

ALASTAIR RICHARDS QUESTIONNAIRE

This Note is structured as follows:

- Introduction
- The Trams Project – Overview
- Questions regarding the lead up to financial close
- 2008 (June to December) – General questions regarding dispute
- 2009
- 2010
- 2011
- Project management, governance and main contractors
- Final thoughts

INTRODUCTION	
1.	<p>By way of overview:</p> <p>a) What were your main qualifications and vocational experience prior to your employment on the Edinburgh Tram Project?</p> <p>10 O-levels, 3 A-levels, Mechanical Engineering degree, Chartered Engineer.</p> <p>b) What was your experience in major infrastructure projects, including tram and light rail systems, prior to your involvement with the Edinburgh Tram Project? We understand, for example, that you were involved with the Croydon tram project. What was your role with that tram project? It would be helpful if you could explain the main differences, and similarities, between the procurement model for the Croydon tram project and the procurement model for the Edinburgh Tram Project?</p> <p>London Underground, Docklands Light Railway, San Francisco Muni, Hudson Bergen tram, Copenhagen Metro, Merseytram scheme, Manchester Metrolink.</p> <p>c) Between what dates did you work on the Edinburgh Tram Project?</p> <p>I worked for Lothian Buses as a consultant advising them on their input on the Tram Bills from October 2004, I was employed by Edinburgh Trams Ltd (Company Number SC219797) in June 2007 and worked for that company until Spring 2012. Note that this Company had it's name changed in 2013 to CEC 2013 and a new Company was then registered with the name Edinburgh Trams Limited.</p> <p>d) How did you become involved in the Edinburgh tram project e.g. were you asked to become involved (and, if so, by whom) or did you apply for a post in open competition?</p> <p>I applied for the role with Lothian Buses.</p> <p>e) Who did you work for in relation to the tram project (including e.g. Lothian Buses, TIE and TEL)? What was your job title in each organisation? Between what dates were you employed by each organisation? What were your main duties and responsibilities in each organisation? Did these change over time (and, if so, when, in what way and why)?</p>

I worked for Lothian Buses as Tram Consultant advising them on their input on the Tram Bills from October 2004, after contract close in 2007 I was employed by Edinburgh Trams Ltd (Company Number SC219797) in June 2007 and worked for that company until Spring 2012.

f) To whom did you report in each organisation and who reported to you?

I reported to the Chief Executive of Lothian Buses, Neil Renilson, whilst working for Lothian, I reported to the Chairman of Edinburgh Trams Ltd (Company Number SC219797) for the duration of my employment there. I had no reports whilst working for Lothian Buses, whilst working for Edinburgh Trams Ltd (Company Number SC219797) since 2007 I had no reports until 2009, when Transdev Edinburgh Trams Ltd employees were TUPE transferred into Edinburgh Trams Ltd (Company Number SC219797) when I then had Margaret Bayne (PA), Liz Stewart (Safety), Sinead Scott (Maintenance), Kevin Keating (Test Track Supervisor), and Michaela Keating (Operations) report to me.

g) We understand that you attended meetings of the Tram Project Board (TPB). Were you a member of the TPB or only an attendee? Which body or organisation did you represent on the TPB? What part, if any, did you play in meetings of the TPB e.g. did you contribute to discussions, did you have voting rights etc?

Yes, I attended TPB as an attendee to report on progress to the TPB members on the areas for which I was responsible for managing, i.e. the Tram vehicle procurement and delivery, and the preparation for tram testing and mobilisation of tram operations. I provided around 4 or 5 slides each month which were incorporated into each of the TPB presentation packs, which I would talk to and take questions on in the relevant part of the agenda. I had no voting rights.

h) Did you attend meetings of the TIE and/or TEL Boards and, if so, in what capacity?

I was neither an attendee nor member of the TIE or TEL Boards. I think I may have attended part of one TEL Board at one stage but that was very much an exception.

	<p>i) Did you attend meetings of any other tram related committees or sub-committees (and, if so, which committees or sub-committees and what was your role)?</p> <p>I attended the Benefits Realisation and Operational Readiness (BROR) Sub-Committee as an attendee, to which I reported detailed progress with operational mobilisation activities and another Sub-Committee whose name/acronym escapes me, which focused on preparation of the Tram Project Business Case.</p>
2.	

THE TRAM PROJECT – OVERVIEW

	<p>Tram Bills</p>
3.	<p>a) What was your involvement in the progress of the tram bills through the Scottish Parliament? We note, for example, that Neil Renilson, Bill Campbell and yourself, on behalf of Lothian Buses, gave evidence to the Scottish Parliament's Edinburgh Tram (Line Two) Bill Committee on 1 December 2004? Mr Renilson introduced you as Lothian Buses' Planning Consultant? What was your role with Lothian Buses at that time? What was the purpose of your evidence to the Bill Committee? Did you have any other involvement in the Bills process?</p> <p>I was working as a consultant for Lothian Buses, providing them with support on tram and light rail topics. I supported Neil and Bill in giving evidence to both Tram Line One and Tram Line Two Committees on the strengths and weaknesses of the proposals at that time based on analysis of data and passenger surveys on bus patronage. As a result of ours and others evidence the Scottish Parliament asked the promoter tie Ltd and Edinburgh Council to make improvements to the proposed scheme.</p>
	<p>Procurement</p>
4.	<p>In relation to the procurement strategy for the tram project:</p> <p>a) What was your understanding of the main elements and objectives of the procurement strategy for the tram project?</p>

I was not involved in the procurement strategy, but what I recall the positives were early operator engagement the (DPOFA) which I later became responsible for the management of. The concept of MUDFA and an early start on the utilities was good but the implementation and delivery were poor in practice (but I was not involved so am not able to comment why this was). There was a change of design team, in my view at a poorly judged time when Motts and Faber Maunsell had just really got to grips with the detail of what was required, this was instigated by the apparent need for an SDS contract to prepare for a later novation to the Infraco contractor. A lot of time was lost through this procurement and the subsequent mobilisation and getting to grips with the project by Parsons Brinckerhoff. This and the failure of the MUDFA works to deliver on time appear to have been the main causes of difficulty in my view. The tram procurement and then novation to part of the Infraco consortium, which I was responsible for delivering, worked as planned.

b) How important was it to obtain a fixed price for the Infraco contract?

