IN THE MATTER OF THE EDINBURGH TRAM INQUIRY

WRITTEN CLOSING SUBMISSIONS

ON BEHALF OF

BILFINGER CONSTRUCTION UK LIMITED

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EXECUTIVE SUMMARY

1. Bilfinger has welcomed the opportunity to be a Core Participant in this Inquiry, and has fully committed to being represented as well as supporting its previous employees in giving evidence.

2. There are many aspects of the evidence which the Inquiry has heard which may well have contributed to the difficulties which the Project faced from its inception, but which are not directly of relevance to Bilfinger. Such matters are only touched upon in passing in these closing submissions. They include the governance of the Project and the political backdrop against which the Project was procured.

3. It is Bilfinger's position that the reason this Project suffered delay, cost more than budgeted for, and delivered less than was projected, is attributable to four main things: (a) the material and unquantifiable risks which existed at the time the Contract was entered into by TIE and the Infraco; (b) the contractual allocation of risk under the Contract; (c) the

manifestation of critical risks for which TIE had contractual responsibility; and (d) the interpretation and maladministration of the Contract by TIE during the course of the works.

4. The Contract was, of course, negotiated over many months on an arm's length basis between large organisations which each had considerable legal and technical construction advice available to them.

5. The Contract was never a 'fully fixed price' one. The price was always going to go up from the original price given the risks which existed and the allocation of contractual responsibility in relation to those risks which TIE accepted when it signed the Contract. The manifestation of risks allocated to TIE under the Contract triggered the Notified Departure mechanism in Schedule Part 4. That mechanism provided that where there was a change to the assumed facts and circumstances set out in Schedule Part 4, there was a deemed mandatory TIE Change. In that event, the Infraco had a contractual entitlement to additional time and/or money under the Contract arising from the effects of such a change.

6. The key risks for which TIE had contractual responsibility duly manifested themselves during the Project. Indeed, there was a Notified Departure under the Contract on day one of the Project. The Contract provided for significant additional payments being made to Bilfinger in the event of that occurring. Bilfinger submits that TIE's refusal to accept the realities of its position under the Contract (which was reflected in TIE's maladministration of the Contract) resulted in a two year dispute which further added to the delays and costs incurred. The Project

delivered less than projected because ultimately the City of Edinburgh Council did not have sufficient funds to meet the cost of the entire line in the circumstances which came to pass.

7. Bilfinger's position is that the Contract in its final form, including in particular the terms and contents of Schedule Part 4, is the only contract which Bilfinger (and its consortium partner, Siemens) was able and willing to enter into, standing major unquantifiable risks which continued to exist at the point of contract award, including those in relation to (a) the incomplete state of the utility works (being performed under the MUDFA contract); (b) the materially incomplete state of the design; and (c) outstanding Third Party approvals and (d) other matters for which TIE was contractually responsible, including unknown and unforeseeable ground conditions. In the contract negotiations, Bilfinger's position was that it could provide a fixed price in areas where it had sufficient information to price the risk, but it could not and would not price the many significant 'unknowns' which existed as at May 2008. As Richard Walker stated in his Witness Statement [**TRI00000072_0096**, **paragraph 25**], if TIE had wanted a truly fixed price contract, the price was £1 billion. If, however, TIE wanted to push the price down and keep it within what was, as far as Bilfinger was concerned, an unknown price cap, then the only contract which Bilfinger (and its consortium partner Siemens) was prepared to enter into was one which included Schedule Part 4, and which gave that schedule primacy over any other aspect of the Contract (which was the case by virtue of clause 4.3 of the Contract).

8. To a large extent, what subsequently happened on the Project was exactly what Schedule Part 4 had contemplated and was specifically designed to deal with: the MUDFA works did not complete in time; the design continued to develop as all parties were aware it would; and Third Party and other approvals trickled in over time. The contractual risk in relation to these matters was – very clearly – allocated to TIE under the Contract.

9. It is Bilfinger's submission that, whilst TIE was aware of the nature of the Contract which it had signed up to (both before and after execution on 14 May 2008), TIE refused to acknowledge that position, having (for whatever reason), wrongly reported to CEC officials, who thereafter reported to the Council members, that the Contract was 95% fixed price, with the remainder being subject to provisional sums for which adequate provision was available. The fact that TIE was fully aware of the nature of the agreement which it had struck with the Infraco is clearly apparent from the email exchange between Jim McEwan, Steven Bell and Geoff Gilbert of TIE, which followed an email sent by Ian Laing of Pinsent Masons LLP on 26 March 2008 [**CEC01465908** and **CEC01465933**]. Aware that matters which had not been finally agreed prior to contract execution would lead to Notified Departures immediately thereafter, Mr McEwan's view was that, to address such matters prior to entering into the Contract:

> *"…will open up the whole can of worms on the Infraco contract cost overall, and that we will have to take on the chin that the programme version is not consistent, get the deal signed and*

then fight the notified departure tooth and nail..."

[**CEC01465908**]

10. Bilfinger finds this statement to be highly illuminating in relation to what subsequently transpired. TIE refused to acknowledge the nature of the agreement that it had entered into (but was fully aware of) and was prepared to fight Infraco, and Bilfinger in particular, *'tooth and nail'* on virtually every point of principle. When the Infraco's position was subsequently determined to be the correct interpretation of the Contract on essentially all the key points following decisions by several independent adjudicators, TIE failed to report fully the outcome and implications of those adjudications, and refused to accept that it was in a very difficult position as a result of them. Instead, TIE developed the ominously named 'Project Pitchfork' which was plainly designed to force Bilfinger into submission. It is a matter of record that this "strategy" was not successful: the Project was only resolved after the mediation at Mar Hall when there came to be a realisation by the Council as to the true nature of the Contract, and of the factual matters which had delayed progress since the outset (i.e., incomplete MUDFA works; incomplete design at the outset; and delay in obtaining Third Party and other consents, and ground conditions requiring works which could not have been reasonably foreseen). Only when a new way of working, with new governance and an amended contract was agreed, could the Project move forward to completion. By this point, TIE had been disbanded. That last point is telling. TIE had proved so dysfunctional in terms of its approach to, and administration of, the Contract, that it was deemed

surplus to requirements by those on the Council side of the Contract. After the Contract was renegotiated and TIE left the scene, the Project proceeded to a relatively smooth, and dispute-free, conclusion.

11. Bilfinger accepts that it adopted a robust attitude to defending its contractual position. It makes no apology for that. It is a commercial organisation accountable to its shareholders. Moreover, the position on the Contract which Bilfinger adopted was proved correct again and again in the many adjudication decisions. Bilfinger refers to the assessment of the Council's legal officer, Nick Smith [**CEC02082694**], when he assessed the position as at December 2010. In relation to the 15 adjudications on the Project, Bilfinger had a 13:2 win rate. But even that assessment is understating the position when one bears in mind that Bilfinger won ***all*** the adjudications on the key points of principle in relation to the Contract and the Project.

12. In short, Bilfinger sought to vindicate its contractual rights, and they were upheld in all material respects. Those adjudication decisions still stand in relation to what they decided, and cannot be reversed. On the Contract, the Inquiry can be fully satisfied that Bilfinger was right.

