DR JOCHEN KEYSBERG - Areas for Discussion

This note identifies the broad subject areas which we would like you to include in your statement. We have tried to include all documents that may assist you in answering the Inquiry's questions. We would be grateful if you could, in addition, provide a full CV setting out your vocational qualifications and experience.

The following matters are covered in this Note:

- Introduction
- The relationship between Bilfinger Germany and Bilfinger UK
- The negotiation of the Infraco contract (late 2007 to May 2008)
- Events between May and December 2008
- 2009
- 2010
- Events between January and September 2011
- From September 2011 to completion of the project
- Project Management and Governance
- Final Comments

Introduction

- 1. By way of introduction:
 - a) What was your experience in major infrastructure projects, including tram and light rail systems, prior to your involvement with the Edinburgh Trams Project?
 - b) Between what dates did you have responsibilities in relation to the Edinburgh Trams Project? What was your job title during that period? What were your main duties and responsibilities?
 - c) Who reported to you? To whom did you report?
 - d) When and why did you cease to have responsibilities in relation to the Edinburgh Trams Project?

- 1a) I have a great deal of experience of major infrastructure projects please see my CV which is provided. I was involved in the Dubai (U.A.E.) light rail project offer. From a management perspective, inner city logistics is more important than experience of light rail. I have a lot of experience of this and have been involved in bigger and more challenging projects than Edinburgh Trams.
- b) I had responsibility for the Edinburgh Tram Project from late 2008 to October 2012. During this period I was a member and from Summer 2010 the Chairman of the Bilfinger Civil Board. Prior to this, Mr Enenkel had held this position. David Darcy was also on the Board from April 2009 to Summer 2010 and also had some responsibility for the Project during this period.
- c) I reported to the Group Executive Board of Bilfinger Berger AG (and its Member Ken Reid at that time). Those reporting to me included Richard Walker, the MD of Bilfinger Construction UK Limited, and Martin Foerder whom I brought in as one of our very senior Project Managers. Martin did not report to Richard Walker but directly to me.
- d) I ceased to have overall responsibility for the Edinburgh Trams Project on 1 November 2012 when I moved up to the Executive Board and was no longer

responsible for construction or civils.

The relationship between Bilfinger Germany and Bilfinger UK

- 2. As regards the relationship between Bilfinger Germany and Bilfinger UK:
 - a) It would be helpful if you could explain the structure of Bilfinger Germany including how and by whom decisions were made? We understand, for example, that there was an Executive Board. Was the Executive Board the main decision making body? Which individuals, and with what titles, sat on the Executive Board?
 - b) How did BB Germany exercise control over BB UK?
 - c) How did BB Germany delegate powers to Bilfinger UK? Were powers formally delegated?
 - d) What type of matters required to be reported to BB Germany for decision making and/or for approval?
 - e) How (and by whom) was that done?

- a) The Bilfinger Civil Board on which I sat reported to the Bilfinger Berger AG Executive Board. Major decisions, such as that to tender for and take on the Edinburgh Trams Project, would have needed approval of the Executive Board. Although I was not involved in the ETN at the time of tender, we have a Major Projects Organisation, who, along with our group legal team, would have reviewed the tender and proposed contract and made a recommendation to enter into the Contract. They operate independently from the Civil Board and we would not have signed the Contract without approval from the Major Projects Organisation and the Legal team. Once their approval was obtained, the final decision would have been taken by the Executive Board.
- b) Germany exercised control over BB UK to the extent that Richard Walker and Martin Foerder were reporting to me. As noted above, Martin Foerder was one of a handful of very senior Project Directors that the Group employs. I brought him in directly. It would not have worked to have him reporting to Richard Walker. He had to report to me. BB UK was a 100% subsidiary of Bilfinger Civil and Bilfinger SE was the 100% shareholder of that company.

c) There was no formal delegation of powers, but Richard Walker had the formal position of Managing Director of Bilfinger Civil UK. Richard and Martin were trusted to take day to day decisions. d) The type of decision that required approval by me, was not a defined list. As noted, Richard and Martin were reporting to me and therefore they knew when to seek guidance or decisions on key aspects of the project and any disputes. I trusted Martin Foerder implicitly as a Senior Project Director, to take day to day decisions. Major decisions or decisions which had a financial implication would need approval. e) Richard Walker and Martin Foerder met with me monthly in Steering Meetings and Side Steering Meetings. Other Civil Board Members in addition to me were at those meetings. We would discuss the Project generally and progress which was being made and agree on the course of action where required.

The negotiation of the Infraco contract (late 2007 to May 2008)

The Bilfinger Siemens Consortium (BSC) were appointed Preferred Bidder in October 2007 and the Infraco contract was signed in May 2008.
 To what extent, if at all, were you involved in, or aware of, the discussions and negotiations between October

Proposed Answer

 I was not involved in this at all. In the period 2007 to late 2008, I was seconded to the Middle East. I would come back to Germany for Board Meetings and would

	2007 and May 2008?	hear general discussions about the bid for the Edinburgh Trams but I was not aware at all of the detail.
4.	We understand that a meeting between BSC and TIE took place at BB's headquarters at Wiesbaden, Germany, between Monday 17 and Thursday 20 December 2007, following which an agreement ('the Wiesbaden agreement') (CEC01502881) was signed.	Proposed Answer
	If you were involved in, or aware of, the discussions at Wiesbaden:	I was not involved at all in these meetings and cannot answer these questions.
	a) Who was present at the meeting, what was discussed and what was agreed?	
	b) What was your understanding of the extent to which the price in the Wiesbaden agreement of £218,262,426 was fixed and firm (and the extent to which that price was subject to exclusions, provisional sums, assumptions and conditions)?	
	c) What was your understanding of the following wording in clause 3.3 of the Wiesbaden agreement, namely, "normal development and completion of designs means the evolution of design through the stages of preliminary to construction phase and excludes changes of design principle, shape and form and outline specification"?	
5.	Discussions and negotiations continued between TIE and BSC between January and May 2008.	Proposed Answer
	If you were involved in these discussions and negotiations:	As noted, I was not involved in the project at all at that time.
	a) Which individual(s) led for Bilfinger in these discussions and	

negotiations?

