pdf>

Question 4: Are you aware of any other issues being considered by the working group that could address challenges experienced in the construction of the tram line in Edinburgh?

The working group has considered whether there are any general issues with the current version which might be addressed to encourage adherence to the Code. One of the first points noted by the group is that, despite its age, large portions of the Code remain fit for purpose. An issue appears to arise however, in the opinion of the group, in relation to accessibility. The Code was only ever available in hard copy via Her Majesty's Stationary Office and, as it is now out of print, access is limited. While there are poor quality photocopies in circulation, and pre-owned hard copies available from online booksellers, the group considers it likely that lack of access to the Code may have prevented some organisations from using it fully or even being aware of it at all. To this end the group's first action was to create a 'word document' version of the printed Code, ready to circulate to the wider roadworks community for comment. This is currently due to be completed before November 2021. The working party intend to make the Code accessible electronically and have identified its lack of electronic format as being a potential source of confusion.

The current procedure for disputes, including those arising from Section 142 of the New Roads and Street Works Act 1991, is detailed for Scotland in the Dispute Resolution and Appeals Code 2011. The working group intends to make specific reference to this document in the revised Code. The expectation is that this route to resolution would be used if required in the event of a dispute arising. The group considers it would be beneficial if all organisations operating in Scotland's roads could be encouraged to make themselves aware of the Dispute Resolution and Appeals Code 2011 and to make use of the dispute resolution procedure where appropriate.

I hope that this is helpful to you



Alison Irvine
Director, Transport Strategy and Analysis

Appendix 6

Letter from Brodies – Correction to Written Submission



www.brodies.com

OUR REF ADC/ROY0035.00286
YOUR REF TBC

F.A.O. Gordon McNicoll
Solicitor to The Edinburgh Tram Inquiry
The Edinburgh Tram Inquiry
Area GC-North
Victoria Quay
The Shore
Edinburgh EH6 6QQ

29 June 2018

Dear Sir

EDINBURGH TRAM INQUIRY – CORRECTION TO WRITTEN SUBMISSIONS
OUR CLIENT: DLA PIPER (SCOTLAND) LLP

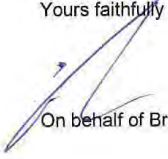
It has come to our attention that there is a drafting error in one of the footnotes to the written closing submissions lodged by us on behalf of DLA Piper (Scotland) LLP.

At footnote 20 on page 19 it is stated that Mr Fitchie travelled from the west coast of the USA the day before his evidence. Mr Fitchie actually arrived in Edinburgh on the Thursday before he was due to give evidence. The error arose from a misunderstanding on the part of the drafter at this firm which was not picked up during the review and approval process and so not corrected in subsequent iterations of the document. For the avoidance of doubt, this error did not in any way stem from Mr Fitchie himself or DLA Piper (Scotland) LLP.

We do not consider that discovery of this error has any substantive bearing on the submissions being made in the relevant section of the written submissions and we do not propose any amendments to them. However, we wished to ensure the Inquiry has entirely accurate information for Lord Hardie's consideration.

We apologise for any inconvenience caused. Please do not hesitate to contact us if you wish to discuss.

Yours faithfully



On behalf of Brodies LLP

ABERDEEN • EDINBURGH • GLASGOW • BRUSSELS
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Appendix 7

Letter Withdrawing Carillion as a Core Participant



F.A.O of Mr. G. McNicoll
Edinburgh Tram Inquiry
Floor 1, Waverley Gate
2 – 4 Waterloo Place
Edinburgh
EH1 3EG

By e-mail only: evidence@edinburghtraminquiry.org

15 March 2018

Dear Mr. McNicoll,

Re: Edinburgh Tram Inquiry – Carillion Utility Services Limited

We write further to your letter of 21 February 2018.

Following the liquidation of Carillion Utility Services Limited coupled with the previous departure of employees who did work on the Edinburgh Tram project there is now no-one left within Carillion Utility Services Limited who has any meaningful knowledge of the Edinburgh Tram project that could contribute to the inquiry. Regrettably Carillion Utility Services Limited (in liquidation) will have to withdraw from the inquiry.

Yours sincerely,

Peter Dickens

Signed by Carillion Utility Services Limited (in liquidation) acting by Peter Dickens, one of its Special Managers, (without personal liability) pursuant to powers granted by an order of the High Court dated 26 January 2018.