13. It must also be remembered that Bilfinger's approach was responsive to the stance being taken by TIE which would not accept the nature of the agreement which it had negotiated and freely entered into. It is also accepted that Bilfinger refused to proceed with certain works without TIE Change Orders. In the prevailing circumstances, Bilfinger was under no contractual obligation to do so. Had Bilfinger continued

indefinitely carrying out works on a 'goodwill' basis (i.e., when Bilfinger did not insist on the requirements of clause 80.13 which required that TIE Change Orders had to be issued by TIE in advance of works commencing – a requirement introduced and insisted upon by TIE), then Bilfinger would have found itself in an extremely difficult financial situation. It was perfectly reasonable for Bilfinger not to countenance such a situation.

14. What Bilfinger does not accept, and what is not borne out by the evidence which is before the Inquiry, is the multiplicity of 'lies and spin' which were propagated by TIE, and which, to this day, appear still to be accepted by some of the key TIE players (without any critical scrutiny). These include the allegations that Bilfinger under-priced the Contract; that it did not have a basis for its position on the key issues in relation to the Contract; that it adopted an aggressive position from the outset; that it refused to mobilise; that it over-priced Notified Departures and had to be 'brought back into line' by TIE; and that it sought to hold TIE to ransom. There is, on the evidence, no proper basis for these allegations.

15. In any event, Bilfinger was plainly aware from early in the Project, namely upon Willie Gallagher's departure, that it would not get a fair hearing on the Contract from TIE, and that it would need to find another way forward. Accordingly, at the same time as defending its position contractually, Bilfinger continuously looked for ways to establish how the Project might progress, in spite of the parties' contractual differences. These efforts included: the Princes Street Supplemental

Agreement; the On Street Supplemental Agreement; Projects Carlisle and Phoenix; and the many attempts made by Bilfinger to get someone (other than TIE) to pay proper attention to what was really going on in relation to the Project.

16. One of the people who did pay attention ultimately was Alastair MacLean, Head of Legal of CEC, who described the process he went through to arrive at a realisation that "*it was patently obvious there was a fundamental problem with that contract",* [**TRI00000055_C_0012**, **paragraph 41**] referring in particular to clause 3.2.1 of Schedule Part 4 of the Contract [**USB00000032_0005**]:

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

17. This is a highly unusual contract provision, but one which was inserted by Bilfinger's legal advisers in order properly to take account of the fact that the factual assumptions made in connection with the Infraco's bid price no longer held good at the time of execution of the Contract (through no fault of the Infraco). It was nonetheless necessary to enshrine these assumptions in the Contract in order to allow a (nominally) "fixed price" to be included against the background of evolving factual circumstances [Witness Statement **TRI00000088_0002, paragraph 5**].

18. In these Closing Submissions, Bilfinger seeks to expand upon:

- the procurement of the Contract;
- TIE's administration of the Contract and the problems which it created;
- Contract award in May 2008 leading to the Princes Street dispute;
- Key events in 2009 and 2010, including:
    - the adjudication proceedings and their outcome;
    - Continuing delays;
    - Project Pitchfork;
- A response to various specific allegations made against Bilfinger;
- The various roads to resolving matters which were pursued by Bilfinger; and
- The successful completion of the Project post mediation.

19. In these submissions, Bilfinger also seeks to cover those aspects of the Chairman's Note for Core Participants concerning closing submissions

dated 15 March 2018 which it is in a position to deal with, and generally to make these submissions in accordance with the suggested chronology.

1. **PROCUREMENT TO CONTRACT CLOSE ON 14 MAY 2008**

2. **Infraco – ITT to Appointment as Preferred Bidder**

3. Bilfinger is unable to comment upon the procurement strategy adopted by CEC and its arm-length company, TIE, other than in the sense of being advised from the outset of TIE's aims and receiving the Invitation to Tender which narrated those aims.

4. TIE's procurement strategy was that the design of the tram lines 1a and 1b would be complete prior to the infrastructure contract being awarded (the 'Infraco Contract'), and that was the understanding of both Richard Walker, Bilfinger's Managing Director for the UK [**TRI00000072_0003, paragraph 2**], and Scott McFadzen, who lead for Bilfinger on the pre-qualification, bid management and mobilisation of the Contract [**TRI00000058_0004, paragraph 15**]. The designer (SDS – a consortium comprising Parsons Brinckerhoff and Halcrow) would be novated to the Infraco Contractor, but with a completed design such that this was never intended to be a design and build contract (which would have attracted a much higher premium). Bilfinger also understood that all necessary statutory approvals and consents would be obtained prior to Contract award. As stated by Scott McFadzen "this was a big selling point" for Bilfinger in deciding to tender for the project [**TRI00000058_0004, paragraph 15**].

5. In addition, it was also understood that all utility diversion works would be diverted prior to award of the Contract. Mr McFadzen explained that

he persuaded Bilfinger to tender for the project on the basis of this original strategy [**TRI00000058_0004, paragraph 14**].

6. Bilfinger were initially in a joint venture with Morgan Est (until October 2006). At a meeting on 7 June 2006, the Bilfinger/Morgan Est joint venture were advised that it was TIE's intention to issue the tender documents in late August/early September 2006, with tender return by the end of December 2006 with a view to contract award by July 2007 and operational trams by the end of 2010 [**TRI00000058_0004, paragraph 13**]. Bilfinger subsequently requalified in a joint venture with Siemens.

7. It is a matter of record that the procurement period slipped and was extended, with the Infraco Contract finally being awarded in May 2008. The Invitation to Negotiate was issued to the Bilfinger Siemens consortium ('BBS') on 3 October 2006, with a date for submission of tenders being 9 January 2007. Richard Walker describes this deadline as being tight and noted that in the covering letter, Andie Harper of TIE had noted:

> "*We are currently checking the Employer's Requirements against the Contract Terms and Conditions and volume 1 of the ITN for consistency of terminology. Consequently we expect to reissue an updated version before the end of October..."* [**TRI00000072_0004, paragraph 3**].

8. As Mr Walker explains: *"This caused me to suspect that they were not really ready to issue the documents, and they were working to an*

unrealistic timetable. They issued them in a panic to achieve a set date." [**TRI00000072_0004, paragraph 3**]

9. Both Scott McFadzen and Richard Walker gave evidence to the extent that completion of the design was delayed and that this gave the tenderers problems in terms of submitting a timeous tender return. Mr McFadzen explained that TIE *"were getting into lots of detail on some parts of the scheme and hardly any, if anything at all, on other parts"* [**TRI00000058_0005, paragraph 16**]. Richard Walker in a letter dated 13 October 2006 [**CEC01795260**] expressed concern and requested a three month extension for the time for return of tenders.

10. The design continued to be developed throughout the tender period. By February 2008 when BBS submitted its Design Due Diligence Report in relation to the state of the design [**DLA00006338**] no detailed design information existed at all for 40% of line 1a. It was accepted by TIE's own Engineering Director, David Crawley in evidence, that this was an accurate conclusion on the extent of the available design. The result of this was that BBS' tender submission was qualified and contained many clarifications. As Scott McFadzen explained:

> "*it was not possible to submit a fully-compliant tender because when we looked at the documents and saw the status of the design we had to submit what I would describe as a very heavily qualified tender. We started with a large list of qualifications/ clarifications and some of these were maintained right through this procurement process. The qualifications*

became Schedule Part 4 of the Infraco contract" [**TRI00000058_0005, paragraph 18**].