- b) To what extent were you involved in these discussions and negotiations?
- c) What were Bilfinger's main concerns?
- d) How were these concerns addressed?
- e) Do you have any other comments in relation to events during this period?
- 6. An internal Weekly Report by Steve Reynolds, Parsons Brinckerhoff, dated 29 February 2008 (PBH00035854) (page 3), noted that "in separate discussions with Richard Walker he has mused that if TIE understood the likely true cost of building the scheme then it would be cancelled. This is not idle chat it is Richard's view of the strategy he has adopted to retain as much flexibility pre-contract with a view to securing substantial variations post-contract. On a related note, Richard has also informed me that he and his manager (from Wiesbaden) have seriously discussed withdrawing from the bid".
 - a) To what extent were these matters discussed within Bilfinger (and between whom)?
 - b) What was your understanding of, and views on, these matters?
 - c) What discussion(s), if any, did you have with Mr Walker around that time in relation to BSC's strategy concerning the negotiation of the Infraco contract? Did BSC intend to seek

- a) I was not involved at the time and therefore cannot comment on the extent to which these matters were discussed within Bilfinger.
- b) I was not involved.
- c) I had no discussions with Mr Walker.
- d) I did not have any discussions with Mr Walker at that time. However, it is always an option to withdraw from a bid if acceptable terms cannot be agreed. As a company, we would have had some minimum requirements and there would be risks we could not accept. In all of our major projects, we were selective about the jobs we would take and would not accept a project with an unacceptable level of risk. Our Executive Board would not have sanctioned entering into a contract based on speculation on future claims -

	substantial variations post contract? If so, were TIE made aware of that? d) Did BB consider withdrawing from the bid and, if so, why? Why did BB decide not to withdraw?	that was not the way we operated and is not a strategy which would ever have been approved. However, these are general comments and as I was not involved at the time, I cannot provide more specific answers.
7.	Infraco contract close took place on 14 and 15 May 2008, as part of which a number of contracts were signed, including novation of the System Design Services (SDS) contract to BSC. a) What was your understanding of the extent to which the Construction Works Price of £238,607,664 was a fixed price (and the extent to which that price was subject to exclusions, provisional sums, assumptions and conditions)?	Proposed Answer a) I had no understanding at the time as I was not involved. However, when I became involved, it was clear to me that this was not in any way a fixed price contract. It was subject to many pricing assumptions which we knew were highly likely not to be met, entitling us to additional time and money.
8.	In relation to the Pricing Assumptions contained in Schedule 4 of the Infraco contract (USB00000032).	Proposed Answer
	Prior to contract close: a) To what extent were the Pricing Assumptions and the terms of Schedule 4 discussed with you?	a) They were not discussed with me at all at the time but I read them and understood them once I became involved in the Project.
	b) What was your understanding of the purpose of the various Pricing Assumptions in Schedule 4?	b) They transferred the risk of the matters which Bilfinger could not price, back to tie.
	c) Did you have any views on the likely number and total value of the Notified Departures and changes?	c) I had no view on this as I was not involved at the time.
	d) Are you aware whether the likely number and total value of the Notified Departures were discussed with any TIE employee (and, if so, with whom and when)?	d) I have no knowledge of this.

9.	The contract price assumed that a number of Value Engineering savings would be made.	Proposed Answer
	In an internal TIE e-mail dated 19 March 2010 (CEC00549779) Richard Jeffrey circulated a draft document setting out his understanding of various matters in which (page 5) he notes you as having, apparently, referred to the "Value engineering nonsense" which was a "scam" for getting the price below the approved budget (CEC00549780). a) What were your views on these matters?	 a) I did not make that statement to Richard Jeffrey. In fact, I did not know the meaning of the word 'scam' and had to look it up in the dictionary in order to answer this question. I don't recall any conversation with Richard Jeffrey from which he can have taken this understanding. b) I had no views on such matters before contract close, not having been involved. When I became
	b) Were your views on these matters discussed with TIE before contract close (and, if so, with which individuals in TIE and when)?	involved, I don't recall that value engineering formed any part of the dispute with tie.
10.	The draft document (CEC00549780) attached to Mr Jeffrey's e-mail dated 19 March 2010 also noted (page 5) that "We know from	Proposed Answer
	a member of the consortium that BB under-priced the job" and that "The argument that this was never a price for the whole job is post rationalisation". a) What are your views on that suggestion?	a) Again, I have no knowledge of why Richard Jeffrey would say this. I do not believe that Bilfinger underpriced the job. It was priced properly but was priced based on a design frozen in November 2007 which was clearly out of date when we entered the contract in May 2008, with everyone knowing that many design changes were expected. I don't understand how tie could say that it was a price for the whole job, given the
		very detailed Pricing Assumptions contained in Schedule Part 4 to the Contract.

2008 (May to December)

11.	After Infraco contract close, it would be helpful if, by way of overview, you could provide your views on the following matters:	Proposed Answer
	a) What were the main difficulties experienced by BSC in carrying out the works? What difficulties, for example, were caused by incomplete utilities works and incomplete design?	a) I only became involved in the Project for the first time in December 2008 so I cannot talk about the problems in the period May to December 2008.
	b) What steps were taken by BSC after novation of the SDS contract in May 2008 to manage and progress the design?	b) I cannot talk about problems with the designers after novation. Even if I had been involved in the project at this time, I wouldn't have been involved at this level (managing the designers).
	c) What difficulties were experienced by BSC in that regard? What difficulties were experienced in completing the design?	
	d) Did you have any concerns, at any time, in relation to the performance of the SDS Provider (and, if so, what were these concerns and how, and when, were they addressed)?	u) as above
12.	Following contract close in May 2008 a major dispute arose between TIE and BSC in relation to the interpretation of the infrastructure contract.	Proposed Answer
	a) When (and how) did you first become aware of that dispute? b) What disputation took place within Different (and between	my attendance at Board Meetings during that period. We would have touched on different aspects of the
	b) What discussion took place within Bilfinger (and between whom) in relation to Bilfinger's position or strategy in relation to the dispute? Who ultimately decided on Bilfinger's position in relation to the dispute (and when)?	
	bininger's position in relation to the dispute (and when)?	Enenkel who was making the decisions in this period.

c) For the avoidance of doubt, what was Bilfinger's position or strategy in relation to the dispute?

c) At this time I was not directly involved but was aware that a large dispute was developing. I was aware that Bilfinger had carried out some work on a good faith basis on Leith Walk which we were not obliged to do. I understood that that work had not gone well due to many, many utilities still being present when they should have already been moved. In fact it was such a mess that we were subsequently instructed to close it up again. We also were not paid for doing this work despite previous assurances. This made everyone very nervous and reluctant to continue working on a good faith basis.

13. We understand that approximately 738 Infraco Notified TIE Changes (INTCs) were intimated by BSC between contract close in May 2008 and the Mar Hall mediation in March 2011.

We further understand that there were also various TIE Change Notices during that period.