The Official Receiver has been appointed liquidator of Carillion Plc (and certain subsidiaries). Special Managers have been appointed by the High Court to help the Official Receiver manage the affairs, business and property of the companies in liquidation, in accordance with the powers and duties contained in the order appointing them. Provisional liquidators have also been appointed by the Court of Session, with the powers set out in Schedule 4 to the Insolvency Act 1986. A full list of the appointments and details of the Special Managers and Provisional Liquidators can be found at www.pwc.co.uk/carillion.

The Provisional Liquidators are licensed in the United Kingdom to act as Insolvency Practitioners by the Institute of Chartered Accountants in England and Wales, and are bound by the Insolvency Code of Ethics which can be found at: <https://www.gov.uk/government/publications/insolvency-practitioner-code-of-ethics>.

The Special Managers and Provisional Liquidators act as agents of the companies to which they are appointed, without personal liability, and they are Data Controllers of personal data as defined by the Data Protection Act 1998. Personal data will be kept secure and processed only for matters relating to the appointment.

Carillion Utility Services Limited (in liquidation)
Registered in England No.: 00728599
Registered Office: 84 Salop Street
Wolverhampton, WV3 0SR

T: +44 (0)1902 422431
F: +44(0)1902 316165
www.carillionplc.com

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Appendix 8

List of Witnesses

The list of witnesses includes those who were interviewed but who did not give a formal statement and who were not called upon to provide further assistance.

The designation “councillor” means that the person referred to was a councillor for all or part of the period during which the project was being planned and constructed.

Witness	Organisation	Position/Role
Adamson, Alison	Macpherson (Scotland) Limited	response to call for evidence
Aitchison, Tom	City of Edinburgh Council	Chief Executive (May 1995–December 2010)
Aitken, Ewan	City of Edinburgh Council	Councillor Council Leader (2006–2007)
Aldridge, Robert	City of Edinburgh Council	Councillor
Allan, John	City of Edinburgh Council	Councillor
Amos, Kimberley	member of the public	response to call for evidence
Anderson, David	City of Edinburgh Council	Director of City Development (March 2008–November 2012) Non-Executive Director, TEL (May 2011–November 2012) Non-Executive Director, tie (May 2011–November 2012)
Anderson, Donald	City of Edinburgh Council	Councillor Council Leader (1999–October 2006)
Andrew, Rebecca	City of Edinburgh Council	Finance Manager (City Development) (2002–2006) Principal Finance Manager (City Development) (from 2007; involvement in Tram project ceased 2008)
Apter, Michael	Paper Tiger and Studio 1	Company Director
Arnot, A	member of the public	response to call for evidence
Attridge, Philip	City of Edinburgh Council	Councillor
Bagshaw, Nigel	City of Edinburgh Council	Councillor

Witness	Organisation	Position/Role
Balfour, Jeremy	City of Edinburgh Council	Councillor Director, TEL (November 2006–May 2007)
Barclay, Graeme	tie	Construction Director (Utilities) (March 2007–April 2010)
Barrie, Gavin	City of Edinburgh Council	Councillor
Beattie, Steve	Carillion Utility Services Limited	Project Director (September 2009–December 2010)
Bell, Steven	tie	Engineering and Procurement Director (September 2006–December 2007) Tram Project Director (January 2008–October 2011)
Bissett, Graeme	tie	Consultant – Finance (May 2003–2010)
Blacklock, Angela	City of Edinburgh Council	Councillor
Blaiklock, Martin	member of the public	
Booth, Chas	City of Edinburgh Council	Councillor
Bourke, Mark	tie	Risk Manager (2003–2007)
Bourne, Alison	member of the public	response to call for evidence
Bourne, Richard	member of the public and former employee of CEC	response to call for evidence
Braddock, Andrew	Light Rail Transit Association	Transport Consultant
Brady, Colin	Bilfinger*	Project Manager (July 1998–April 2010)
Brandenburger, Alfred	Siemens	Commercial Project Director (October 2008–December 2012)
Brock, Deirdre	City of Edinburgh Council	Councillor
Brown, David	David Brown Design Group	Owner
Brown, Sir Ewan	tie	Chairman (May 2002–March 2006)
Brown, Iain	member of the public	response to call for evidence