11. BBS submitted tender proposals on 12 January 2007. In May 2007 it submitted a price and consolidated proposals which included risk and a list of clarifications [**CEC01656123**, **CEC01604676** and **CEC01491869**]. A contract mark-up was submitted by BBS in July 2007 and a priced submission with clarifications in August 2007 [**TRI00000058_0015, paragraph 52**]. A letter was sent on 24 August 2007 with a revised price [**TIE00087652**]. Scott McFadzen made the point that he considered it very unusual for a contractor to be asked to submit two sets of prices in both May and August 2007. As he puts it:

> "*This was the start of the financial pressure that TIE were to put us under*." [**TRI00000058_0009, paragraph 31**]

12. It is clear from the evidence that is before the Inquiry that the design continued to develop throughout the tender period, and also appeared to be in a state of some disarray (see for example the Witness Statement of Scott McFadzen **TRI00000058** at paragraphs 26 to 30). Problems with the availability of sufficient design to enable full and unqualified tenders to be submitted were acknowledged by TIE's Geoff Gilbert in a letter dated 19 July 2007 where he explained that the programme had been delayed by:

> "*Delays to the design programme resulting in the outputs required for pricing due to their difficulty in obtaining decisions*

from Project stakeholders. TIE have intervened to bring about clear decision making." [**CEC01627004**]

13. Richard Walker explained that he anticipated from this that the design was to be provided *"two months before the return date for the bid, but it was not returned within that timescale....It was envisaged and anticipated that all the design would be complete in sufficient time for us to price. I felt - and I think I voiced this concern at the time - that the tender should be delayed approximately a year to get the design completed, so the procurement timescale was totally unrealistic and not achievable*" [**TRI00000072_0009, paragraph 15**].

14. Mr Walker described the process from pre-qualification to Contract award, in evidence as being:

> *"(it)wasn't really similar at all to anything I had come across in that time…"* [**Public Hearing Transcript, 15 November 2017, page 8:12-13**],

and in response to a question from Mr MacKenzie, confirmed that the whole process up to contract close in May 2008 was *"a lengthy, difficult and very trying negotiation to try and get agreement such that we could enter into a contract."* [**Public Hearing Transcript, 15 November 2017, page 9:8-10**].

15. The difficult and trying negotiations are exemplified by the following:

16. Firstly, the pressure that was put on BBS by TIE to bring the Infraco price within a certain figure, which Richard Walker describes as a 'gateway':

> "*The reality appeared to be that TIE had a top price, which I understood as a "gateway" and was referred to as the "business case" which the price had to be under to be approved by the Council. TIE was trying to manipulate the numbers to get the price through this "gateway". TIE did not disclose to BBS what this figure was. We were simply aware that they were under pressure to get the number below a set figure in order for this "business case" to be approved by the Council. This was apparent at tender stage and during the subsequent contractual negotiations. TIE would tell us how much we needed to take off the price to put us back in poll position to be awarded the contract*." [**TRI00000072_0112, paragraph 20**]

17. Mr Walker was asked by the Chair to the Inquiry when giving evidence whether he considered this to be appropriate in a procurement exercise, to which his response was:

> "*Not appropriate really, no, my Lord*
>
> *CHAIR OF THE INQUIRY: Why not?*
>
> *A: Because it is the client trying to tell is, and essentially reducing – what's the right word - giving out potential confidential information as to what the other bidder's price was.*

It's -- it's not a professional way of working in my view" [**Public Hearing Transcript, 15 November 2017, page 24:7-13**].

18. Secondly, the development of what Richard Walker referred to the 'risk basket':

> "*Discussions took place after BBS had been appointed preferred bidder. Where the design was incomplete, the progress of the MUDFA contractor was not in line with our construction programme or the agreement of the points of contract was, well, non-agreement of points of contract, then we put those items into a schedule of items which contained risk*," [**TRI00000072_0013, paragraph 21**].

19. In the run up to being awarded Preferred Bidder, Mr Walker described the negotiation process as follows:

> "*Following submission of the Tender we were invited on a regular basis (maybe twice a week) for further negotiations in the run up to Preferred Bidder where we were continually and repeatedly asked by TIE to further reduce our price and accept more risk*." [**TRI00000072_0092, paragraph 17**]

20. He also described TIE's 'normalisation process':

> "*I also recall that TIE kept using the word "normalisation" in respect of the price. To this day I have no idea how the precise mechanism of this normalisation process worked. TIE would never explain this "normalisation" process to me or anyone else*

on the BBS team. Essentially what it appeared to mean was that where BBS' tender had not included a price for something, TIE would use this "normalisation" process to insert a number into our tender. I have no idea how they calculated this number, as no one would ever explain it, but I believe they were comparing our submissions with that of the other tenderer...or some financial model known only to them....TIE's objectives and negotiation methodology appeared to be driven by the necessity to produce a construction price below a particular sum which was not disclosed to BBS." [**TRI00000072_0095, paragraph 22**]

21. BBS were appointed as Preferred Bidder on 22 October 2007 with the Preferred Bidder Agreement being signed on that day. However, the Agreement makes it clear that there were many items still to be agreed, explained by Mr Walker as follows:

"*I signed the Preferred Bidder Agreement on 22 October 2007…I have reviewed this Agreement again recently, and it is very clear from the words of the Agreement that there was much left to be done in October 2007 before the contract could be finalised. ...The key issues in October 2007 (and prior to and after that date) were: a) The final design was not complete; (b) the multi utility diversionary framework agreement ("MUDFA") works were not complete; (c) the status of the Third Party Agreements was unclear; and (d) the pricing was not complete. Following the award of Preferred Bidder status we then*

commenced a seven month process of final contract negotiations." [**TRI00000072_0013, paragraph 21**]

22. **Events of December 2007**

23. The Inquiry has heard a great deal of evidence of the events in early December 2007 leading up to the meeting which took place in Wiesbaden, Germany, on 13 and 14 December 2007, leading to the execution of the Wiesbaden Agreement on 20 December 2007 [**CEC02085660**].

24. The key documents referred to include the following:

- An email from Scott McFadzen to Geoff Gilbert of 10 December 2007 advising TIE of difficulties which Bilfinger had in firming up prices for a number of items [**CEC01494139**];
- Mr Gilbert's response of the same day [**CEC01494152**];
- A letter from Mr Gallagher to Mr Walker of 11 December 2007 [**CEC01481843**];
- Richard Walker's response to Mr Gallagher of 12 December 2007 [**CEC00547788**]; and
- Mr Gallagher's response to Mr Walker dated 13 December 2007 [**CEC00547779**].