- a) What was your understanding of, and views on, the main reasons for the Notified Departures and changes?
- b) How does the number of changes in the contract for the Edinburgh Trams Project compare with the number of changes in other major infrastructure contracts you have worked on i.e. were there more changes in the Edinburgh Trams Project, less or about the same when compared with other projects?

- a) The main reasons for the changes were that the MUDFA works did not appear to be aligned with our Contract. In other cases, design was not co-ordinated: there were many design changes. Where this occurred, the Contract provided that we should send INTCs. These happened throughout the whole project it seemed to be a complete mess.
- b) Nobody expected the number of changes we experienced and it was an extremely high number compared with other projects, tie were the only ones with the knowledge who might have been able to predict the amount of change (given that they were in contract with the MUDFA Contractor). The number of changes which were disputed and which remained unresolved

During the dispute TIE made a number of allegations against BSC.
For completeness, it would be helpful if you could provide your
views on the following assertions by TIE:

- a) BSC failed to mobilise timeously (see e.g. CEC00355114, DLA00001673, DLA00001672).
- BSC unreasonably refused to commence works involving a variation until a price had been agreed for the works as varied.
- c) BSC carried out very little on-street works under the Infraco contract with very few exceptions (e.g. Princes Street, in respect of which a supplementary agreement, on a demonstrable cost basis, had been agreed).
- d) BSC stopped all work in a section if not all utility diversion works in that section had been completed (c.f. undertaking works in those parts of the section in which utility diversion works had been completed, see e.g. (i) letter dated 6 October 2008 from Steven Bell to Colin Brady, CEC01205274 and (ii) adjudication decision dated 26 July 2010 by Robert Howie QC, CEC00407650).
- e) BSC delayed in carrying out the off-street works (in relation to which utility diversions were, presumably, less of a problem).
- f) BSC failed in its duty to take all reasonable steps to mitigate details now of the adjudication decision. In general

for a long time, was also unprecedented. For infrastructure projects there was an abnormally high ratio of unresolved compared with resolved changes.

- a) The alleged failure to mobilise was before my time but I was informed about it when I did get involved. I was informed by my side that this was not correct. This was not a major part of the dispute when I did become involved and so I did not focus on it.
- b) This is not correct. As far as Notified Departures are concerned, clause 80.13 which was carefully drafted and inserted into the contract, confirms that we were not permitted to commence work without tie's agreement on the value of the change. This was drafted in to protect the public purse. There was nothing unreasonable about this. As subsequently became clear, where we did start work without tie's agreement, we lost out because tie would not accept that matters would have to be dealt with as Notified Departures.
- c) We tried to work in on-street sections where we could. We would start work and a change (Notified Departure) would arise and we would have to stop work. The on-street sections were severely hampered by the on-going presence of utilities.
- d) I cannot answer this question to the level of detail asked as I don't specifically recall that letter or the details now of the adjudication decision. In general

delay to the Infraco works.

- g) BSC failed to properly manage and progress the design process after SDS novation (design being incomplete, and necessary approvals and consents being outstanding, years after contract close).
- h) BSC intimated an unreasonably high number of INTCs.
- i) BSC delayed in providing Estimates for the INTCs (see e.g. (i) letter dated 19 February 2010 by Steven Bell. CEC00574090 and (ii) spread sheet, dated 12 March 2010, CEC00590422, in which a number of Estimates were noted to be outstanding).
- When Estimates were provided, they were lacking in specification and/or failed to demonstrate how Infraco would minimise any increase in costs and ensure that the change would be implemented in the most cost effective manner etc (per clause 80.7 of the Infraco contract, CEC00036952).
- k) The amounts in the Estimates were often excessive (see e.g. (i) BSC's Estimate for INTC 1, Design delivery programme, was just over £7m c.f. agreement appears to have been reached at around £3.5m - see CEC00590422, (ii) the example of the Russell Road Retaining Wall given by Richard Walker in BSC's opening statement at the Mar Hall mediation noted below (TIE00670846 at para 16.4) in which he noted that Infraco submitted an estimate of £4.5m, which was reduced by BSC by £2.5m, and then again by £180k, and that the adjudicator awarded £1.46m and (iii) the various adjudication decisions, where the sums sought by k) I deny this and it should be made clear that tie were

terms, we did try to work around utilities but it did not work. David McKay had come on board at some point and confirmed that we would get 'not a penny more'.

That lead us to seeking to enforce our contractual rights to a greater degree.

- e) I don't accept that we delayed in carrying out the offstreet sections of the works. The off-street sections were also hampered by design changes and outstanding consents and approvals e.g. with Scottish Water.
- f) This was just part of the dispute and was a position that tie adopted. We did not agree with their allegations and did not accept their position.
- g) My answer is the same as item f)
- h) My answer is the same as item f)
- i) I was not involved in the detail of this but I understand that the sheer volume of Notified Departures lead to some delays on occasion in submitting Estimates.
- i) This is the type of complaint that clients will always push back to the contractor when variations and claims are made. We did not agree. We also did not have any such problems or allegations after mediation.

BSC were, on a number of occasions, significantly reduced by the adjudicator).

The estimates produced by BSC during settlement discussions in 2010 and 2011 for building a line from the Airport to St Andrew Square were excessive (see e.g. (i) e-March 2011 by Brandon Nolan mail dated 1 (BFB00094574) which sought more detailed information in relation to Siemens' Project Phoenix Proposal (PPP) price, noting that Siemens' PPP price of over £136m was double Siemens' original price of c. £68m for the Airport to Haymarket (see also Mr Nolan's e-mail dated 2 March, BFB00094589, in which he explained how he had arrived at the sum of £68m) and (ii) report dated 19 August 2011 by Faithful and Gould (CEC01727000) which, in the Executive Summary, stated that current costs for the on-street works

for Siemens were "extremely high and not value for money"

and that the cost of the other on-street works was "grossly

never willing to negotiate on the value of Estimates as in most cases, they disputed the principle.

The Russell Road Retaining Wall comment is wrong. Whilst I was not personally involved in this, I understand that this is a mis-quote and a misunderstanding of the position on this adjudication, where the figure referred to adjudication was not £4.5 million.

There will always be valuation disputes between contractor and employer - that is normal. What caused the problem here was that tie would not acknowledge the proper operation of the contract and would not negotiate.

- I) This last point seems to be directed at Siemens. I cannot comment on that.
- 15. By letter dated 13 October 2008 (**DLA00001671**) Richard Walker suggested a structured approach to progressing matters.

 Mr Gallagher replied by letter dated 14 October (**DLA00001672**). In his letter Mr Gallagher stated, "We ... feel it will be important to recognise that normal design development from the base date design was provided for in the price agreed at contract close".

inflated").