Witness	Organisation	Position/Role
Brown, James	tie	Non-Executive Director (May 2002–October 2005)
Bruce, Dame Sue	City of Edinburgh Council	Chief Executive (January 2011–August 2015)
Bruce, Yvonne	member of the public	response to call for evidence
Brueckmann, Roland	Siemens	Director of the Project's technical team (October 2007–April 2009)
Burgess, Steve	City of Edinburgh Council	Councillor
Burns, Andrew	City of Edinburgh Council	Councillor Council Leader (2012–2017) Member of tie (2002–September 2006) Member of TEL (2004–September 2006)
Burt, Robert	Acutus	Director in Acutus engaged as consultants by tie between April 2009 and April 2011 to provide expert services in respect of claims by Infracore for delay and extension of time
Cairns, Robert	City of Edinburgh Council	Councillor
Campbell, William	Lothian Buses	Operations Director (1999–March 2016) Non-Executive Director, TEL (October 2005–September 2011)
Cardownie, Steve	City of Edinburgh Council	Councillor
Carson, John	n/a	Semi-retired Civil Engineer – campaigned, presented and has written on Edinburgh Trams (2007 onwards)
Casserly, John	tie	Commercial Manager for MUDFA (April 2007–August 2010)
Chandler, Jason	Parsons Brinckerhoff	Project Manager for the design of the Edinburgh Tram Infrastructure works (September 2006–December 2011)
Chapman, Margaret	City of Edinburgh Council	Councillor
Child, Maureen	City of Edinburgh Council	Councillor Lead Member for Finance and Sustainability (May 1999–May 2007) Non-Executive Director, tie (March 2002–May 2007)

Witness	Organisation	Position/Role
Clark, Susan	tie	Project Director, EARL (January 2004–August 2006) Deputy Project Director (Trams) (August 2006–October 2011)
Clarkson, Donald	member of the public	response to call for evidence
Connarty, John	City of Edinburgh Council	Qualified Accountant within the Department of Finance throughout the tram project but not involved in it
Connelly, Mike	tie	Head of Public Affairs (August 2006–August 2011)
Conway, Andy	City of Edinburgh Council	Tram Co-ordination Manager
Cook, William	City of Edinburgh Council	Councillor
Corbett, Gavin	City of Edinburgh Council	Councillor
Cox, Brian	tie	Non-Executive Director, tie (January 2007–May 2011) Non-Executive Director, TEL (April 2008–May 2011)
Coyle, Alan	City of Edinburgh Council	Finance Manager (2007–2009) Principal Finance Manager (2009–2011) Finance, Commercial and Legal Manager (Tram) (2011–2013) Major Project Manager (2014–2015) (seconded to tie late 2010 until early 2011)
Craggs, Trudi	tie	Associate and Senior Associate, Dundas & Wilson CS LLP (September 2002–April 2007), seconded to tie as Director of Approvals and Consents (March 2006–April 2007)
Craig, David	member of the public	response to call for evidence
Craig, Ian	Lothian Buses	Managing Director (August 2006–January 2016) Non-Executive Director, TEL (December 2009–September 2011)
Crawley, David	tie	Consultant (January 2007) Engineering Director/Director of Engineering, Assurance and Approvals (February 2007– 2009) (job share with Tony Glazebrook)

Witness	Organisation	Position/Role
Cross, Barry	tie	Development Director, tie (2005, left 2008)
Crosse, Matthew	tie	Project Director (January 2007–March 2008)
Cushing, Peter	Metrolink	Director
Dawe, Jennifer	City of Edinburgh Council	Councillor Council Leader (May 2007–May 2012)
Dawson, Robert	tie	Procurement Manager for Infraco and Tramco contracts (August 2006–March 2008)
Day, Cammy	City of Edinburgh Council	Councillor
de Wit, Riikka	member of the public	response to call for evidence
Deas, Chris	Nottingham City Council	NET (Nottingham Express Transit) Project Director
Ditchburn, Ted	member of the public	response to call for evidence
Dixon, Denis	City of Edinburgh Council	Councillor
Dolan, Alan	Parsons Brinckerhoff	Interim Project Manager (late 2005–September 2006) Deputy Project Manager/Design Delivery Manager (February 2007–April 2012)
Donaldson, Daniel	member of the public	
Donaldson, James	Bilfinger*	Construction Manager (July 2008–April 2014)
Doran, Karen	City of Edinburgh Council	Councillor
Drysdale, Robert	member of the public	response to call for evidence
Dundas, Charles	City of Edinburgh Council	Councillor
Dunlop, Peter	member of the public	response to call for evidence
Dunn, Hugh	City of Edinburgh Council and CEC Recovery Limited (formerly tie)	Non-Executive Director, tie (May 2013 onwards) Non-Executive Director, TEL (May 2013 onwards)
Easton, Gary	Turner & Townsend	tasks required by tie (August 2005–April 2007) Commercial Lead (engaged by CEC, August 2011–April 2014)