25. This line of correspondence is summarised in the Witness Statements of Richard Walker [**TRI00000072_0017, paragraph 27**] and Scott McFadzen [**TRI00000058_0026, paragraphs 92-93**]. In short, both witnesses refer to the financial pressure being put upon Bilfinger by TIE,

to firm up on prices despite the absence of firm design or information which would permit Bilfinger to do so. In particular, Richard Walker refers to TIE's tactics at this time as amounting to 'bullying' and in particular, to Willie Gallagher's letter of 13 December 2007 which had sought to delete the consortium's assumptions and replace it with TIE's schedule of 'Anticipated Price' in the following terms:

> "*Essentially I felt it was a bullying tactic. I was under the threat of having to report to Mr Enenkel who was my Chief executive of civil engineering in Germany that we'd been – we'd had a preferred bidder position and we'd lost it….I felt it was completely out of order to receive threats putting not just words in our mouths, but trying to get us to put words on paper. Obviously we didn't want the meeting cancelled. We didn't want to lose preferred bidder status. We wanted Mr Gallagher to go across to Germany and meet with our principals, both Siemens and Bilfinger*." [**Public Hearing Transcript, 15 November 2017, page 39:25 and 40:1-13**]

26. Richard Walker's letter of 12 December 2007 [**CEC00547788**] provided comment on specific matters where it was suggested that the price could be fixed by adding specific further sums totalling £8.2 million. This is the basis for what was subsequently included within the Wiesbaden Agreement. From Bilfinger's perspective, and as explained by Scott McFadzen:

"It would be correct to say that we could firm up on certain items for £8.2 million but only if we had the design information. We expected that some of our clarifications would be bought out. It was "round one" of the buying out process and the price was £8.2 million." [**TRI00000058_0026, paragraph 93**]

27. The former TIE executives' evidence on this period of the negotiations was as follows:

28. Willie Gallagher: "*I think I suggested to Matthew to put some pressure on the consortium to close out as many items as possible. I suggested that a meeting be convened at a senior level with the consortium to get commitment from the directors and agree the required prices."* [**TRI00000037_0075, paragraphs 92-93**]. This is confirmation that TIE did in fact have a *'required price'* and also that there was a deliberate attempt to impose pressure on the Consortium, to meet that price. There appears to have been no recognition by Mr Gallagher that if the design information was simply not available to the BBS consortium, or other crucial elements had not been confirmed (the status of the MUDFA Works, third party approvals and consents), then BBS would not be able to provide fixed prices, let alone agree to TIE's 'required price'.

29. Matthew Crosse: He explains that he and Geoff Gilbert drafted the letter of 11 December 2007 to Richard Walker because they needed BBS to commit to a firm price. He refers to BBS' response of 12 December 2007 as making "*us at TIE very concerned. At this stage BBS would*

have an understanding of their profit expectations, which may have been lower than bid. BBS are therefore taking the opportunity at this stage of the process to increase the price." [**TRI00000031_0036, paragraphs 109-110**]. The remainder of his comments on the run up to Wiesbaden are all to the extent that BBS were purely playing a tactical game to improve their negotiating position, and he does not take on board any of the comments made by BBS. He states that in relation to Mr Walker's letter of 12 December 2007 "*all the bulleted items are very general issues which could be dealt with easily.*" [**TRI00000031_0036, paragraph 110**]. Given that one of those bulleted points was that the SDS design would be delivered in accordance with BBS' anticipated programme, and that 40% of the detailed design was not available to Infraco by February 2008 (some 2 months later), Mr Crosse's views are naive at best, if not frankly incredible and not borne out by the facts, or subsequent events leading up to contract close. In evidence, he confirmed his belief that this was just a 'hard nosed' negotiating tactic by BBS [**Public Hearing Transcript, 17 October 2017, page 134:23-135:3**].

30. Geoff Gilbert: Mr Gilbert simply recalls that there were *'frustrations on the part of the TPB with the progress to award the Infraco Contract. Willie and Matthew went out to Wiesbaden where BB were based…*" [**TRI00000038_0051, paragraph 138**]. His oral evidence adds very little to his Witness Statement other than an acknowledgement that if BBS were to take the design development risk, he understood that the most important part of that would be building to the revised design and that in

order to take such a risk, he would accept that the price would have to increase [**Public Hearing Transcript, page 87:8**].

31. **The Meeting in Wiesbaden**

32. As the Inquiry is aware, a meeting took place in Wiesbaden, Germany, on 13 December and 14 December 2007 at Bilfinger's headquarters. The meeting at Wiesbaden was attended by Richard Walker and Michael Flynn on behalf of the consortium, among others, and Willie Gallagher and Matthew Crosse on behalf of TIE.

33. The Inquiry has heard various statements describing the purpose of that meeting in Wiesbaden, but what is clear and undisputed is that the key purpose of the meeting was to discuss the Infraco Contract price and value engineering. The evidence of Matthew Crosse and Willie Gallagher was that TIE went to Wiesbaden with the intention of agreeing a fixed price for the Infraco Contract [**TRI00000037_0083, paragraph 266** and **Public Hearing Transcript, 17 October 2017, page 134:6-9**]. In his oral evidence, Mr Gallagher stated that he believed the meeting at Wiesbaden had achieved that goal, transferring the design development risk to the Consortium [**Public Hearing Transcript, 17 November 2017, page 83:16-20**], but he fails to elaborate the terms of this alleged agreement. Mr Crosse also said that the Consortium had agreed at Wiesbaden to fix their price, but he could not recall the terms on which this was allegedly agreed [**Public Hearing Transcript, 17 October 2017, page 142:7-9**]. With some assistance from Inquiry Counsel, Mr Crosse was reminded that the parties agreed

to an additional sum of £8 million being added to the Contract Price. [**Public Hearing Transcript, 17 October 2017, page 142:18**]. Inquiry Counsel then asked Mr Crosse:

> "*Q. But what did they undertake in return for that? How did they firm up their price?*
>
> *A. I understand it was to fix their price subject to certain things which aren't documented and were not documented the next day when we came back; sufficient enough for us to put a reliable, in FBC terms, price into the FBC*." [**Public Hearing Transcript, 17 October 2017, page 142:20-25**]

34. Mr Crosse's answer here is confusing. His suggestion that the price was fixed "*subject to certain things which aren't documented*" gives little by way of clarification. In any event, the terms of the Wiesbaden Agreement [**CEC02085660**] which TIE and BBS signed on 20 December 2007 after the meeting and following further negotiations of its terms, provides a clear answer to what was agreed at Wiesbaden.

35. Matthew Crosse delegated the task of formalising the outcome of the meeting in Wiesbaden into a document, which became known as the Wiesbaden Agreement [**CEC02085660**], to Geoff Gilbert. The email correspondence between TIE and the Consortium after the meeting in Wiesbaden (put to various witnesses) has shown that the final draft of this document was the product of the input of both Geoff Gilbert and Richard Walker. Various drafts of the Wiesbaden Agreement passed between TIE and the consortium before it was finally executed on 20

December 2007. Richard Walker expressed clearly to TIE (in particular to Geoff Gilbert), that the consortium had significant reservations about accepting the design development risk, as TIE wished them to do. Commenting on his email to Geoff Gilbert on 19 December 2007 (at 13:44) [**CEC00547735**], Richard Walker, in his Witness Statement, explained:

> "*The point I was making in that Email was, our price was based on the premise that the SDS design would be complete at the point of novation; and they were not. I was informing them that this was going to cost them millions more, and asking if they had the budget for it. I discussed this with Willie Gallagher. One of the discussions I had with Willie Gallagher was that he stated that everybody knew that the price was going to increase after award....The people who were best placed to know how much it was going to go up by, were TIE, because they had the contract with MUDFA. They knew the status of the design at that stage and were in contract with the designer*." [**TRI00000072_0022, paragraph 37**]

36. Richard Walker's concerns were repeated in an email on 20 December 2007 [**CEC00547740**], which reinforced the Consortium's position that they would not accept the design development risk. The Inquiry has undertaken an exercise with several witnesses of reviewing the various drafts of the Wiesbaden Agreement which were passed between TIE and the Consortium before the agreement was signed. The revisions being negotiated by the parties, and the concerns expressed in the

emails sent by Richard Walker, categorically evidence that there was no agreement that the consortium would accept full or unqualified design development risk. Richard Walker's comments on the draft agreement express this fittingly:

> "*It is clearly evident, reading the draft agreements, that there were a significant number of conditions and caveats, all of which are just going to lead to extended time and the price going up; quite clearly evident to anybody who knows anything about this industry*." [**TRI00000072_0021, paragraph 33**]

37. That, however, is precisely what the former TIE executives have said that the Wiesbaden Agreement ultimately achieved. Willie Gallagher said:

> "…*So I -- my understanding of the deal was that the design development risk had passed through, it had been agreed we'd take on through -- with the consortium*." [**Public Hearing Transcript, 17 November 2017, page 83:17-20**].