It is always better for the Client to obtain as much cost certainty as they can for those things which are entirely within the contractors control, without paying out excessive cost premiums to contractors for buying out the risk of things they do not control.

c) Did the procurement strategy or objectives change in any way (and, if so, when and why)?

The only change that I was aware of was that we decided to bring the DPOFA contract back in-house when it became clear that the construction was going to take longer than originally intended and to leverage the resources that Lothian Buses already had. In my view this was the right decision on VfM and delivery grounds.

d) In the event, do you consider that the aims of the procurement strategy were met (and, if not, why not)?

As answered under (a), the MUDFA work did not progress as planned and the design produced by the SDS contractor was both late and of poor quality in my opinion, although I was not directly involved or close enough to either to know in any detail the reasons why. I suspect that neither were directly linked to the Procurement Strategy.

	Design
5.	We understand that TIE entered into a Systems Design Services (SDS) contract with Parsons Brinckerhoff in September 2005 and

	<p>that there were three main stages of design, namely, the Requirements Definition phase (provided by December 2005), the Preliminary Design phase (provided by June 2006) and the Detailed Design phase.</p> <p>We also understand that there were difficulties and delays in progressing and completing the design for the tram project.</p> <p>By way of overview:</p> <p>a) What was your understanding of the main difficulties and delays in carrying out the design work and the main reasons for these difficulties and delays?</p> <p>From my perspective, which was managing the Tram Supply contract and DPOFA and not the management of this particular area, but as an attendee at design reviews from the operations standpoint, I believe that the SDS contractor was very slow to mobilise and didn't bring the right quality or experience of design resource until it was too late in the process. I don't believe that there was an effective handover from the previous designers (who had been unsuccessful in the SDS tender competition from memory). I think that both the SDS Contractor and tie underestimated the complexities involved in the design of such a project.</p> <p>b) What steps were taken to address these difficulties and delays?</p> <p>I believe contractual levers were used to try to get them to improve performance but I was not involved in the management of this area so do not have any direct knowledge of the detail.</p> <p>c) Were these steps successful (and, if not, why not)?</p> <p>Not sufficiently, in my opinion it took too long and many changes of staff before there was a suitably experienced design team working on the project. I also think, looking back now, that the non-performance and potentially the responses to it (but I don't know this for a fact as I was not directly involved so this is conjecture), created behaviour from the SDS contractor that was to work to the leanest letter of the contract that they could, by observation of their behaviour when attending design reviews.</p>
	Utilities
6.	TIE entered into the MUDFA contract in October 2006. Utilities diversion works commenced in July 2007 and were due to be

	<p>completed by the end of 2008, prior to the commencement of the main infrastructure works. There were difficulties and delays in progressing and completing the utilities diversion works. By way of overview:</p> <p>a) What was your understanding of the main difficulties in carrying out the utilities works and the main reasons for these difficulties? What role if any was played by provision of designs for these works?</p> <p>I don't know as I wasn't involved in the implementation, my understanding of what I heard at TPB meetings was that it was due to lack of availability of adequate utility design, unforeseen circumstances encountered when the ground was opened up, restrictions imposed on the number of work sites available and potentially opportunistic behaviour from the utility companies, but I do not have first hand knowledge of these matters.</p> <p>b) What steps were taken to address these difficulties?</p> <p>I do not have specific knowledge of this to be able to answer. The only thing I remember was that the program of where to undertake works became far more prioritised over time.</p> <p>c) Were these steps successful (and, if not, why not)?</p> <p>No, as the works took far longer (by 3 or 4 times from memory) than they were originally intended to, I recall the procurement strategy was to have the Utilities work completed so that the Infraco contractor would have clear access to the work sites.</p>
7.	<p>a) Was any consideration given to the effect that the MUDFA slippages would have on the INFRACO contract works?</p> <p>I do not have direct knowledge of this, my recollection is that the MUDFA works were rephased to match the Infraco programme but I don't recall whether this was after or before the Infraco contract was let, so I cannot really offer an opinion as I was not involved in this area of the project.</p> <p>b) In the April 2008 Tram Project Board minutes (see the May papers - CEC00079902), the programme dates appears to be based on the assumption that there would be recovery in the MUDFA programme (Item 4.3). What was the basis for thinking there would be such a recovery?</p>

	<p>I don't recall and wasn't involved in the MUDFA or INFRACO construction areas, but it would make sense that this was believed to be possible at the time as I don't recall prior to the letting of the INFRACO contract that the impact of the delays to MUDFA were recognised as being as critical or high risk as they proved to be.</p> <p>c) What consideration was given to the position if the recovery did not materialise?</p> <p>I don't recall and wasn't involved in this area so cannot offer an opinion.</p>
	<p>Risk</p>
8.	<p>a) In general, what risks were identified as requiring management and how were they managed?</p> <p>I was responsible for the tram vehicles procurement, supply and the operations and maintenance mobilisation and planning, I identified the risks that were associated with these and the dependency on the other areas of the project and took mitigation actions based on the information I was provided by those managing the overall Tram Project and specifically the Infraco contract.</p> <p>b) Who was responsible for managing and monitoring risk?</p> <p>I had the overall project management responsibility and had a risk manager that coordinated and reported on risks across the Tram Project. I managed, monitored and reported on the specific risks associated with the tram vehicles, maintenance and operation preparations.</p> <p>c) Did the risk management approach differ from other contracts and projects on which you have worked and, if so, in what ways?</p> <p>Not that stands out in my memory, the process was like many others I have worked with. On the areas I was responsible for, I managed the risk management by taking appropriate and measured actions and working collaboratively with the contractors and stakeholders and by and large this proved successful on the DPOFA, the TSA and TMA contracts.</p> <p>d) Do you consider that risk management was effective and can you give the reasons for your view?</p>

	<p>As answered above in (c), yes I believe it was on the elements of the project that I was responsible for, and there were few surprises that arose, I do not have the specific knowledge to answer this for the other parts of the project.</p> <p>e) In this project, what was done when it became apparent that a risk would arise and how did that compare with other projects?</p> <p>It would be monitored, escalated if appropriate and managed, I don't think that the process was particularly different from other projects from what I recall.</p>
9.	<p>a) How was risk identified, evaluated and managed during the project? Who was responsible for that?</p> <p>I recall that each manager responsible for a particular area would manage risks on their project and report them into a central risk management process.</p> <p>b) Did you have a role in relation to evaluation and management of risk during the project? If so, what was your role? How did you fulfil any duties you had in that regard?</p> <p>Yes for the project areas for which I was responsible, namely the Tram Supply Agreement (TSA,) the Tram Maintenance Agreement (TMA), and the DPOFA contracts.</p>