Witness	Organisation	Position/Role
Edie, Paul	City of Edinburgh Council	Councillor
Eickhorn, Axel	Siemens plc	Deputy Commercial Project Manager (October 2008–October 2011) involved in Tram project from June 2008 before he became Deputy Commercial Project Manager Commercial Project Director (October 2011–May 2015)
Elliott-Cannon, Nicholas	City of Edinburgh Council	Councillor
Emery, Vic	tie	Chair of tie /TEL (February 2011–July 2013) Consultant to CEC (July 2011–April 2013)
Enenkel, Dr Joachim	Bilfinger*	Chief Executive Officer (2003–2015)
Fair, Stuart	CIPFA (Chartered Institute of Public Finance and Accountancy)	Chartered Public Finance Accountant
Fallon, Edward	City of Edinburgh Council	Councillor
Ferguson, Neil	Strathclyde University	Researcher
Fitchie, Andrew	DLA Piper Scotland LLP, Solicitors	Partner, Head of Finance and Projects Scotland (August 2001–June 2011) Lead Solicitor for tie (2002–June 2011)
Fitzgerald, Dr Sharon	DLA Piper Scotland LLP, Solicitors	Associate, Finance and Projects Team (October 2004–January 2007) Partner, Finance and Projects Team (from January 2007)
Flynn, Michael	Siemens plc	Director of Major Projects (April 2007–summer 2011)
Flyvbjerg, Bent	Oxford University's Saïd Business School	BT Professor and inaugural Chair of Major Programme Management
Foerder, Martin	Bilfinger*	Project Director (March 2009–May 2013)
Forrest, Moyra	City of Edinburgh Council	Councillor
Frame, Barbara	member of the public	response to call for evidence

Witness	Organisation	Position/Role
Fraser, Duncan	City of Edinburgh Council	Tram Co-ordinator (June 2007–September 2009), seconded to tie as Roads and Traffic Regulation Order Manager (September 2009–November 2011)
Fullerton, Catherine	City of Edinburgh Council	Councillor
Gallagher, William	tie	Chairman (Non Executive) (2005–June 2006) Chairman and Chief Executive (Executive Chairman) (June 2006–2008) Non-Executive role in TEL (2006)
Gilbert, Geoff	tie	Commercial Director (August 2006–April 2008)
Glazebrook, Tony	tie	Consultant Engineering Services Director (February 2007–March 2011) (job share with David Crawley until 2009)
Godzik, Paul	City of Edinburgh Council	Councillor
Goodall, Andrew	member of the public	response to call for evidence
Gough, David	Bilfinger*	Project Quantity Surveyor (October 2007–July 2010) Commercial Manager (July 2010–May 2012)
Greenhill, Graeme	Audit Scotland	Manager (April 2000–2003) Senior Manager (2003–2017)
Gregson, Peter	member of the public	response to call for evidence
Griffiths, Joan	City of Edinburgh Council	Councillor
Grubb, George	City of Edinburgh Council	Councillor
Hamill, Mark	tie	Risk and Insurance Manager (May 2007–December 2010)
Harper, Andrew	tie	Project Director (May 2006–December 2006) Consultant (January 2007–April 2007)
Harries, Jim	Transdev	Project Engineer (November 2004–February 2008)
Hawkins, Stephen	City of Edinburgh Council	Councillor
Hay, Stuart	Living Streets Scotland	response to call for evidence