There appears to have been a conference call on 14 October 2008 which discussed establishing three parallel streams of activity, namely, establish the programme position in terms of delay and progress at discrete intervals, sort out an emergency instruction process that provided for recognition of cash flow and increase in

Proposed Answer

a) I was not involved at this time and have no comments on this.

contract value for emergency changes and a task force for the unblocking of approvals, access problems and encumbrances etc to focus on the current top 10 problem items (as set out in an email dated 15 October 2008 from Michael Flynn, **CEC00605556**).

- a) What discussion of these matters was there within Bilfinger (and between whom)?
- b) What was your involvement? What were your views?
- 16. BSC's Period Report to 8 November 2008 (CEC01169379) (page 3) stated:

"Construction works are in progress in sections 1B, 2A, 5A, 5B, 5C and 7, but are all impacted by external issues which require resolution through the change process. In Leith Walk, un-diverted utilities in the first work site are severely hampering progress. On Edinburgh Park viaduct, significant changes to foundation works are required due to unsuitable ground conditions ... The overall volume of changes, and in some cases requirement for design work to produce change estimates is overloading available management resources and introducing severe delay. Disagreement over liability for change, for example between Base Date information and IFC drawings when produced, exacerbating the delays in agreement of changes".

See also TIE's response in CEC00417427 at page 12.

- a) Were you sent BSC's period reports?
- b) What was your awareness of and views on the matters noted above?

- a) I never saw the Period Reports which were sent to the Client. We had an internal reporting mechanism and so I would be advised of key developments by those reporting to me.
- b) Once I became involved, I was of course aware of all of these problems which the project was suffering from, but again at a higher level than the detail contained in these Reports seems to provide.

17.	An internal TIE e-mail dated 25 January 2010 by Stewart	Proposed Answer
	McGarrity noted that at a meeting with Mr Gallagher in November 2008 Mr Enenkel introduced you to TIE (CEC00605561). a) Why were you introduced to TIE at the meeting in November 2008?	a) I don't recall being introduced to Mr Gallagher in November 2008. In fact, I don't recall ever meeting him. I recall meeting Mr David McKay at about this time. My calendar indicates that this was on 27 November 2008.
	b) What was the purpose of the meeting, what was discussed and what was the outcome?	b) I would have been introduced by Mr Enenkel at this time as I was taking over from him and became responsible for the UK at this time. I see that Mr McGarrity indicates that there was continual change at Bilfinger. That is not true. It was Mr Enenkel and then it was me, until well after mediation.
18.	BSC's Period Report to 6 December 2008 (CEC01121557) (page 3) noted:	Proposed Answer
	"Minimal progress has been made on issue of civil IFC design packages particularly those required for trackwork in sections 1 and 7. Efforts to resolve outstanding issues in technical meetings have not been successful, since the issues are largely commercial". "Limited construction works have been progressed in sections 1B, 2A, 5A, 5B, 5C and 7, but are all impacted by external issues which require resolution through the change process. Discussions are in progress to agree an interim change mechanism to permit works to proceed whilst the full change process is followed. Until this is in place, BSC will not progress any further changed works prior to agreement on costs".	a) My answer to this is the same as my answer to question 16.
	See also TIE's response in CEC00423799 at p13.	

a) What was your awareness of and views on these matters?

Events in 2009

19. A dispute arose in relation to the works at Princes Street due to Proposed Answer start in February 2009.

A meeting took place between TIE and BSC on 9 and 10 February 2009, which we think you were unable to attend (TIE's internal notes of the meeting are TIE00089656).

David Mackay, Chairman, TIE, wrote to you on 12 February 2009 (CEC00900093).

We understand that you met with Mr Mackay on 17 February 2009.

By e-mail dated 18 February 2009, Robert Sheehan, BSC advised TIE that they did not consider that they were contractually obliged to start work on Princes Street (CEC00867153).

David Mackay, Chairman, TIE, set out TIE's position in a letter dated 19 February 2009 (CEC00942802).

An e-mail dated 19 February from BSC stated that they were prepared to commence works in Princes Street on a goodwill basis on the understanding that the works would be paid on a demonstrable costs basis (CEC00942256).

a) I do recall trying to get to Edinburgh for the meeting on 9 February 2009. There was too much snow in Edinburgh and so we landed in Manchester and were kept on the runway until 5am and then flown back to Frankfurt. This is why I missed the meeting.

In terms of the question asked, I recall that on several occasions, either in a one to one discussion with Richard Jeffrey and definitely with David McKay, that I seriously recommended that the works be suspended to allow the utilities to be finally diverted and the design completed. We would need to be paid for demobilising and mobilising again but I believed that overall this would save money and would be a much better way of working than in a fully disruptive mode.

Mr McKay would have seen this as a personal failure if the project was abandoned for 6 months to a year. He thought that he could continue to push us and get his own way. However, I felt that we were almost obliged to make this suggestion which I still believe would have been in the best interests of the project, and the best You responded to Mr Mackay by letter dated 23 February 2009 (CEC00942804), noting that BSC considered that the likely additional costs were between £50 and £80 million (excluding any additional costs of Siemens and CAF) and that a joint exercise carried out between TIE and Infraco's planner had identified an agreed overrun of 16 months to the completion date.

Mr Mackay replied by letter dated 25 February 2009 (CEC00942803).

By e-mail dated 5 March 2009 (**DLA00002513**) Michael Flynn, Siemens, circulated a proposed *f* "Framework Concept" for discussion (**DLA00001455**).

An internal TIE e-mail dated 20 March 2009 noted that you and David Mackay had that morning agreed the principles of an agreed amendment to the measurement and payment regime for Princes Street (CEC01009997).

After discussion, including invocation of the dispute resolution procedure, the dispute was resolved by parties entering into the Princes Street Agreement (**CEC00302099**), whereby BSC would carry out the works at Princes Street on a demonstrable costs basis (we understand that an initial draft of the agreement was agreed on 20 March 2009, to allow work to commence on 23 March, and that the final version of the agreement was signed on 30 May 2009).

a) TIE's internal notes of the meeting on 9 February 2009 (CEC00941819) noted (paragraph 6) that you had, apparently, stated at a meeting in December 2008 that the best outcome for CEC in cost and programme terms was to

way for mitigating our cost overruns. I really tried to explain this to Mr McKay but he was not interested in listening.

One of my main criticisms of tie is that they had no one who had experience of major construction projects, especially in inner city areas. They appeared to come from a rail project background.

CEC01009997 should be CEC01009977 suspend construction for a period of time (except where there was an agreed basis to progress on an actual costs basis) sufficient to complete design and utility diversions and re-price/re-programme. Did you make that suggestion and, if so, why and what was TIE's response?