QUESTIONS REGARDING THE LEAD UP TO FINANCIAL CLOSE

10.	<p>By e-mail dated 14 December 2007 (CEC01397774) Duncan Fraser, CEC, referred to a presentation by TIE the previous day and asked certain questions about the Quantified Risk Allowance, including querying the provision made for the likely change in scope given the incomplete/outstanding design, approvals and consents.</p> <p>Mr Fraser stated, <i>"The 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 (none technically and only 4 out of 61 prior approval packages) hence the scope is likely to change, hence provision should be made for this"</i>.</p>
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	<p>Geoff Gilbert replied, <i>"I have previously explained the interrelationship between emerging detail 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?"</i>.</p> <p>a) What was your view, at that time, on the above matters including, in particular, whether the "scope" was fixed or was likely to change?</p> <p>At the time I was focused on financial close of the Tram Supply Agreement and the Tram Maintenance Agreement and the post-Financial close novation of them over to the Infraco contractor, I was not involved in the civil works area so couldn't offer any specific comment on this.</p>
11.	<p>An e-mail dated 21 December 2007 from Susan Clark, TIE (CEC01547632) attached a paper (CEC01547633) setting out the agreed process for getting approvals from CEC which would allow them to recommend to CEC's Chief Executive that he write to TIE to give delegated authority to award the Infraco and Tramco contracts. You were noted to be one of the key people involved from TEL.</p> <p>a) What was your involvement in this process?</p> <p>As stated above, I managed the financial close of the Tram Supply Agreement (TSA) and the Tram Maintenance Agreement (TMA) and the post-Financial close novation of these contracts over to the Infraco contractor.</p> <p>b) More generally, what was your involvement in, and responsibilities for, the tram project at this stage?</p> <p>I was responsible for managing the DPOFA, the TSA and the TMA contracts.</p> <p>c) What was your knowledge of, and involvement in, the discussions and negotiations that took place between late 2007 and financial close in May 2008 in relation to the infrastructure contract terms and price?</p> <p>I was involved primarily in the tram operations, the Infraco maintenance terms and price and the interface to the Tram Supply and</p>

	Maintenance Agreements interface terms in the Infraco contract.
12.	<p>By e-mail dated 7 February 2008 (CEC01422925)) you provided David Mackay, Neil Renilson and Bill Campbell with an update on price negotiations with BBS. You noted that <i>"The biggest danger will I think be any further attempts at changing the risk transfer back from Private to Public sector. This would be very unadvisable in my opinion"</i>.</p> <p>a) What was the basis of your concern in relation to any further attempts at changing the risk transfer back from the private to the public sector?</p> <p>I don't recall the exact details, but I presume I must have felt that I had spotted some indications in the way that the drafting of the Infraco agreement was going that this was happening. Although I was focused upon the maintenance, tram vehicle and operator interfaces I tended to look through all the tracked changes in each draft.</p> <p>b) In the event, do you consider that further risk was transferred from the private to the public sector? If so, how and why did that occur?</p> <p>When I became aware of the contents of schedule 4, which was several years later, it was clear that it had.</p>
13.	<p>The minutes of a joint meeting of the Tram Project Board (TPB) and the TEL Board on 13 February 2008 (CEC01246825 at para 4.3) noted: CEC Technical and Prior Approvals, <i>"Steven Bell ... confirmed that the final design packages are now expected in late 2008 and that the critical designs will be identified and dealt with in the programme"</i>.</p> <p>a) What was your understanding of, and views on, these matters?</p> <p>I cannot really comment as it was outside my area of responsibility.</p> <p>b) If it is correct that the final design packages were not expected until late 2008, what was your understanding in relation to how BBS could undertake due diligence on the design and provide a fixed price?</p>

	<p>It was not my area of responsibility, however my understanding was that BBS had been provided with the designs and that it was refinements and iterations that followed, I had no knowledge at the time of the contents of Schedule 4 so was unaware of the potential consequences.</p>
14.	<p>On 18 February 2008 BBS produced a Design Due Diligence Summary Report, based on design information received by BBS by 14 December 2007 (DLA00006338). That document raised various concerns about design, including that <i>"more than 40% of the detailed design information"</i> had not been issued to BBS.</p> <p>a) Did you see, or were you otherwise made aware of, BBS's report?</p> <p>I have no recollection of seeing or hearing about the report specifically, at that time I was focused on negotiation of the tram supply and tram maintenance contract to finalise them and align the terms with the emerging Infraco contract.</p> <p>b) In any event, what is your view on the matters in the Executive Summary of the report, including, in particular, the assertion that approximately 40% of detailed design was outstanding (or, at least, had not been issued to BBS) as at 14 December 2007? Did that accord with your general understanding of matters around that time?</p> <p>I seem to recall that there was a schedule of design 'drops' of drawings around that time and in the weeks after which were being received and managed by the tie Commercial Team and then issued out to the Infraco preferred bidder, I think CD-roms may have been used along with transmittal notes being raised, but it may have been a data-room that was being used. These documents would give an accurate indication of what was transferred when.</p> <p>c) Was this report discussed within TIE, TEL or at the Tram Project Board or with CEC?</p> <p>Not that I personally can recall, I do recall the issuing of design documents at or around that time as mentioned in (b) above but it is a long time ago, so it may have been, but it certainly does not ring any bells with me.</p>