Witness	Organisation	Position/Role
Heath, Michael	Partnerships (UK) (part of UK Treasury)	Gateway Review Team member (2006–March 2010)
Henderson, Alan	City of Edinburgh Council	Head of Planning and Strategy
Henderson, Richard	City of Edinburgh Council	Councillor Director, tie (April 2002–July 2004, January 2007–September 2008) Director, TEL (September 2006–August 2008)
Herbert, Dr William	member of the public	response to call for evidence
Hickman, Thomas	tie	Seconded by Turner & Townsend to tie as Senior Project Controls Engineer (March 2006–May 2007) Programme Manager (May 2007–October 2011)
Hinds, Lesley	City of Edinburgh Council	Councillor
Hofsaess, Stefan	Siemens plc	President, Siemens Turnkey Systems (October 2005–September 2008)
Hogg, Kenneth	Scottish Government/ Transport Scotland tie	Head of Transport Division 3 (October 2004–October 2005) Non-Executive Director, tie (September 2006–May 2011) Non-Executive Director, TEL (March 2010–March 2011)
Holmes, Andrew	City of Edinburgh Council	Director of City Development (1999–April 2008)
Howat, Sandy	City of Edinburgh Council	Councillor
Howell, Michael	tie	Chief Executive (2002–June 2006)
Hudson, Stephen	Carillion Utility Services Limited	Commercial Director (2006–December 2009)
Hunter, Ann	member of the public	response to call for evidence
Hunter, Ronald	Institution of Civil Engineers	Civil Engineer
Hutchinson, Malcolm	OGC	HM Treasury (OGC) – High Risk Review Team Leader (August 2001 onwards)
Inch, Jim	City of Edinburgh Council	Director of Corporate Services (2002–January 2011)

Witness	Organisation	Position/Role
Jack, Anthony	member of the public	response to call for evidence
Jackson, Allan	City of Edinburgh Council	Councillor Convener of Audit Committee (2003–2012) Director, tie (January 2007–May 2011) Director, TEL (May 2007–May 2011)
Jeffrey, Richard	tie	Chief Executive (April 2009–June 2011)
Johnson, John	Aspidistra Limited	Owner of business affected by delayed Tram project
Johnstone, Alison	City of Edinburgh Council	Councillor
Johnstone, Marlene	World of Gas Limited	Company's business adversely affected by delayed tram works
Kay, John	member of the public	response to call for evidence
Keil, Karen	City of Edinburgh Council	Councillor
Keir, Colin	City of Edinburgh Council	Councillor
Kelly, John	member of the public	response to call for evidence
Kendall, Ian	tie	Operations/Procurement Director (September 2003–July 2005) Tram Project Director (August 2005–May 2006)
Key, David	City of Edinburgh Council	Councillor
Keysberg, Dr Jochen	Bilfinger*	Responsible within Bilfinger* for the Edinburgh Tram project (late 2008–October 2012)
Kingsley, Thomas	City of Edinburgh Council	Councillor
Laing, Ian	Pinsent Masons	Partner Legal adviser to Bilfinger Berger (UK) Limited
Lang, Louise	City of Edinburgh Council	Councillor
Lazarowicz, Mark	City of Edinburgh Council	Councillor
Leckie, Stuart	member of the public	response to call for evidence

Witness	Organisation	Position/Role
Lesley, Prof Lewis	Trampower	response to call for evidence
Lindsay, Gill	City of Edinburgh Council	Depute Council Solicitor (2001–2004) Council Solicitor (February 2004– August 2010)
Lloyd, Ashley	Moray Feu Residents Association	response to call for evidence
Longstaff, John	City of Edinburgh Council	Councillor
Macaulay, Alex	tie	Project Director (April 2002–July 2006)
Mackay, David	tie	Non-Executive Director, TEL (August 2005–2010) Chair, TEL (February 2006–2010) Interim Chair/Chair, tie (November 2008–November 2010)
MacKenzie, Colin	City of Edinburgh Council	Principal Solicitor (August 2006–mid-way through 2009)
Mackenzie, Dr Colin	Hi-Fi Corner (Edinburgh) Limited	Owner of business with premises adjacent to Leith Walk and in Rose Street affected by delayed tram project
Mackenzie, Gordon	City of Edinburgh Council	Councillor Transport Convenor (June 2009–May 2012) Director, tie (July 2007–September 2011) Director, TEL (April 2008–September 2011)
Mackintosh, Fred	City of Edinburgh Council	Councillor Director, TEL (December 2005–April 2007)
Maclean, Alastair	City of Edinburgh Council	Head of Legal and Administrative Services/ Head of Legal, Risk and Compliance (December 2009–2012) Director of Corporate Governance (2012–2015)
Macnab, David	member of the public	response to call for evidence
Main, Melanie	City of Edinburgh Council	Councillor
Malkin, Andrew	Alfred McAlpine Infrastructure Services	Project Director for MUDFA (November 2006–April 2008)
Marshall, Lawrence	City of Edinburgh Council	Councillor
Marshall, Sandra	member of the public	response to call for evidence