- b) What were your views, around that time, of the likely total additional cost of the project and the likely overrun of the completion date? What was the basis for your views on these matters?
- c) What were your views on the cause(s), of the Princes Street dispute?
- d) It would be helpful if you could explain your involvement in the discussions that took place to resolve the Princes Street dispute?
- e) To what extent, if at all, was the "Framework Concept" proposed by Siemens the basis of the agreement eventually reached in relation to the works at Princes Street?
- f) What was your understanding as to whether BSC were in a position in February 2009 to start (and progress to completion) the works at Princes Street had a suitable instruction been received from TIE? (see e.g. (i) e-mail dated 15 May 2009 from David Bell of Mackenzie Construction Ltd, BFB00058190 and (ii) a briefing note dated 22 May 2009 relating to the track depth at Princes Street, CEC00948650)?
- g) What is your understanding as to why it was agreed that This was the first occasion when we refused to carry

I think if Mr McKay had major project experience, he would have been better able to understand that my suggestion was a sensible one.

- b) Generally, I knew that the total additional cost of the project was likely to be much higher and that there would be a significant overrun of the completion date. We could not give exact figures as we did not know (for example) how many utility diversions were still to be carried out under tie's responsibility. Even after mediation, the on-street works were still done on a target cost basis as the number of utility diversions still outstanding at that time, was not clear.
- So in short, we knew that the overruns would be substantial but they were not easy to predict.
- c) The actual cause of the dispute was a minor change to a bus lane which tie did not instruct as a tie Change Order and appeared not to accept that it should have been treated as such. However, we also knew that we would find a substantial amount of utilities when we started to dig up the road and that it 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.

BSC would carry out the Princes Street Works on a demonstrable cost basis (c.f. on a fixed price basis)? Did you understand that to be a departure from the pricing provisions contained in the Infraco contract? Did you consider that that was more advantageous to BSC or to TIE?

out work without a tie Change Order (remembering that clause 80.13 of the Infraco Contract prescribed that we were not permitted to start work in this situation).

Tie thought that they could put us under such pressure that we would just proceed with the works. We could not proceed in this way as we would have lost a lot of money, knowing as we did by this point in time that tie were taking a very different view to us on the interpretation of the Contract.

- d) I was deeply involved in all of the discussions on Princes Street. I attended meetings in Edinburgh, and had calls with Mr McKay. I was not involved in the detail of the drafting of the Princes Street Agreement ('PSSA') but I was the principal person involved in the negotiations from our side. This was by far one of the biggest problems which we were facing as a company at this time, and it was therefore essential that I be involved in trying to resolve it.
- e) I cannot recall the detail of Siemens' proposal.
- f) The design was not complete when the contract was signed, and design work was ongoing but likewise we knew there were a huge number of utilities which had not been moved and that this would have had a major impact on Princes Street. Beyond this, I cannot recall the detail of the issues that are raised in the documents you refer to.
- g) This was the only way that we could start work in

		Princes Street given the premature nature of the design and the ongoing presence of utilities. The only other option would have been to stop work for a period of time (as per my suggestion to Mr McKay). It was neither more advantageous to tie or Infraco – it was a way of allowing the works to proceed where we had all of these disputes and difficulties and so it was in the interests of both parties. It was also in the interests of the Princes Street retailers as without this separate agreement, we would have started work and had to halt it 2 days later whilst Notified Departures were sorted out.
20.	We understand that you met with Richard Jeffrey on 22 June 2009 (see Mr Jeffrey's internal TIE e-mail dated that day, CEC00951818) and that an informal mediation took place between TIE and BSC between 29 June 2009 and 3 July 2009. A TIE e-mail dated 26 June 2009 (CEC00965765) attached a list of issues for mediation (CEC00965767). a) Were you present at the mediation? b) What was discussed and agreed? What was the outcome?	Proposed Answer a) I don't believe that I was present at the mediation. b) It did not resolve the dispute.
21.	A subsequent internal TIE e-mail (dated 13 January 2010) from Richard Jeffrey noted that a meeting with him on or about 6 July 2009 you had, apparently, said words to the effect that "this is a great contract for us, it allows us to hold the client to ransom", "We behave you (Tie) have behaved dishonourably in this contract, you knew very well what the parties intended when the contract was signed" and "You can only choose to agree with us or to litigate"	Proposed Answer a) I did not use those words – this does not sound like a statement that I would ever have made. I possibly explained to Mr Jeffrey that we would start works, then come to a stop and be unable to continue. This is just the mechanism of the contract. It would have led to a

complete standstill while we tried (and failed) to get tie (CEC00586386) (see also Mr Jeffrey's e-mail dated 19 May 2010 setting out his recollection of that meeting, CEC00267000). to formally issue an instruction, tie continued to refuse to understand that this was the way that the contract a) Did you say these words (or words to that effect)? worked, and it had been worded this way at their insistence (to protect the public purse). b) If so, what did you mean by these statements? Whatever I said to Mr Jeffrey, it was probably in the course of a tough meeting, but I have never spoken to a client like this in my life. What really disappointed me was tie's use of the press and media to put pressure on us. They went to extreme lengths to make us look bad, including contacting the client on a project we had in Canada where the contract had been terminated. Tie thought that they could employ the pressure of the media to get us to work outside the contract and waive our entitlements (by starting work). We would not do that as it seemed clear to us that tie would not honour the contract. In relation to the threat to litigate, I believe I will have indicated that we would stick to the contract and if tie would not acknowledge what it meant, we would have no option but to go to court. b) I have responded to this in point a) above. By an internal TIE e-mail dated 31 July 2009 Richard Jeffrey noted Proposed Answer that he had met with Martin Foerder the previous evening and that,

among other things, Mr Foerder had indicated that BSC would not start any more on-street works without a much improved (i.e. cost plus) supplemental agreement (which Mr Jeffrey had indicated was not on the table), which would affect start dates for Shandwick Place and Leith Walk (CEC00667242).

By e-mail dated 31 July 2009 (**TIE00031088**) Mr Foerder sent Richard Jeffrey BSC's Final Settlement Proposal (**TIE00031089**).

The proposal was rejected by Mr Jeffrey's e-mail dated 4 August 2009 (**TIE00033401**).

We understand that discussions continued in the second half of 2009, in particular, in relation to exploring the possibility of using the Princes Street Supplementary Agreement as the basis of a wider On-Street Supplementary Agreement.