15.	<p>Infraco contract close took place on 14 and 15 May 2008, as part of which a number of contracts were signed, including the Infraco contract (CEC00036952) and novation of the SDS contract to the Bilfinger Berger/Siemens consortium (BBS). We note that you were in attendance at the meeting of the Tram Project Board on 13 May 2008 that gave final approval for financial close (the minutes are at CEC00080738, p.9).</p> <p>a) In what role did you attend that meeting i.e. which body did you represent?</p> <p>I attended in the role of project manager of the Tram Supply and Tram Maintenance Agreement and the maintenance and operational interfaces to the Infraco Agreement that I had been responsible for managing. I believe these elements were under the responsibility of TEL.</p> <p>b) Who else was present at the meeting? What was discussed at the meeting? Approximately how long did the meeting last?</p> <p>I don't recall precisely but the usual members and attendees, the TPB Meetings were I seem to remember were always in the mornings and ran typically lasted for approximately 2 to 2.5 hours. They were always minuted so the attendees should be shown on the formal Notes of the Meeting.</p> <p>c) Were all individuals present in agreement that financial close should take place? What were your views? Did you have any concerns at that time as to whether the project would be delivered on time and within the contract price? What were your views at that time in relation to whether there was a fixed price for the Infraco contract and the extent to which, if at all, the Infraco contract price may change after financial close?</p> <p>Yes I believe so, I don't recall there ever being any votes at TPB's, the decisions were from memory reached by consensus amongst the Members of the TPB. As far as I recall the case to proceed was positive, I personally was mainly focused on the decision in relation to the Tram Supply and Tram Maintenance Agreements and the risks, opportunities and timeline for these was balanced and well understood.</p>
16.	By way of overview:

- a) During 2007, what was your understanding of the extent to which detailed design would be complete (i) when bids were received for the Infraco contract and (ii) when the Infraco contract was signed?

I was not involved closely enough in this area to comment specifically. As mentioned above, I was aware that regular drops of civil works design were being provided to the Infraco Preferred Bidder during that period but not the exact content.

- b) At contract close, what was your understanding of the extent to which detailed design was complete (and all necessary statutory approvals and consents had been obtained), the extent to which these matters were outstanding and when the detailed design was likely to be completed (and all approvals and consents obtained)?

I was not involved closely enough in this area to comment specifically. As mentioned above, I was aware that regular drops of civil works design were being provided to the Infraco Preferred Bidder during that period but not the exact content.

- c) At contract close, what was your understanding of the extent to which utilities diversions were complete, the extent to which these works were outstanding and when these works would be completed? Did you have any concerns as to whether the utility diversion works would be completed by the end of 2008? Were any such concerns discussed within TIE and/or TEL?

My recollection was that the MUDFA works were progressing slower than originally planned, but that those managing MUDFA and the planned Infraco works had coordinated their implementation plans to avoid conflicts. I couldn't comment in detail on the plans as this is not an area that I was managing or responsible for.

- d) At contract close, what was your understanding of the likely effect on the Infraco works and contract (and the cost of the tram project) if the outstanding design (and approvals and consents) and outstanding utilities diversion works were not completed within the anticipated timescale?

As mentioned above I remember the MUDFA works being discussed and it was said by those responsible that the programmes had been coordinated with that of INFRACO, which made sense at the time, but with hindsight proved to be optimistic. I remember thinking at the time that approvals and consents would need to be carefully managed by and overseen by tie and CEC because of the responsibilities they had in the process. I don't recall being aware of outstanding design at contract close. Anecdotally, I recall that on the day of contract close it was the schedule listing/containing the design drawings that was the last thing to be printed or to

	<p>arrive.</p> <p>e) At contract close, what was your understanding of the provision made in the risk allowance for the above matters?</p> <p>I don't recall, from memory a QRA had been run on the risk register and was included in the Business Case. The details should be in the tie server files.</p> <p>f) At contract close, to what extent did TIE discuss the above matters with CEC?</p> <p>CEC were represented on the TPB so had the benefit of what was discussed there. I wasn't party to any other meetings between tie and CEC that I recall.</p>
17.	<p>The pricing provisions of the Infraco contract were set out in Schedule 4 (USB00000032).</p> <p>a) When did you first become aware of Schedule 4 and its terms? Were you aware of Schedule 4 at the time of the meeting of the Tram Project Board on 13 May 2008 referred to above?</p> <p>No, schedule 4 was deemed confidential and only the tie commercial team had sight of it, I think I was only given access to it a long time after contract close, it was possibly at the time when I was asked to take a look at some of the disputes that had arisen that I was provided with it.</p> <p>b) What was your understanding of the extent to which the Construction Works Price of £238,607,664 was a fixed price?</p> <p>I don't recall the exact number, but that was my understanding that it was a fixed price, I seem to remember that there was a relatively small provisional sum of c.£50,000 for something to do with maintenance that I was aware of, but my understanding was that the civil works had been fixed.</p> <p>c) What did you understand to be the main exclusions, provisional sums, assumptions and conditions?</p>

	<p>I don't recall, the only one I was aware of was the maintenance provisional sum mentioned above.</p> <p>d) In what circumstances did you consider that the price was likely to change?</p> <p>I wasn't involved in the detail to be able to offer an opinion on Infraco. On the Tram Supply Agreement it was only if the Client instructed a change, on Tram Maintenance there was a pricing mechanism based on how many Kilometres per year the trams averaged per annum</p>
18.	<p>In relation to the Value Engineering deductions shown in Appendix A of Schedule 4 of the Infraco contract (USB00000032):</p> <p>a) What was your understanding of what would happen if the VE savings were not achieved?</p> <p>I wasn't involved in or sighted on Schedule 4.</p> <p>b) What were your views as to whether the VE savings were likely to be achieved?</p> <p>I was only involved in conversations on some pieces of depot equipment which were I think at one point included in the Value Engineering, but my recollection is that these were turned into fixed elements of the Siemens scope of works, I think before contract close.</p> <p>c) In the event, were these Value Engineering savings achieved (and, if not, why not)?</p> <p>I was not involved, other than the Depot Equipment mentioned above which I recall was realised, but I think this was done before contract close.</p>
19.	<p>Schedule 4 of the Infraco contract (USB00000032) contained a number of Pricing Assumptions.</p> <p>At the time of Infraco contract close:</p>