Witness	Organisation	Position/Role
Maxwell, Ian	SPOKES The Lothian Cycle Campaign	response to call for evidence
McAlister, Iain	Acutus	Associate Director in Acutus engaged as consultants by tie between April 2009 and April 2011 to provide expert services in respect of claims by Infraco for delay and extension of time
McEwan, James	tie	Consultant/Contractor – Business Improvement Director (May 2007–November 2009)
McFadden, Francis	tie	Construction Manager, tie (July 2008–2010)
McFadzen, Scott	Bilfinger*	Project Director (January 2006–August 2008)
McGarrity, Stewart	tie	Tram Project Finance Director/ Finance and Performance Director (February 2005–December 2010)
McGougan, Donald	City of Edinburgh Council	Director of Finance (July 1995–June 2011)
McGregor, Ailsa	tie	Interim Project Manager (August 2006–spring 2007) Interim Project Controls Manager (spring 2007–August 2007)
McInnes, Mark	City of Edinburgh Council	Councillor
McKay, Tim	City of Edinburgh Council	Councillor
McKeeman, Grant	member of the public	
McKinlay, Fraser	Audit Scotland	Director of Performance Audit and Best Value
McKittrick, Robert	Institution of Civil Engineers	Civil Engineer
McLaughlin, Ainslie	Transport Scotland	Director of Major Transport Infrastructure Projects (March 2007–March 2015)
McVey, Adam	City of Edinburgh Council	Councillor
Milligan, Eric	City of Edinburgh Council	Councillor
Miners, Peter	Parsons Brinckerhoff	Principal Engineer (Traffic) (June–August 2006)
Mitchell, David	member of the public	response to call for evidence

Witness	Organisation	Position/Role
More, Jonathan	tie	Solicitor for tie (June 2007–March 2008)
Mowat, Joanna	City of Edinburgh Council	Councillor
Munro, Gordon	City of Edinburgh Council	Councillor
Murray, Dennis	tie	Commercial Director (January 2008–2012)
Murray, Ian	City of Edinburgh Council	Councillor
Nolan, Brandon	McGrigors	Solicitor and External Adviser appointed by tie (July 2009–2011)
Orr, Jim	City of Edinburgh Council	Councillor
Paisley, Alastair	City of Edinburgh Council	Councillor
Papps, James	Partnerships UK (part of UK Treasury)	Assistant Director of PUK (2002–2008) working with tie team
Paterson, Antonia	member of the public	response to call for evidence
Paterson, Lindsay	City of Edinburgh Council	Councillor
Peacock, Gary	City of Edinburgh Council	Councillor
Perry, Ian	City of Edinburgh Council	Councillor and member of tie Board
Poulton, Marshall	City of Edinburgh Council	Head of Transport (April 2008–August 2013) Tram Monitoring Officer (January 2009–December 2010)
Ramsay, John	Transport Scotland	Project Manager of the Edinburgh Tram Project (2005–2013)
Redpath, Vicki	City of Edinburgh Council	Councillor
Reed, Dr Malcolm	Transport Scotland	Chief Executive (August 2005–February 2009)
Reeve, William	Transport Scotland	Director, Rail Delivery (December 2005–December 2010)
Renfrew, Alan	member of the public	response to call for evidence
Renilson, Neil	Transport Edinburgh Limited (TEL)	Chief Executive (late 1998–December 2008) Chief Executive of Lothian Buses (February 1999–2008)