If you were involved in these matters:

- a) What was your involvement in these matters?
- b) Was BSC's position that they refused to start any more onstreet works without a supplemental agreement and, if so, why?
- c) Was BSC's position different in relation to the off-street works (and, if so, why)?
- d) To what extent, if at all, were you involved in the further discussions that took place in 2009? (see, for example, an e-mail dated 23 September 2009 from Richard Jeffrey which noted that he recently had met with you, David Darcy and Dr Schneppedahl in Germany, TIE00033698)

- a) I was not involved in the detail of what was being proposed in terms of the On Street Supplemental Agreement. That was dealt with by Martin Foerder and Richard Walker who will have reported to me. However, I was aware that we made several attempts to look at ways of resolving the issues between us, including the OSSA with the exception of the PSSA, they all failed.
- b) No this is not correct. We continued to comply with the Contract. Some works had continued on a good will basis that is, we did do some on street works which were affected by Notified Departures. It was not until much later in 2010 that BSC finally wrote to tie to state that all good will works will cease (which mainly affected the on-street works).
- c) the position was not any different as I recall. Both onstreet and off-street sections were affected by design changes and utilities and other changes such as lack of approvals and consents. The on-street section was more affected by the presence of utilities.
- d) There was a meeting on the 18 September 2009 (I have checked my calendar). From memory, it was more presentations from Bilfinger and Siemens to Richard Jeffrey. It was not specific to any part of the dispute.

23. By internal e-mail dated 9 December 2009 (CEC00328711), Baltazar Ochoa, Change Manager, BB, circulated a draft Memorandum of Understanding between BB and PB (CEC00328712).

See also (i) the minutes of a TIE/BSC meeting on 21 June 2010 (item 214) which noted that Kevin Russell had advised that there was one additional agreement in place between BSC (or individual companies within BSC) and the SDS Provider (TIE00369812), (ii) the discussion of the matter in Steven Bell's letter dated 30 June 2010 (CEC00161476), (iii) BSC's letter dated 5 July 2010 (CEC00439115), (iv) Mr Bell's letter dated 13 July 2010 (pages 4 and 5) (CEC00109840) and (v) BSC's letter dated 12 October 2010 (TIE00372104).

- a) What was your awareness and understanding of any agreement or memorandum of understanding between BB and PB in relation to PB providing additional design services and/or in relation to further incentives or remuneration being provided to PB?
- b) What was the purpose of any such agreement?
- c) What discussions took place between BB and PB in relation to any such agreement?
- d) Were Siemens a party to any such discussions and agreement?
- e) Was such an agreement (or a similar document) ever agreed and/or signed (and, if not, why not)?

- a) I had some awareness of the agreement reached with the SDS provider, but it was not at the heart of the dispute and I don't recall the details of it.
- b) As I say, I don't recall the details of this and would not have been involved to this level of detail.
- c) as above.
- d) as above though I understand now that Siemens did not sign the agreement and so probably were not party to it.
- e) Yes, I believe to
- f) as per items b) and c) above.

f) If such an agreement was entered into, what was your understanding of its' main provisions?

Events in 2010

24. By letter dated 19 February 2010 Mr Foerder sent TIE a detailed offer for a Supplemental Agreement covering the remainder of the on-street works (the letter and offer are both **CEC02084034**).

By letter dated 26 February 2010 (CEC00368373), Richard Jeffrey rejected BSC's offer.

Mr Foerder replied by letter dated 3 March 2010 (CEC00648426).

- a) What was your involvement, if any, in these proposals and any discussions between BSC and TIE?
- 25. By letter dated 29 July 2010 (**TIE00885457**) Mr Foerder sent BSC's "Project Carlisle 1" proposal (**CEC00183919**) to TIE.

Under the proposal BSC offered to complete the line from the Airport to the east end of Princes Street for a Guaranteed Maximum Price of £433,290,156 and 5,829,805 euros (less the amounts previously paid), subject to a shortened list of Pricing Assumptions.

BSC's proposal was rejected by TIE by letter dated 24 August 2010 (CEC00221164), in which TIE responded with a counterproposal of a construction works price (to BSC) for a line from the

Proposed Answer

a) I will have been informed of progress on this by Martin Foerder. I was not involved in directly discussing this with tie.

Proposed Answer

a) As above, Martin Foerder was in charge of submitting this proposal and keeping me updated on progress. I was not involved in the discussions with tie. I was aware that tie had given us an impression that a deal of this nature may be acceptable to them but then came back with completely unrealistic numbers, and an unrealistic approach to the level of risk they wanted us to assume.

	Airport to Waverley Bridge of £216,492,216, £45,893,997 to CAF, the amount to SDS to be determined and a sum of just under £4,922,418 in respect of Infraco maintenance mobilisation, Tram maintenance mobilisation and Infraco spare parts. a) What was your involvement, if any, in these proposals and any discussions between BSC and TIE?	
26.	By letter dated 11 September 2010 (TIE00667410), BSC submitted its "Project Carlisle 2" proposal to TIE, in which BSC offered to complete the line from the Airport to Haymarket for a Guaranteed Maximum Price of £405,531,217 plus 5,829,805 euros, subject to the previously suggested shortened list of Pricing Assumptions.	Proposed Answer a) My answer is the same as to the previous question.
	By letter dated 24 September 2010 (CEC00129943), TIE rejected BSC's proposal. Mr Foerder responded by letter dated 1 October 2010 (CEC00086171). a) What was your involvement, if any, in these proposals and any discussions between BSC and TIE?	
27.	Between 9 August and 12 October 2010 TIE served ten Remediable Termination Notices (RTNs) and three Underperformance Warning Notices (UWNs) on BSC. In response, BSC both denied that the RTNs constituted valid notices and, in some cases, also produced Rectification Plans. The RTNs and BSC's responses are (CEC02084518) to	a) I was aware of these notices which were served and was not particularly surprised that we had received them. It seemed like the last desperate step in the process. We agreed on a high level strategy and the detail was dealt with by our in house legal team.