	<p>a) What did you understand to be the purpose and effect of the Pricing Assumptions?</p> <p>I was not involved in schedule 4 and only became aware of the Pricing Assumptions when I was asked to look at the disputes that had arisen several years after contract close.</p> <p>b) What did you consider were the main Pricing Assumptions that were likely to change and result in Notified Departures and why?</p> <p>I was not involved in schedule 4 so cannot comment.</p> <p>c) Approximately how many Notified Departures did you consider were likely to arise?</p> <p>I was not involved in schedule 4 so cannot comment.</p> <p>d) What did you consider to be the likely total value of the Notified Departures?</p> <p>I was not involved in schedule 4 so cannot comment.</p> <p>e) To what extent were the above matters discussed, prior to financial close, (i) at meetings of the TPB, (ii) within TIE, (iii) within TEL, (iv) with CEC and (v) with Transport Scotland?</p> <p>I don't recall them being discussed in any forum that I was involved in or aware of.</p>
20.	<p>Pricing Assumption 3.4 of Schedule 4 (USB00000032) dealt with design development.</p> <p>a) What was your understanding of the meaning of that Pricing Assumption, including which party bore the risk that development, or change, of design from the base date of 25 November 2007 would result in a contract change/Notified Departure?</p> <p>I was not involved in schedule 4 so cannot comment.</p>

21.	<p>At Infraco contract close the SDS contract was novated from TIE to BBS.</p> <p>a) What was your understanding in relation to who would be responsible for managing the design process after novation and for ensuring that all outstanding design (and all outstanding statutory approvals and consents) was completed/obtained on time?</p> <p>The novation made Infraco responsible for managing SDS and the design process, my understanding was that responsibility for approvals and consents was shared between tie, Infraco and CEC, something that in my opinion at the time required careful management.</p> <p>b) What responsibility and powers, if any, did TIE retain after novation in relation to managing the design process and ensuring that all outstanding design (and all outstanding statutory approvals and consents) was completed/obtained on time?</p> <p>My recollection was that tie and CEC carried a shared responsibility for approvals and consents but otherwise my understanding was that the responsibility had been transferred.</p> <p>c) Do you consider that any problems arose from the fact that (i) changes to, and completion of, design was primarily under the control of BBS (as a result of novation of the SDS contract to BBS) but (ii) changes to design, or delay in completing design, could give rise to a departure from one of the Pricing Assumptions in Schedule 4 of the Infraco contract and, therefore, give rise to a Notified Departure (leading to an increase in the cost of the project)? Was any consideration given by TIE to that potential difficulty prior to SDS Novation?</p> <p>I became aware of this pricing mechanism only when I was asked to look at the Disputes a long time after contract close. I cannot say whether consideration was given by tie prior to SDS Novation.</p>
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2008 (JUNE TO DECEMBER) – GENERAL QUESTIONS REGARDING DISPUTE

22.	Following contract close, a major dispute arose between TIE and BBS in relation to the interpretation and application of the Infraco
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	<p>contract and Schedule 4. By way of overview:</p> <p>a) When (and how) did you first become aware of the dispute?</p> <p>At some stage, I don't recall when, I was asked to provide a view when the tie team were preparing for the formal Adjudication Process.</p> <p>b) What was your understanding of, and views on, the main matters in dispute and the main reasons for the dispute?</p> <p>I was surprised when I was made aware of the pricing mechanisms that existed in Schedule 4. My view was that this pricing mechanism appeared to me to open tie up to risk and cost exposure. My view was that a mediated outcome was a better course of action than contesting through to formal Adjudication.</p>
23.	<p>In total, approximately 738 INTCs were notified by BBS between Infraco contract close and Mar Hall in March 2011. By way of overview:</p> <p>a) Were you surprised by the number of INTCs?</p> <p>Yes, although my recollection is that when these were shown at TPB in a table in the presentation pack by those responsible for Infraco that many of them were disputed by tie as being small and therefore did not qualify in their opinion as a change.</p> <p>b) What do you consider were the main INTCs in terms of value and importance?</p> <p>I was not involved in the detail of them at the time so cannot really comment on this. I was however later asked to participate in what was called a Project Management Panel, this was quite late on in the process to see if we could reach/broker an agreement. My view was that at the Panel meetings, we made good progress on getting to a position where both parties could settle fairly on some of these INTCs over the design changes on some of the key structures on the route out to the airport, but for some reason these deals were never formalised by tie. In my view this was a missed opportunity.</p>

24.	<p>a) How would you describe the initial implementation of the INFRACO works? What were the problems? What was the cause of the problems?</p> <p>I was focused on mobilising the Tram Supply Agreement with CAF, so don't feel able to give any real insight on this or into the underlying causes. My suspicion looking back is that INFRACO had focused too much on the negotiation and final close and not enough on making preparations for actually delivering the project.</p> <p>b) How did the mobilisation proceed?</p> <p>I remember that there was a lag in mobilising, it took an extended period of time to establish project offices out at the Gyle from memory and for the INFRACO to staff up the key roles in their team.</p> <p>c) Did you at any stage become alarmed by the lack of progress? If so, when and what triggered it?</p> <p>I must have been aware through attending TPB of the progress reporting on INFRACO, but I was primarily focused on my responsibilities with the Tram vehicles progress and making sure that they remained on programme and resolving matters on the interior design and fitout of them. I don't recall precisely when it was but I know there was an escalation meeting with Dr Keysburg of BBS that I was asked to attend and that is when I really got an insight on what the issues were between tie and INFRACO. At that time and with the information that I had available to me (ie I had not been given sight of schedule 4 of the INFRACO Agreement) it just appeared to me to be a contractual 'try-on' by the contractor and them covering up for a slow mobilisation. The key interface with INFRACO that I was interested in for my area of responsibility was the Depot at Gogar, where the trams were to be delivered to and where I needed to mobilise the operations, and the section of track adjacent to it. These were progressing reasonably ok and I feel that we were collectively relatively successful at addressing issues as they arose there.</p>

25.	<p>It is clear that as the contract got under way there were still ongoing delays in designs, consents and MUDFA.</p> <p>a) What was the approach of TIE/TPB to this?</p> <p>I can only really talk about the areas I was responsible for, whilst I was involved in Design Reviews (from an operations perspective) and attended TPB so was aware of the issues from the reports. As far as I recall, at first it was monitored, then escalated.</p>
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2009