38. This was the message passed on to Steven Bell, Geoff Gilbert, Jim McEwan, and others at the Tram Project Board, after the meeting in Wiesbaden (see Jim McEwan, **Public Hearing Transcript, 18 October 2017, page 102:6-9**; Steven Bell, **TRI00000109_0031, paragraph 19(2)** and **Public Hearing Transcript ,24 October 2017, page 28:3-22**; and Geoff Gilbert, **Public Hearing Transcript, 18 October 2017, page 88:16-18**). However, the terms of the Wiesbaden Agreement put

beyond any doubt that design development risk remained firmly with TIE. Clause 3.3 of the Wiesbaden Agreement provides:

> "*The BBS price for civils works includes for any impact on construction cost arising from the normal development and completion of designs based on the design intent for the scheme as represented by the design information drawings issued to BB up to and including the design information drop on 25th November 2007...*
>
> *For the avoidance of doubt normal design development and completion of designs means the evolution of design through the stages of preliminary to construction stage and excludes changes of design principle, shape and form and outline specification.*" [**CEC02085660_0005-0007**]

39. Geoff Gilbert, who was intimately involved in the drafting of the Wiesbaden Agreement, was clearly aware of the significance of this clause 3.3. That is apparent from his comment on Richard Walker's email on 20 December 2007 [**CEC00547740**] (at 06:17), and which expressed his concerns about Infraco accepting the design development risk. Geoff Gilbert described this as, "*completely contrary to the agreement that we had, completely contrary to what had been agreed at Wiesbaden*" [**Public Hearing Transcript, 18 October 2017, page 108:14-16**]. Geoff Gilbert did not attend Wiesbaden, and could only have formed a view on this based on information he had received from Willie Gallagher and Matthew Crosse. Nevertheless, the extent to

which clause 3.3 of the Wiesbaden truly reflected what had been agreed at Wiesbaden is irrelevant. The point to be taken from Geoff Gilbert's evidence here is that TIE was aware that the Consortium had not agreed, and were not going to agree, to take on unfettered and open ended 'design development risk' after Wiesbaden.

40. It is acknowledged by both Geoff Gilbert [**Public Hearing Transcript, 18 October 2017, page 111:11**] and Richard Walker (see paragraph 42 below) that the exclusionary wording as found in clause 3.3 of the Wiesbaden Agreement, came about through discussions between both of them.

41. Steven Bell gave evidence on what he understood clause 3.3 of the Wiesbaden Agreement to mean. He was at pains to explain why he and TIE understood that this provided for the passing of the design development risk to the consortium. He said:

> "*If it was just the normal process of completing design, then we would expect that to be included within the price and we thought that was the language that was covered there. It has been tested at length after the fact, but certainly at that time that was our very clear understanding of the mechanics*." [**Public Hearing Transcript, 24 October 2017, page 31:8-13**]

42. By contrast, Richard Walker was frank in his Witness Statement to the Inquiry on the meaning of clause 3.3. His evidence was as follows:

"*The final version of clause 3.3, in my view, was made clearer by putting the "avoidance of doubt" statement in there, which was put in in conjunction with a discussion with Geoff Gilbert. The suggestion that in the signed agreement, BBS, take on greater risk for design development is really silly.*" [**TRI00000072_0024, paragraph 41**]

43. Clause 3.3 of the Wiesbaden Agreement ultimately developed into clause 3.4.1 of Schedule Part 4 to the Infraco Contract [**USB00000032**]. Notwithstanding the evidence of TIE witnesses who have defiantly maintained the "understanding" which Steven Bell professed in his oral evidence to the Inquiry, clause 3.3 of the Wiesbaden Agreement and clause 3.4.1 of Schedule Part 4 quite clearly did not result in TIE having bought out all of the residual risk for design development. These clauses were not intended to achieve that function, and this is clear not only from the printed words in the documents, but in the email correspondence which surrounded the revised drafts of Schedule Part 4 of the Infraco Contract as dealt with in further detail below (at Paragraphs 117 to 126 - see by way of example: Richard Walker's emails: **CEC00547732**, **CEC00547735**, **CEC00547740**; Ian Laing's email on 26 March 2008, Andrew Fitchie's advice following that email: **CEC01465933**; and Jim McEwan's internal response to Steven Bell – **CEC01465908**).

44. Although clause 3.3 of the Wiesbaden Agreement was in time translated into Schedule Part 4, Wiesbaden itself was merely a step in the process of negotiating the Infraco Contract terms. It was not a "final

deal" that could not be opened up or negotiated further. Whereas Andrew Fitchie has suggested that the heads of terms agreed at Wiesbaden were not negotiable [**Public Hearing Transcript, 10 October 2017, page 105:1-5** and **TRI00000102_0176, paragraph 7.249**]; all of the other parties involved in Wiesbaden have confirmed otherwise. Richard Walker is clear on this point. He described the meeting as "*negotiation along the way, some months before the contract was signed*." [**Public Hearing Transcript, 15 November 2017, page 50:12-13**]. Willie Gallagher described Wiesbaden as "*a negotiation opportunity*", and stated categorically that he was not there to negotiate a deal [**TRI00000037_0087, paragraph 276**]. For Matthew Crosse, it "*was not the final contract…It was a point in time*" [**Public Hearing Transcript, 17 October 2017, page 161:9-10**]. Ian Laing, whom Andrew Fitchie claimed had firmly communicated that the Wiesbaden Agreement was not negotiable in the months leading to contract close, also confirmed otherwise. Mr Laing said:

> "*…the Wiesbaden Agreement clearly is a record of agreements reached by the principals at a point in time.*
>
> *A number of things can have happened in that regard. The language of the Wiesbaden Agreement certainly is imprecise as one often finds in such documents. The legal teams were not involved in Wiesbaden, and therefore I would have felt it entirely appropriate to -- to interpret that in a way which gave greater certainty.*

But I have no recollection in particular of going back to the Wiesbaden Agreement from time to time and seeing it as something that we had to adhere to on an ongoing basis, not least because the factual circumstances were continually changing throughout the negotiation of Schedule 4." [**Public Hearing Transcript, 23 November 2017, page 14:19-15:9**].

45. The discussions held in Wiesbaden and the subsequent terms of the Wiesbaden Agreement evidently were not "set in stone". As on any other project, the drafting of the final Infraco Contract terms was always intended to be the subject of further negotiation. Indeed, the parties spent a further five months after Wiesbaden negotiating and agreeing the final contract terms. Wiesbaden was the genesis of Schedule Part 4, but it was, simply, a stage in the negotiation. It was not the "final deal" between the parties.