Witness	Organisation	Position/Role
Reynolds, Stephen	Parsons Brinckerhoff	Project Director (February 2007–early 2011)
Richards, Alastair	Transport Edinburgh Limited (TEL)	Tram Consultant, Lothian Buses (October 2004–2007) TEL (June 2007–spring 2012)
Rimmer, Keith	City of Edinburgh Council	Head of Transport (1996–March 2007) Employed by tie (April 2007–March 2009)
Roberts, Gregor	tie	Deputy Finance Director (August 2008–November 2010) Finance Director (December 2010–October 2011)
Robertson, Alan	Alfred McAlpine Infrastructure Services	Managing Director/Non-Executive Chairman (May 2005–October 2007); left before takeover bid by Carillion
Robson, Keith	City of Edinburgh Council	Councillor
Rose, Cameron	City of Edinburgh Council	Councillor
Ross, Frank	City of Edinburgh Council	Councillor
Rumney, David	David Rumney	Chartered Engineer
Rush, Anthony	tie	Consultant (January 2010–April 2011)
Russell, Frank	City of Edinburgh Council	Councillor
Scales, Neil	tie	Non-Executive Director, tie (January 2007–May 2011) Non-Executive Director, TEL (December 2009–May 2011)
Schneppendahl, Dr Joerg	Siemens plc	Consultant and interface to Siemens AG (July 2008–October 2012)
Scobbie, Andrew	City of Edinburgh Council	Councillor
Sharman, Ian	member of the public	response to call for evidence
Sharp, Damian	Scottish Government/ Transport Scotland tie	Head of Major Projects (May 2003–October 2007) Design and Consents Manager, tie (October 2007–August 2011)

Witness	Organisation	Position/Role
Smith, Colin	Hg Consulting	Special Adviser to the City of Edinburgh Council (January 2011–May 2014) appointed by Dame Sue Bruce Senior Responsible Owner for CEC Independent Certifier
Smith, Nick	City of Edinburgh Council	Senior Solicitor (October 2004–February 2010), joined Tram project team in February 2007 Principal Solicitor (March 2010–September 2011) Depute Head of Legal and Administrative Services (September 2011–July 2012) Chief Procurement Officer (August 2012–February 2016) Head of Legal Services and Risk and Monitoring Officer (February 2016–present date)
Snowden, Conor	City of Edinburgh Council	Councillor
Steedman, Richard	Steedman & Company Limited	response to call for evidence
Steele, David	member of the public	response to call for evidence
Stevenson, Stewart	Scottish Ministers	Minister for Transport, Infrastructure and Climate Change (May 2007–December 2010) Minister for Environment and Climate Change (May 2011–September 2012) Parliamentary Liaison Officer to the Cabinet Secretary for Finance, Employment and Sustainable Growth (September 2012–November 2013)
Stewart, James	Partnerships (UK) (part of UK Treasury)	Chief Executive (May 2000–December 2009) Chief Executive, Infrastructure UK (December 2009–February 2011)
Strachan, Peter	tie /TEL	Non-Executive Director, tie (September 2006–May 2011) Non-Executive Director, TEL (December 2009–May 2011)
Swinney, John	Scottish Ministers	Cabinet Secretary for Finance and Sustainable Growth (May 2007–May 2011) Cabinet Secretary for Finance, Employment and Sustainable Growth (May 2011–November 2014)
Thomas, Jim	member of the public	response to call for evidence

Witness	Organisation	Position/Role
Thomas, Kingsley	City of Edinburgh Council	Councillor
Thomas, Marjorie	City of Edinburgh Council	Councillor
Thompson, Chris	Living Streets Scotland	response to call for evidence
Thomson, Douglas	member of the public	response to call for evidence
Tobermann, Harald	Leith Central Community Council	response to call for evidence
Tritton, Susan	City of Edinburgh Council	Councillor
Tymkewycz, Stefan	City of Edinburgh Council	Councillor
Walker, David	City of Edinburgh Council	Councillor
Walker, Richard	Bilfinger Construction UK Limited	Managing Director (May 2006–September 2011)
Weatherley, Julian	Turner & Townsend	Director of Project Delivery (August 2011–January 2013)
Weddell, Brian	City of Edinburgh Council	Councillor
Wheeler, Philip	City of Edinburgh Council	Councillor Transport Convenor (May 2007–May 2009) Director of tie (December 2005–September 2011) Director of TEL (May 2007–September 2011)
Whyte, Iain	City of Edinburgh Council	Councillor Group Leader (April 2002–May 2010)
Wilson, Donald	City of Edinburgh Council	Councillor
Wilson, John	member of the public	response to call for evidence
Woodward, Colin	Contract Scotland	Director of a recruitment company
Work, Norman	City of Edinburgh Council	Councillor

* “Bilfinger” in this table means the Bilfinger Berger group of companies.

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