26.	<p>A dispute arose in relation to the Princes Street works due to start in February 2009.</p> <p>After discussions and correspondence over a number of weeks, an internal TIE e-mail dated 20 March 2009 noted that David Mackay and Dr Keysberg had that morning agreed the principles of an agreed amendment to the measurement and payment regime for Princes Street (CEC01009977) .</p> <p>The dispute was resolved by parties entering into the Princes Street Agreement (CEC00302099) (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).</p> <p>a) When (and how) were you first aware that there was a dispute in relation to the works at Princes Street?</p> <p>At a TPB probably, I seem to recall that it all blew-up fairly quickly and immediately after the contractor had taken possession of the work site, it was reported at TPB as opportunism by the contractor and the timing certainly coincided with when tie and the city council were in a vulnerable position.</p> <p>b) What was your understanding of the basis, and underlying cause(s), of the Princes Street dispute?</p> <p>On the surface, it was about the uncertainty of the exact location and condition of utilities under Princes Street by the INFRACO Contractor. They had not from memory been diverted in advance as the city council wanted the tramworks and utilities to be done on</p>
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such a key street at the same time during one closure. INFRACO took the view that each and every time that they would encounter a utility they would stop work and be entitled to compensation for waiting whilst a local utility diversion was designed and then undertaken. This was considered to be an opportunistic interpretation/exploitation of what they considered were their rights under the contract.

c) What was your understanding of why BBS refused to start work on Princes Street?

As far as I recall it was the reason I have stated above.

d) How, and when, was the dispute resolved? What was your involvement, if any, in resolving the Princes Street dispute?

It was resolved by a commercial deal. I was asked to take a view on and support the negotiations of this deal, as someone semi-independent of those directly involved by David Mackay.

e) Why was it agreed that BBS would carry out the Princes Works at demonstrable cost (plus overhead and profit percentages etc)?

Because BBS effectively had tie and the City Council held to ransom.

f) Did you consider that that was likely to result in the cost of the Princes Street works being greater than the sum allowed for these works in the Infraco price?

Yes higher than the original Infraco price, but not as high as it would have been if BBS had continued to sit and wait.

2010

27.	By letter dated 29 July 2010 (TIE00885457) Martin Foerder sent BBS's "Project Carlisle 1" proposal (CEC00183919) to TIE.
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	<p>Under the proposal BBS 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.</p> <p>BBS's proposal was rejected by TIE by letter dated 24 August 2010 (CEC00221164), in which TIE responded with a counter-proposal of a construction works price (to BBS) for a line from the 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.</p> <p>a) Which party instigated the Project Carlisle proposal and why?</p> <p>I believe that it was Siemens who instigated it as they were worried about the reputational damage and lack of progress being made on the project.</p> <p>b) To what extent were you involved in the Project Carlisle proposals and discussions?</p> <p>I was asked to assess what the maintenance costs should be for various shortened line lengths which was fed into the discussions. I was not involved in the discussions on the infrastructure works.</p> <p>c) What were your views, in general, on the Project Carlisle 1 proposal and why it did not resolve the dispute?</p> <p>I was in favour of finding a solution to the problem, from previous experience, I was aware of how much delay costs build-up if a project is not making progress and how unpredictable the outcomes of disputes are. A similar figure from memory had been reached during a previous bout of mediation. I think there was concern however over the risk of BBS further exploiting the pricing assumptions and that the price would end higher in practice.</p>
28.	<p>By letter dated 11 September 2010 (TIE00667410), BBS submitted its "Project Carlisle 2" proposal to TIE, in which BBS 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.</p> <p>By letter dated 24 September 2010 (CEC00129943), TIE rejected BBS's proposal.</p>

	<p>Mr Foerder responded by letter dated 1 October 2010 (CEC00086171).</p> <p>a) What were your views in general on the Project Carlisle 2 proposal and why it did not resolve the dispute?</p> <p>A tramline from the Airport to Haymarket didn't work from a patronage and operating cost point of view, from what I recall it had to reach Princes Street tramstop as a minimum (which in practice meant the line had to go as far as York Place for a turnback as the trams cannot travel against the flow of traffic) that is why we ended up with the Piccardy Place temporary stop to make it as viable as possible in operations terms (avoiding a relatively long distance of empty tram movement).</p>
29.	<p>A number of adjudication decisions were issued in 2010 relation to disputes between TIE and BBS.</p> <p>a) In general, what were your views on the outcomes of the adjudications (including whether they favoured TIE or BBS)?</p> <p>In helping to prepare for these (I was asked to be a critical reviewer) I first became aware of the full contents of Schedule 4 and the effect on the interpretation of the INFRACO contract. On the key points I was of the view (with the benefit of seeing Schedule 4) that tie were in a weak position.</p>
30.	<p>Between 9 August and 12 October 2010 TIE served ten Remediable Termination Notices (RTNs) and three Underperformance Warning Notices (UWNs) on BBS.</p> <p>The RTNs and BBS's responses are found at [CEC02084518] to [CEC02084529]. The UWNs are [CEC00378695], [CEC00167342] and [CEC00164758].</p> <p>In response, BBS both denied that the RTNs constituted valid notices and, in some cases, also produced Rectification Plans.</p> <p>a) In general, what were your views on TIE's RTNs and UWNs?</p> <p>I was not directly involved, but I considered that they were a good mechanism to apply pressure to try to drive BBS into accepting a more reasonable deal for a Fixed Price for delivering a truncated section of tramline. I did not however consider, that if tie had followed</p>

	<p>them through to a termination, that the resulting court case would go in tie's favour.</p> <p>b) In general, what was BBS's response?</p> <p>I think initially they were surprised and taken aback.</p> <p>c) Were any of these RTNs or UWNs taken further by TIE and, if not, why not?</p> <p>I don't recall, I don't believe so. As stated above I think had they been the resulting court case would have gone against tie.</p>
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2011

31.	<p>On 24 February 2011 BBS provided its "Project Phoenix Proposal" to complete the line from the Airport to Haymarket for a total price of £449,166,366, subject to a shortened list of Pricing Assumptions (BFB00053258).</p> <p>a) What were your views on that proposal?</p> <p>As before, my views from an operational perspective is that stopping the tramline at Haymarket would have been a disastrous outcome.</p>
32.	<p>Mediation talks took place at Mar Hall between 8 and 12 March 2011. TIE prepared a mediation statement (BFB00053300) as did BBS (CEC01927734).</p> <p>We understand that a statement "ETN Mediation – Without Prejudice – Mar Hall Agreed Key Points of Principle" was signed by the parties on 10 March 2011 (the principles of which were then incorporated into a Heads of Terms document (CEC02084685).</p> <p>a) Did you attend or were you involved in preparing for the mediation? If so, what was your role?</p> <p>I attended to work on the element involving CAF in connection with the Tram Supply and Tram Maintenance Agreements, I also</p>