46. Wiesbaden was part of the process of buying out of residual risk. Clearly, it did not do what certain of the TIE witnesses subsequently professed was achieved. It did not result in the residual risk for design development being passed to the BBS Consortium, nor did it result in a firm and fixed price. To the extent that TIE witnesses believe that this was achieved at Wiesbaden or by the Wiesbaden Agreement, then their evidence is simply not credible, or they simply have not read the terms of the Wiesbaden Agreement or Schedule Part 4. Certain of the key individuals involved however, including Geoff Gilbert (whose evidence on the topic was particularly confusing and given that he was the person primarily tasked with drafting Schedule Part 4, more than a little

alarming) can have been under no doubt at the time, as to what was and was not being achieved by the final terms of the Wiesbaden Agreement.

47. The agreement reached at Wiesbaden also resulted in the 'design – freeze' date of 25 November 2007 being agreed – the design information drawings issued to Infraco at this date subsequently becoming the 'Base Date Design Information' as contained within Schedule Part 4. As Richard Walker has explained in his Witness Statement [**TRI00000072_0015, paragraphs 22-23**], TIE were putting pressure on the Consortium to agree to a fixed price for the Infraco works against the backdrop of continual design development and the provision of additional design information. To allow the Consortium to price the Infraco works, the Consortium, "*insisted on drawing a line in the sand that we* [BBS] *could price against*." [**TRI00000072_0015, paragraph 22**]. Richard Walker explained the reason for this in his oral evidence to the Inquiry, where he said:

> "*What was happening at this stage, and throughout, was the design was changing and developing day by day. So what we as Bilfinger insisted that at some stage we have to draw a line in the sand and say: that is what it is now, that's what we'll price, anything on that side is not subject to this price if it changes.*
>
> *…*

> *[T]hat is why we ended up saying: let's take these CDs, whether there were four or five, I have in my mind that there was five, I could be stood to be corrected. They are the ones upon which our price was based*." [**Public Hearing Transcript, 15 November 2017, page 61:7-19**].

48. This "line in the sand" became 25 November 2007, which was the date on which TIE had given the Consortium five CDs containing the design information at that date. The information contained in these five CDs became the "*design information drop*" referred to in clause 3.3 of the Wiesbaden Agreement [**CEC02085660_0005**], and as noted above, the "*Base Date Design Information*" ("BDDI") for the purposes of clause 3.4.1 of Schedule Part 4 [**USB00000032_0005**]. The effect of this "design freeze" date was to agree that any changes in design principle, shape and form and outline specification from the design shown in the BDDI, would result in a Notified Departure and Mandatory TIE Change, potentially resulting in an increase in the Infraco Contract Price, and an extension of time.

49. It is accepted by TIE witnesses that this line in the sand had to be drawn to allow the Infraco Contract price to be agreed. Geoff Gilbert said:

> "…*[W]hat we were seeking to achieve in transferring risk, and that in order to do that, there would need to be a defined position from which we established that definition*." [**Public Hearing Transcript, 19 October 2017, page 134:18-21**].

50. Geoff Gilbert clearly understood how this line in the sand would function. He elaborated:

> "*There would be a need, given that we -- I described it as the envelope -- that we had defined the envelope. There would need to be a process and procedure for the notification of anything that was emerging out of the designs that would mean that you -- the scheme strayed beyond that envelope*." [**Public Hearing Transcript, 19 October 2017, page137:21-138:1**].

51. So too did Steven Bell. He described at length in his oral evidence that there was a need for the "design freeze" at 25 November 2007 because the design was incomplete. He said:

> "*It was clear that the procurement strategy to complete the design before novation was not going to be successful. We sought, therefore, to identify and clarify the basis of the price for the Infraco, and we firmly and clearly considered that that was based on what was known in the November 2007 baseline, and allowed for, in our view, very clearly normal design development to completion.*
>
> *It also protected the Infraco on a number of other pricing assumptions of matters that weren't yet concluded, and allowed the price to be adjusted if those matters came to arise.*
>
> *So I think it was acknowledged that the original strategic intent of the completion of design prior to novation and contract award*

was not going to be the case. An appropriate protection for all parties we considered had been put in place. However, there clearly later emerged a difference in view as to what was transferred from normal design development risk and what was -- and what the Infraco considered that to be." [**Public Hearing Transcript, 24 October 2017, page 76:22-77:16**]

52. This is supported also by the evidence of Robert Dawson. Mr Dawson accepted that the design freeze was necessary for pricing purposes [**Public Hearing Transcript, 21 March 2018, page 64:21-24**].

53. **Events from January to May 2008**

54. From Bilfinger's perspective, in this period negotiations continued leading to Contract Award on 14 May 2008. Richard Walker discusses in some detail, the continuation of negotiations in this period in his Witness Statement [**TRI00000072, paragraphs 43 to 75**]. Likewise Mr McFadzen provides evidence on this stage of the negotiations in his Witness Statement [**TRI00000058_0031, paragraphs 113 to 171**]. Both Mr Walker and Mr McFadzen are clear that the matters which continued to be discussed and debated at length in this period included delay to the design, MUDFA progress and third party agreements (for example Scott McFadzen **TRI00000058_0031, paragraphs 122, 125; 129**; and Richard Walker **TRI00000072, paragraph 46**, where he states *"We discussed the same issues over and over again, the design is not finished, your programme is late, your utility diversions are late, and we cannot fix the price."*).

55. The Inquiry has heard evidence of some key developments during this period, not least that there was acknowledgement that the price was going to go up. At paragraph 48 of his Witness Statement, Richard Walker states that "*On 18 January 2008 Scott McFadzen, Mr Flynn and I had a discussion with Willie Gallagher. This discussion consisted of everybody agreeing and giving verbal assurance that we were all aware that the price was going to go up. This is why TIE moved money around from Phase 1(a) to Phase 1(b), it is why there was a bonus agreed. It was taking money out, calling it a bonus and actually it was part of the price…*" [**TRI00000072, paragraph 48**]. Mr Walker was asked about this in his oral evidence to the Inquiry and confirmed that he believed he'd spoken to Mr Gallagher about this privately, and that Mr Gallagher had confirmed the price increase publicly, on Thursday 13 December 2007 on the evening of the first day of meetings in Wiesbaden [**Public Hearing Transcript, 15 November 2017, page 64:24**]. When asked how much he believed the price would go up, Mr Walker stated:

> "*I think at one stage I suggested using the words something like 40, 50, 60, 80, 100 million. Probably 70 or 80.*
>
> *Q: You don't seem to have a clear recollection about that, or do you.*
>
> *A: Reasonably clear, yes. I didn't know, I couldn't know how much but it wasn't 1 or 2 million. It was 40, 50, 60, 80, 100....."*
> [**Public Hearing Transcript, 15 November 2017, page 65:22**]

56. Andrew Fitchie in his Witness Statement [**TRI000000102_24, paragraph 2.115**] confirmed that he was party to similar discussions:

> "*In December 2007 Richard Walker of BB told me the job would cost a lot more than TIE expected because BB was not willing to take on the risk of the SDS design being late and inadequate and MUDFA being in obvious delay. The rough figure he quoted was £80 million. I made sure TIE was immediately advised of this conversation."*

57. The same point is made by Mr Fitchie at paragraph 7.123 of his Witness Statement. In oral evidence, whilst Mr Walker could not recall specifically having this conversation with Andrew Fitchie, he confirmed that Mr Fitchie was often 'in the room' when these matters were discussed [**Public Hearing Transcript, 15 November 2017, page 76:2**].