	(CEC02084529).	
	The UWNs are (CEC00378695), (CEC00167342) and (CEC00164758). a) What was your awareness of, and views on, these notices? b) To what extent were these matters discussed within Bilfinger (and between whom)?	b) As above, I was informed of progress and agreed to the strategy. I was not involved in the detail of the response or the discussions. I believe there were management meetings in Edinburgh where the detail of the various responses was discussed. It was mainly handled by our in-house legal team working with the management team in Edinburgh and our external lawyers.
28.	By letter dated 29 September 2010 (TIE00409574) Martin Foerder	Proposed Answer
	advised TIE that BSC were no longer prepared to carry out "goodwill" works (i.e. works which were the subject of 94 outstanding INTCs listed with the letter, in respect of which no TIE Change Order or an agreed Estimate existed, and which BSC considered that they were not required to carry out under the contract). a) What was your involvement, if any, in BSC coming to that decision?	a) Martin Foerder had reached the conclusion that we were not getting anywhere with tie and needed to take a very strong line with them and stick to the contract. Martin had my full support and when he made this proposal I approved it. It was in many ways an easy decision faced with the knowledge that tie were not going to acknowledge our full contractual entitlements and nothing was getting any easier.
	b) Why did BSC decide to stop carrying out "goodwilt" works?	b) As noted above, it felt like the only option given tie's approach - we could have ended up funding the project to an inordinate extent by carrying out work which was not our risk under the contract, and not being paid by tie for works which were contractually their responsibility.
29.	An internal TIE e-mail dated 8 October 2010 from Richard Jeffrey noted that he had taken a call from Richard Walker, that BB	Proposed Answer
	wished to meet to discuss a "clean break" and that you wished to speak to Mr Jeffrey to set the tone for the meeting	a) I don't recall particularly that we instructed Richard to make this proposal but it could be that we said that it

(CEC00099403).

- a) What is your recollection of events around that time?
- b) Did Bilfinger wish a "clean break" (and, if so, why)? Did you call Mr Jeffrey to discuss matters (and, if so, what was discussed and what was the outcome)? Did BSC and TIE meet around that time (and, if so, what was discussed and what was the outcome)?

seemed that we were heading towards a large dispute, and that one solution would have been a clean break. We were also very frustrated by this point in time at the way things were going. We tried every avenue to avoid a complete failure of the project and avoid being in dispute for years. The focus on this time and throughout had really been on Bilfinger, not Siemens. The suggestion may have been for Bilfinger to get out of the contract and Siemens to continue with another civil contractor. As I say, I don't recall the detail and cannot recall any particular meetings etc.

b) My comments are as noted in paragraph a).

Events between January and September 2011

- We understand that you met with Sue Bruce, CEC's Chief Proposed Answer Executive, on 15 February 2011 (see, for example, the reference to such a meeting in TIE00083983).
 - a) Did such a meeting take place and, if so, what was discussed and what was the outcome?

a) I did meet Sue Brice on 15 February 2011 but this was not the first time I met her.

The background to this is that on 8 November 2010, I met Ainslie McLaughlin of Transport Scotland and John Swinney (the Minister for Finance at that time) at St Andrews House. Dr. Schneppendahl of Siemens was there as well as Gordon Wakefield. We had been asked to attend this meeting by the Scottish Government in order that they could understand exactly what was going on.

It was a very good meeting. Ainslie McLaughlin is a person who understands construction (he knew us from the M6 as a good contractor). I explained the Contract to him and the issues which had arisen. In my mind, this was the turning point in the whole project. We were able to explain our side of what had been happening and what the Contract actually said. It was good to have this opportunity - we had written to CEC around 8 months before (in March 2010) and they had not been prepared to meet with us. After this meeting, the Minister (Mr Swinney) asked the Council to look into this. I was then asked to attend a meeting on 13 December 2010 with Councillor Jenny Dawe. I was introduced to Sue Bruce at this meeting. After this, I met with Sue on 15 February 2011 at the City Chambers. In addition to Sue, Vic Emery and Councillor Jenny Dawe were also at this meeting. We discussed the upcoming mediation which had been agreed to by all parties, by this time. I believe that Ainslie McLaughlin and Mr Swinney did the country and the project a real favour in agreeing to meet us and hear us out. Thereafter Sue Bruce took the project through the mediation and to the ultimate settlement that allowed the project to be completed. On 24 February 2011 BSC provided TIE with its "Project Phoenix a) As with Project Carlisle I and II, I was aware of the Proposal" (BFB00053258) to complete the line from the Airport to proposal but not the detail of it. Martin Foerder and the Haymarket for a total price of £449,166,366, subject to a shortened team in Edinburgh will have reported to me on it. list of Pricing Assumptions.

- a) What was your involvement, if any, in that proposal?
- 32. Between 8 and 12 March 2011 mediation talks took place at Mar Hall Hotel, Glasgow.

TIE prepared a mediation statement (BFB00053300) with exhibits (CEC02084530) to (CEC02084561). BSC also produced a mediation statement (BFB00053260).

Sue Bruce delivered an opening statement on behalf of CEC (CEC02084575) and Richard Walker delivered an opening statement on behalf of BSC (BFB00053256) and (TIE00670846).

A document "ETN Mediation – Without Prejudice – Mar Hall Agreed Key Points of Principle" was signed by the parties on 10 March 2011 (CEC02084685). The principles were incorporated into a Heads of Terms document (CEC02084685). Both documents were non-binding and were subject to contract.

The documents set out a price of £362.5 million for the off-street works (i.e. from the Airport to Haymarket, with other ancillary works) with a target price of £39 million for the on-street works (i.e. from Haymarket to St Andrew Square).

If you were involved in these events:

- a) Were you present at the mediation and, if so, what was your role? Who else from Bilfinger was present?
- b) What happened over the course of that week?
- c) To what extent did Bilfinger UK require to obtain approval

- a) I was at the mediation from the first morning (Tuesday 8 March) through to Thursday afternoon when we reached a settlement in principle. My role was as the face of the company, and I made a few introductory words. There were lots of people there for Bilfinger Richard Walker, Martin Foerder, many people from the commercial team, our in-house lawyers and our external lawyers Pinsent Masons.
- b) there were very many discussions between different people. We reached agreement in principle about how the project might move forward.
- c) I was there and had the authority to do a deal. There was no need for any phone calls back to Germany.
- d) The heads of term were agreed on the last day of the mediation. The mediation had moved location by then to another hotel and then back into Glasgow (on the Saturday). I believe that Richard Walker signed the heads of term reflecting the agreement reached which was around:
 - a shortened route
 - fixed price for off-street works
 - target price for on-street works
 - better project governance

from Bilfinger Germany for the agreement reache	d? How
(and when) was any such approval obtained?	

- d) What was the outcome of the mediation i.e. what were the main matters agreed? Were the Heads of Terms noted above agreed at the mediation or in the following weeks or months?
- e) What were your views on the outcome of the mediation?

- some priority works
- everyone understood that the management and co-operation would need to change
- · it was discussed that tie would be removed
- CEC would need to get approval to additional funding
- e) It was a successful outcome for all parties. This is evident from the fact that after mediation, we were able to stick to the programme and to the budget. There were many unresolved issues which were able to be resolved with the new governance structure. Trust returned where before there had been none. The contractual mechanisms also became much easier to operate.