	<p>suggested that the depot finalisation and test track sequencing was written into and the deal.</p> <p>b) What were your views on the outcome of the mediation?</p> <p>I cannot comment on the overall settlement as I was not involved, but the CAF element, the depot sequencing, test track and operation as far as Piccardy Place were the right outcomes in my opinion.</p>
33.	<p>A full and final Settlement Agreement was entered into on 15 September 2011 (BFB00005464).</p> <p>a) What were your views on the settlement agreement?</p> <p>I worked on amending and agreeing the Employers Requirements for the truncated section of line and the interfaces to the Tram Supply and Maintenance Agreements, these I believe were a good outcome.</p>
34.	<p>We are unsure when your involvement with the tram project ceased and should be grateful, for completeness, if you would explain when and why your involvement with the project stopped?</p> <p>I ceased working on the project in Spring 2012 after I had successfully overseen the depot successfully handed over, the test track was up and running and the tram vehicles had been successfully delivered and passed their Dynamic Site Acceptance Tests. You would need to ask the City of Edinburgh Council and the Chairman at the time of Edinburgh Trams Limited (Company Number SC219797) why my involvement in the project stopped at this time. My appointment was formally terminated on Companies House on the 20/03/2012 on the formal record of Edinburgh Trams Limited (Company Number SC219797).</p>

PROJECT MANAGEMENT, GOVERNANCE AND MAIN CONTRACTORS

35.	<p>In relation to project management:</p> <p>a) Which body or organisation do you consider was ultimately responsible for ensuring that the contracts and works were properly</p>
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	<p>managed, including managing the interface between the different contracts and works?</p> <p>TIE.</p> <p>b) Did you have any concerns at any stage in relation to TIE's management of the tram project or the performance of any of TIE's senior personnel or Board members?</p> <p>Yes.</p> <p>c) Did you have any concerns at any stage in relation to TIE's reporting to CEC (or others)?</p> <p>Not that I was aware of, No.</p>
36.	<p>In relation to CEC:</p> <p>a) How were important matters relating to the tram project reported by TIE to CEC (including by whom and to whom)?</p> <p>As far as I was aware this was through the TPB, but there must have been other meetings outwith this in practice, but I was not a party to any and am not aware of the existence of any.</p> <p>b) How were the views and requirements of CEC fed back to TIE?</p> <p>The only visibility I had was what was said at TPB and what was put into writing either by email or formal correspondence that was shared with me.</p> <p>c) Did you have any concerns at any stage in relation to the performance of senior CEC officials or councillors?</p> <p>No not in connection with the project, until events in early Spring 2012.</p>
37.	<p>In relation to the Tram Project Board (TPB):</p>

	<p>a) How were important matters relating to the tram project reported by TIE to the TPB (including by whom and to whom)?</p> <p>There were papers distributed and a presentation briefing pack that was run through in the meetings. Predominantly it was the tie Tram Project Director Steven Bell that would report, I would report in connection with the tram vehicles, the depot fitout progress and preparations for operations.</p> <p>b) How were the views and requirements of the TPB fed back to TIE?</p> <p>Verbally at the TPB, in writing by email and formal correspondence.</p> <p>c) Did you have any concerns at any stage in relation to the performance of the TPB or any members of the TPB?</p> <p>I had concerns at the progress of the project and what I consider were potentially missed opportunities to resolve some issues but I think the TPB overall performed well in difficult and challenging circumstances.</p>
38.	<p>In relation to TEL:</p> <p>a) How were important matters relating to the tram project reported by TIE to TEL (including by whom and to whom)?</p> <p>I presume formally this was done at the TEL Board, and by TEL Board Members attending the TPB.</p> <p>b) How were the views and requirements of TEL fed back to TIE?</p> <p>Verbally at the TPB and I presume verbally at TEL, emails and there were a few letters as far as I am aware.</p> <p>c) Did you have any concerns at any stage in relation to the performance of TEL or any members of TEL?</p> <p>I had concerns at the progress of the project and what I consider were potentially missed opportunities to resolve some issues but I think the TPB (therefore including the TEL members that attended) overall performed well in difficult and challenging circumstances.</p>

39.	<p>In relation to the Scottish Government (SG) and Transport Scotland (TS):</p> <p>a) How were important matters relating to the tram project reported by TIE to SG/TS (including by whom and to whom)?</p> <p>I don't really know after TS stopped attending the TPB other than a few quarterly progress reporting meetings that I was involved in to give updates on progress with the tram vehicle delivery milestones.</p> <p>b) How were the views and requirements of SG/TS fed back to TIE?</p> <p>I was involved in some interaction on the Business Case but other than that I was not involved in this.</p> <p>c) Did you have any concerns at any stage in relation to the performance of SG/TS or any ministers or senior officials?</p> <p>I think the manifesto, election and post-election uncertainty over the project at the time that the procurement competition was running was incredibly unhelpful to the project, but I was not aware of any specific issues.</p> <p>d) What are your views, with the benefit of hindsight, on the decision taken around July 2007 that TS should play a lesser role in the governance of the project?</p> <p>I am not sure it made much difference in practice, I think you could try to argue that the Contractors may have thought twice about taking on SG and CEC but in practice it didn't seem to make much difference when senior members of SG did become involved.</p>
	<p>In relation to the inter-action between the different bodies and organisations involved in the project management and governance of the tram project:</p> <p>a) How were important matters relating to the tram project reported between these different bodies and how, and by whom, were decisions taken in relation to these matters?</p>

	<p>As far as I was aware and involved the decisions were taken at TPB</p> <p>b) What were your views in relation to the governance arrangements for the tram project including, in particular, the effectiveness of the governance arrangements?</p> <p>They appeared effective to me at the time.</p> <p>c) Do you consider that the duties, responsibilities and reporting requirements of the different bodies were sufficiently clear?</p> <p>Yes, I believe so.</p> <p>d) Did you have any concerns at any stage in relation to the governance arrangements?</p> <p>No, not really.</p> <p>e) Which body or organisation do you consider was ultimately responsible for ensuring that the tram project was delivered on time and within budget?</p> <p>Tie were responsible for ensuring that the tram project was delivered on time and within budget.</p>
40.	<p>In relation to the main contractors involved in the tram project:</p> <p>a) What were your views on the performance of each of the main contractors?</p> <p>I think my summary would be CAF performed as expected and as contracted and always tried to achieve positive outcomes. I think Siemens were a mixed bag some good and some bad. I think Bilfinger Berger have some explaining to do and I think Parsons Brinkerhoff were a disaster for the project.</p> <p>b) To the extent you had concerns in relation to any of the main contractors, what did TIE do to try and address these concerns? Were these steps successful (and, if not ,why not)?</p>