58. Willie Gallagher specifically denies having stated that that everyone knew the price would go up [**Public Hearing Transcript, 17 November 2017, page 98: 4**], as does Steven Bell [**Public Hearing Transcript, 24 October 2017, page 34:7-8**]. Bilfinger submits that it is very telling that TIE's own legal adviser corroborates a discussion along the lines that Mr Walker reports, but none of the TIE executives dealing with the Contract do. At the very least (and insofar as it has been suggested that Bilfinger in some way conjoined with TIE or entered into a contract knowing certain things not to be correct), then this line of evidence serves to establish that this is not true. Mr Walker took this opportunity,

as well as others (which are discussed below), to make it clear to TIE that the Contract Price would rise and would rise substantially.

59. **Bilfinger's Design Due Diligence Report**

60. In terms of Clause 7 of the Preferred Bidder Agreement dated 22 October 2007 [**CEC02086428**], the Consortium were to conduct due diligence in respect of the deliverables which had been produced under the SDS contract (the design). The exercise was carried out by BBS between 25 November 2007 to 18 February 2008. The date of 25 November was the date of the 'design dump' (the 5 CDs) which ultimately became the Base Date Design Information (as referred to in Schedule Part 4), but as Scott McFadzen describes in his Witness Statement [**TRI00000058_038 paragraphs 140-141**], the due diligence summary report was in fact based on all design information received to 14 December 2007. The Executive Summary of this report, confirms the conclusions of the Consortium:

> "*In order to determine the design status prior to contract award a technical due diligence has been carried out for the design of the Edinburgh Tram Network Project...*
>
> *Contrary to the original intention for this project stage, the design is incomplete and will require significant further development. Several sections are currently under re-design and the final concepts for those are unknown to us. According to the SDS document tracker more than 40% of the detailed*

design information has not been issued to BBS at all by the above-mentioned cut-off date [14 December 2007].

Where the detailed design is available it is mostly of acceptable standard. However, this does not apply throughout. Particular areas of concern are the geotechnical and earthworks design, the pavements design as well as the design of tram stops and certain structures.

…For many areas 3rd party approvals status is not clear. Formal TIE/CEC design approvals are generally outstanding. Not a single design element has received final approval and has been issued for construction.

*…In accordance with TIE's original procurement concept and (*sic*) issued for construction design would have been novated to the Infraco. The current design is far from meeting these requirements and, as a consequence, a novation is considered to present significant and unforeseeable risks to the project."* [**DLA00006338**]

61. Inquiry Counsel put this executive summary to David Crawley, who was engaged by TIE as their Engineering Director for the tram project. Mr Crawley confirmed that he agreed with statements made in every paragraph of the executive summary which was put to him by counsel [**Public Hearing Transcript, 4 October 2017, page 97:1-102:21**]. Furthermore, the opinion of Tony Glazebrook (who job-shared with David Crawley), was that the statement that 40% of the design was

incomplete "*looks about right*" [**Public Hearing Transcript, 4 October 2017, page 192:2**], and he confirmed that the executive summary was "*a fair statement*" [**Public Hearing Transcript, 4 October 2017, page 192:11**]. On the ability of a contractor to give a fixed price on the basis of incomplete design, Mr Glazebrook said:

> "*Q. Just for clarification, what was it you were astonished to hear at the time?*
>
> *A. That anyone could expect to produce a fixed price on an incomplete design. The only way in which you can end up with a fixed price in that situation is to price in a load of risk*" [**Public Hearing Transcript, 4 October 2017, page 189:14-19**].

62. In providing oral evidence to the Inquiry, Steven Bell also confirmed that the BBS Design Due Diligence Report was an accurate assessment of the stage of development of the design at that stage. In fact, he agreed with every element of this executive summary including that it was not just residual approvals and consents outstanding (as he had stated in his Witness Statement) but virtually all of them [**Public Hearing Transcript, 24 October 2017, page 72:20**], that the incomplete design would have an effect on the extent to which the Contract Price could be 'fixed' [**Public Hearing Transcript, 24 October 2017, page 74:20-22]**: "*You start to import a degree of risk or assumption that that price can –- can change from that – that base. That's correct*"). He also accepted that the design programme had slipped by 13 months in a space of two

years and that there were 'clearly additional risks of slippage' [**Public Hearing Transcript, 24 October 2017, page 75:2**].

63. In short, the BBS Due Diligence Report appears to have been accepted by TIE as an accurate reflection of the state of the design at that time.

64. **Schedule Part 4 (Pricing)**

65. Another important stage in the move to Contract Award in this period, was the drafting of and ultimate agreement of Schedule Part 4. As explained by the Bilfinger witnesses, Schedule Part 4 was drafted to reflect the 'risk basket', being those elements in relation to which the BBS Consortium could not provide a 'lump sum fixed price'. It reflects the Wiesbaden Agreement, in particular, clause 3.3 thereof which developed into Pricing Assumption no. 1 relating to design development risk.

66. The Inquiry has heard a great deal of evidence from many witnesses about what they believed Schedule Part 4 was designed to achieve, and how it was ultimately interpreted by Adjudicators (including the adjudications in relation to Carrick Knowe, Gogarburn and Russell Road) and those providing legal advice to TIE (McGrigors and Richard Keen QC amongst others). From Bilfinger's perspective, the Inquiry has also heard evidence about the development of this Part of the Contract, and those involved in drafting it.

67. The evidence of the Bilfinger witnesses has been clear in relation to both the ownership of the drafting of the Infraco Contract and in relation

to the intention behind that drafting. For example, Mr Walker's evidence was that:

> *"where risk could be identified and quantified, BBS, as a contractor, were prepared to accept the risk and price for it accordingly. Where the risk could not be quantified or even identified in some instances, we negotiated the contract to ensure that the risk sat with TIE, as the majority of the risk items were their responsibility such as MUDFA, Design and Third Party Agreements"* [**TRI00000072_0013, paragraph 21**].

68. Similarly, Mr Laing's evidence was that:

> *"around the February/March time I was focussing my attention on Schedule 4. It seemed to me to be a priority document from the consortium's point of view"* [**Public Hearing Transcript, 23 November 2018, page 22:2 -4**].

69. In contrast to this, what is striking in terms of the evidence which was heard by the Inquiry from the former TIE employees is:

70. Firstly, an almost complete lack of ownership in terms of who, from TIE's side, was involved in the drafting and Agreement of Schedule Part 4;

71. Secondly, the apparent misunderstanding as to what it was intended to do, particularly as regards passing of risk for design development.

72. On the first of these points, the Inquiry has heard conflicting evidence as to who, from TIE's perspective, was involved in drafting this Part of the Infraco Contract.