33. We understand that further discussions took place between the mediation in March 2011 and signing the Settlement Agreement in September 2011.

By way of overview:

- a) What was your involvement during this period?
- b) What were the main issues that required to be discussed and resolved during this period?
- c) How were these issues resolved?

- a) I was kept updated but was not involved in the detail of drafting the agreement.
- b) the main issues surrounded where the tram was to go to (Haymarket or St Andrews Square) and there were various cut offs concerning whether or not CEC could obtain the necessary funding. CEC had sufficient funding for the priority works so these took place straight away.
- c) funding was obtained and other details were sorted out.

34.	On 15 September 2011 a full and final Settlement Agreement
	(Minute of Variation 5) (BFB00005464) was entered into between
	TIE, CEC and BSC.

- a) What discussion was there within Bilfinger of the settlement agreement? To what extent were you involved in these discussions?
- b) What were the main changes to the contract brought about by the settlement agreement?
- c) What were your views on the settlement agreement?

Proposed Answer

- a) I think I have answered this above. I also believe that Sue Bruce instigated update meetings every second month which I attended and also thereafter there was the Project Forum. I stayed involved in this. All of these meetings were amicable and good progress was made.
- b) the main changes were reflected in the contract amendment which was finalised. I wasn't involved in the detail of that so cannot answer further.
- c) as above that is was a successful outcome for all parties including the people of Edinburgh

September 2011 until completion in 2014

35.	In relation to events between September 2011 and the tram line
	opening for service in May 2014:

By way of overview:

- a) What was your involvement during this period?
- b) What were the main difficulties that arose?
- c) How were these difficulties resolved?
- d) What further design work was undertaken (and by whom

- a) I remained the CEO of Bilfinger Civil until 31 October 2012 and a member of the Project Control Forum for the Edinburgh Trams Project. I may have attended a few meetings even after this because of the relationship which I had established with Sue Bruce and CEC.
- b) there were no real difficulties. No issues were referred to the Project Control Forum which to me shows that the new governance structure was clearly

	and when)? When was design finally completed? When were all statutory approvals and consents finally obtained?	working.
		c) they were dealt with at the appropriate level in the
	 e) What further utilities diversion work was undertaken (and b whom and when)? When were the utilities diversion work 	
	finally completed?	d) I do not have the detail of what further design work was undertaken.
	f) How did the difficulties that arose, and how they were	
	resolved, compare with matters prior to Mar Hall?	e) I do not have the detail of this. I know that there was still a lot of utility diversion works which had to be
	g) Why did works, apparently, progress in line with the new budget and programme after Mar Hall (in contrast with the position before)? What was different?	
		f) There was a completely different project governance structure and trust had been restored. This was still a complex project with many different parties and the design was still ongoing. However, blockers which were there before were no longer present, and decisions were made which allowed the project to progress.
		g) This is the same answer as question f).
36.	We understand that following the Mar Hall mediation there wer approximately 352 Post Mediation Changes.	Proposed Answer
		a) I have no views on this. There were still a lot of
	a) On the face of it, that seems a relatively large number of changes given, by that stage, the design and utilit diversion works ought, presumably, to have been largel completed and given that a shorter section of line was to be built. Do you have views or comments on the suggestion?	design decisions to be made and finalised but this was done without disputes developing.

37.	An e-mail dated 20 November 2012 from Colin Smith noted a	Proposed Answer
	proposed meeting the next day with Keith Brown, Minister, which	^
	you were due to attend (CEC02019588).	a) The meeting did take place. I attended it with Martin
		Foerder and I think someone from Transport Scotland
	a) What was the purpose of the meeting? Did it take	was also present. The purpose was to confirm that
	place? If so, who was present, what was discussed and	everything was now progressing well. Sue Bruce and
	what was the outcome?	Colin Smith would also have been present to confirm
	**	this. I believe that their arrival on the project was a
		game changer.

Project Management and Governance

38.	In relation to the project management and governance of the tram project:	Proposed Answer
	a) Do you have any views, in general, on the project management and governance of the tram project?	a) tie were ill equipped to run this contract. The individuals in tie did not have the right experience and then didn't manage the project properly.
	b) Do you have any views on the performance of the various organisations (including the senior personnel in these bodies) involved in the project management and governance of the tram project (including e.g. TIE, TEL, CEC and Transport Scotland)?	b) I have no detailed comments to make other than my criticisms of tie. Transport Scotland once they became involved were extremely professional and helpful. As far as CEC are concerned, once Sue Bruce was appointed as CEO, she made a concerted and successful decision
	c) Did you have any concerns, at any stage, in relation to the performance of the main contactors involved in the tram project, including Bilfinger, Siemens and Parsons Brinckerhoff? If so, what were these concerns and how were they addressed?	to move the project forward. c) No, I had no concerns with our JV partners. The designers were dealt with at project level and I cannot comment further on their performance.

Final Comments

39. By way of final comments:

- a) How did your experience of the Edinburgh Trams Project compare with other projects you have worked on, both previously and subsequently?
- b) The mediator at Mar Hall had, apparently, remarked in his opening statement that the tram project was a "Simple infrastructure project" (TIE00670972). To what extent do you agree with that statement? To what extent were the problems with the project caused by the civil engineering and construction works that required to be carried out and to what extent did the problems arise due to other reasons?
- c) Do you have any views on what were the main reasons for the failure to deliver the tram project in the time, within the budget and to the extent projected?
- d) Do you have any comments on how these failures might have been avoided?
- e) Are there any final comments you would like to make that fall within the Inquiry's Terms of Reference and which have not already been covered in your answers to the above questions?

- a) I have never seen such a stubborn client, tie simply denied the facts and their own contract and used the media against us to an extent that I have never experienced before or after, particularly where we were not permitted to answer to defend ourselves.
- b) Technically, I would agree that this was not a challenging project. What was challenging was the logistics of working in an inner city environment with utilities which still had to be moved that was challenging.
- c) At the end this comes back to tie and the poor governance of the contract. They did not manage the project well. Our works and those of the MUDFA Contractor were not aligned and that was one of the biggest problems. Neither was the design aligned with our programme. I believe the contract was entered into, too early. I understood that there was a drive from tie to get the contract completed. tie were not competent enough to manage this project.
- d) Better co-ordination of all of the works with more competent people in charge.
- e) No

Terms of Certificate

I confirm that the facts to which I attest in the answers contained within this document, consisting of this and the preceding 34 pages are within my direct knowledge and are true. Where they are based on information provided to me by others, I confirm that they are true to the best of my knowledge, information and belief.

Dr Jochen Keysberg

Dated

26 June 2017