	I think you should ask tie who would be better placed to answer this.
	Relationship between TIE, TEL and TPB
41.	<p>a) What was the relationship between TEL, TIE and the Tram Project Board?</p> <p>The relation was collaborative from memory, we all had our allocated responsibilities to report on</p> <p>b) What role/remit did each body have and how did they interact? Was one the client for the other(s)? Which body was "in charge"? Did these matters change over time and, if so, in what way?</p> <p>I think it did change over time, up until around the September after Infraco contract close I recall tie was very much in charge, then when the Executive Chair of tie, Willie Gallagher left, I recall TEL stepping in more to provide leadership, but tie remained responsible for the management of both MUDFA and Infraco contracts.</p>
42.	<p>a) Did you have dealings with the CEC Tram Sub-committee?</p> <p>Not that I recall, was this a council group, I seem to recall attending some kind of committee meeting in the council offices after the Mar Hall mediation but I do not recall what it was called. I attended the BROR (Benefits Realisation and Operational Readiness) sub-committee, but I think this was a sub-committee of the TPB or TEL Board and it didn't have any councillors on it only non-execs from memory.</p> <p>b) It was said to have an oversight function. How did that function compare to or sit alongside the functions of TIE, TEL and TPB?</p> <p>Not aware of it's existence that I recall.</p>

FINAL THOUGHTS

43.	<p>By way of final thoughts:</p> <p>(1) How did your experience of the Edinburgh Tram Project compare with other projects you have worked on (both previously and subsequently) including, in particular, the Croydon tram project?</p> <p>I didn't work on Croydon, so cannot really compare it to that. The tram vehicle procurement proceeded as other rolling stock contracts that I have been involved in, in fact probably better. Looking back I found it an utterly draining experience to be a part of, I am proud of the trams, the depot and the tram stop design, all parts I personally had a responsibility for. The rest I found a waste of a significant part of my life.</p> <p>(2) Do you have any views on what were the main reasons for the failure to deliver the project in the time, within the budget and to the extent projected?</p> <p>As I have said previously, I think changing out the designers for SDS caused problems which were probably never really recovered from. I think that Bilfinger Berger were <i>difficult. A.B.</i></p> <p>(3) Do you have any comments, with the benefit of hindsight, on how these failures might have been avoided?</p> <p>With the benefit of hindsight, I think that the Pricing Assumptions being drafted as they turned out to be in Schedule 4 of the INFRACO Agreement, tie should have paid greater attention to the evolution of the designs to manage the risk of changes. Having said that INFRACO demonstrated with the Princes Street stand-off, that it was an opportunistic contractor and was prepared to hold tie and CEC to ransom until it got what it wanted. My recollection is that there was a weakness in the Change Mechanism drafting in the INFRACO Agreement which BB exploited, refusing to undertake a change until the value had been agreed. So addressing these two issues would have potentially avoided some of the problems but those who were directly responsible for managing INFRACO would be better placed to answer this question.</p> <p>(4) Are there any final comments you would like to make that fall within the Inquiry's Terms of Reference and which have not already</p>
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been covered in your answers to the above questions?

I thought that there would be questions on the Tram Supply, Tram Maintenance and DPOFA agreements for which I was actually responsible, rather than on the INFRACO and MUDFA matters where I simply provided my insight to those who were actually responsible for managing. Are questions on Tram Supply, Tram Maintenance and DPOFA to come at a later stage?

SUPPLEMENTARY QUESTION

On 5 April 2007, you circulated your thoughts on comments Transport Scotland had made on the Draft Final Business Case (CEC01622828, covering email CEC01622827). TS's comments included:

- (4) That *"a risk allowance of 12% for a rail-related project just entering detailed design may be viewed as a little optimistic"*. In response to that, you noted that *"this is a little unfair given the relative levels of design achieved on this project, however in light of the comments below risk assessment is probably optimistic."*
 - (4) That risks with a 95% probability should be transferred to the cost estimate; and that *"an indication of tie's confidence that the mitigation will be effective should be provided with an indication of what the residual risk is"*. In response to these, you expressed concern that doing this would push up the capex, and the risk element of the capex.
 - (5) That the programme described *"only a best case scenario"* as it was *"based on assumptions of a right first time and on-time delivery. Edinburgh Tram Network Project is a unique project in Scotland. Therefore the assumptions and preconditions appear optimistic."* You noted that this would mean the *"capex estimate reflects a 'Best Case' too"*, and that these were *"very pertinent observations"*.
- (1) Please explain your views on these matters.

It would appear that I concluded that the risk provision should be higher to better reflect the risks and that this would have an effect on the BCR.

I can see that italics and the word 'issue' followed by a colon punctuation was used consistently to denote where a comment had been inserted in the original document.

- (2) Was the risk allowance too low, having regard to these matters?

<p>I cannot draw a fully informed conclusion on that from this extract alone, I however clearly thought that it might be and flagged points which I felt warranted satisfactorily addressing by the project before proceeding.</p> <p>(3) To what extent were there concerns that increasing the risk allowance would call into question the viability of the project?</p> <p>I don't know of any so cannot really comment, I apparently made the statement, which appears to me to be entirely logical in connection with any Business Case, that the consequence of raising the level of capex without any additional benefits accruing will have the overall effect of reducing the Benefit Cost Ratio. From memory, however the BCR was around 1.7 or 1.8, at this level I would be very surprised if adding in these risks would make a material difference on the viability of the project.</p> <p>(4) To what extent did that influence the treatment of risk on the project?</p> <p>None to my knowledge.</p>

I confirm that the facts to which I attest in this witness statement, consisting of this and the preceding 33 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.

Witness signature... 

Date of signing.....06/07/17.....