73. Willie Gallagher – asserts that he was not involved in drafting Schedule Part 4 [**Public Hearing Transcript, 17 November 2017, page 99: 15**], but believes this would have been Matthew Crosse [**Public Hearing Transcript, 17 October 2017, page 103: 17**]; and following his departure, Steven Bell as Project Director [**Public Hearing Transcript, 24 October 2017, page 105:13**]. He asserts that confirmation would have been sought from Andrew Fitchie of DLA [**Public Hearing Transcript, 10 October 2017, page** 106: 3];

74. Matthew Crosse – asserts that he was not involved [**Public Hearing Transcript, 17 October 2017, page 162:24 and 164:6**];

75. Geoff Gilbert – accepts that it was part of his job to translate what came out of the Wiesbaden discussions into the ongoing negotiations and into the contract package [**Public Hearing Transcript, 19 October 2017, page 90:3**]. Schedule Part 4 was intended to incorporate the Wiesbaden Agreement [**Public Hearing Transcript, 19 October 2017, page 116:3**]. He gave the job of producing the first draft of Schedule Part 4 to Bob Dawson [**Public Hearing Transcript, 17 October 2017, page 119:18**]. He also stated that Dennis Murray, who replaced him, was also involved [**Public Hearing Transcript, 19 October 2017, page 138:20**].

76. Bob Dawson – Mr Dawson left the Project at the end of March 2008. Whilst he produced the initial draft of Schedule Part 4, he categorically stated that he was not responsible for it and that he did not lead on the negotiation of it [**Public Hearing Transcript, 21 March 2018, page 59:19 and 77:9**]. He claims that Dennis Murray and Geoff Gilbert were responsible for finalising Schedule Part 4 [**Public Hearing Transcript, 21 March 2018, page 62:13**]. He also maintained that Andrew Fitchie was heavily involved in trying to close out concerns with Schedule Part 4 [**Public Hearing Transcript, 21 March 2018, page 78:11**].

77. Dennis Murray – claims he was involved in certain meetings and discussions at the request of Steven Bell [**Public Hearing Transcript, 20 March 2018, page 121:11**]. He assumed a series of tasks [**Public Hearing Transcript, 20 March 2018, page 121:18**]. One of those tasks was to agree a Schedule of Rates which could be used for measuring changes [**Public Hearing Transcript, 21 March 2018, page 122:1-4**]. He denies that he was one of a team of three (along with Geoff Gilbert and Bob Dawson) who were negotiating Schedule Part 4 [**Public Hearing Transcript, 21 March 2018, page 122:16**]. He stated that he did not have a central role [**Public Hearing Transcript, 21 March 2018, page 127:1**].

78. Steven Bell – he accepted that he became more involved in the Contract close, from February 2008 onwards (in conjunction with Jim McEwan) and that this involved, taking charge of Schedule Part 4 (from Geoff Gilbert) from the end of February 2008, although he said that Geoff was still taking the lead on Schedule 4 drafting, albeit that "*there*

were a number of items of principle that Jim McEwan and I were also involved in resolutions and discussions with the Infraco". [**Public Hearing Transcript, 24 October 2017, page 38:11-14**].

79. Andrew Fitchie – Bilfinger would simply note the position adopted by Mr Fitchie in his Witness Statement and in giving evidence, that he was not properly involved in drafting or advising on the terms of Schedule Part 4 [**TRI00000102, paragraph 2.234-253**]. It is clearly not for Bilfinger to comment on the extent to which Mr Fitchie did or did not give advice to his clients about the impact of Schedule Part 4. What can be said from Bilfinger's perspective is that DLA were in attendance at meetings at which Schedule Part 4 was discussed. Ian Laing, in his oral evidence, mentioned that he had had a separate conversation with Andrew Fitchie close to the time of contract close in which he and Andrew Fitchie discussed Schedule Part 4, giving Ian Laing confidence that Andrew Fitchie and CEC were aware of the effect of Schedule Part 4 [**Public Hearing Transcript, 23 November 2017, 46:25-47:3 and 48:3-48:12**]. In his Witness Statement, Richard Walker refers to TIE's lawyer being in attendance at meetings regarding the draft Infraco Contract [**TRI00000072, paragraphs 46, 50 and 51**], and he particularly mentions that DLA Piper submitted revised drafts of the Infraco Contract following these meetings [**TRI00000072, paragraph 50**].

80. Scott McFadzen recalled also discussions about Notified Departures and their potential value. His evidence was that those discussions took place very close to contract close, and involved TIE, Andrew Fitchie,

BBS and Pinsent Masons [**Public Hearing Transcript, 14 November 2017, page 147:25-149:3**].

81. Secondly, whilst there would now appear to be misunderstanding (amongst former TIE senior executives) about what Schedule Part 4 was intended to achieve, and in particular, in relation to Pricing Assumption no. 1, Bilfinger does not consider it necessary to review in detail, the process of negotiating the terms of Schedule Part 4, or what the various parties thought that they were achieving (although it is accepted that other Core Participants may seek to do so). Both the BBS Consortium and TIE, had large teams of people working on the drafting and both were legally represented. As summarised below, the final Infraco Contract and Schedule Part 4 thereof, was the only agreement which Bilfinger was prepared to enter into, standing the known difficulties with late design, the incomplete MUDFA Works, and the extent to which third party and other consents were outstanding.

82. Bilfinger does however consider the TIE understanding of the impact of Schedule Part 4 in the context of the very clear statements made by Ian Laing of Pinsent Masons in the run up to contract close, about the implications of the final Schedule Part 4 drafting. This is considered below at paragraphs 111 to 124.

83. **Clauses 65 and 80**

84. In terms of these clauses of the Infraco Contract, the Bilfinger witnesses were not asked specifically about how they came to be drafted as they are found in the executed version of the Infraco Contract.

85. However, and with reference to clause 80 in particular, the evidence from Andrew Fitchie of DLA was that the final wording which is found in clause 80.13 of the Contract, was inserted following discussions and negotiations between Geoff Gilbert of TIE and Richard Walker of Bilfinger in April 2008 (shortly before contract award). It is noted that Mr Fitchie's evidence is to the following effect [**TRI00000102_0231, paragraph 7.528.1**]:

> *"TIE's April 2008 drafting simply removed TIE's ability (acting reasonably) to instruct Infraco to proceed with a TIE Change or Mandatory TIE Change (i.e. a Notified Departure) before any DRP determination about a disputed Infraco Estimate for the change……when I pointed out the impact of these changes to Geoff Gilbert in 2008, his comment was that TIE did not want to be exposed to a situation where BBS would be carrying out work without pricing certainty".*

86. Accordingly, Mr Fitchie's evidence is that it was TIE and Geoff Gilbert who insisted on this wording appearing in clause 80.13 of the Infraco Contract. How these clauses came to be negotiated are from Bilfinger's perspective, largely irrelevant (accepting that their origin may be of relevance to other Core Participants) – the point being that the Infraco

Contract was negotiated with both of these clauses contained therein (in final form).

87. In terms of the interaction of clause 65 and clause 80, this subsequently formed part of the dispute between Infraco and TIE during the Project. Changes arose which Infraco considered to be Notified Departures which Infraco asserted required to be dealt with in accordance with clause 80 of the Contract (TIE Changes), but which TIE asserted amounted to Compensation Events (Clause 65). For example, this was an issue in the MUDFA adjudication (before Robert Howie QC). His finding was that:

> "*An occurrence cannot therefore be both a Compensation Event and a Notified Departure, and so a party cannot choose whether to follow the provisions of clause 65 or those of clause 80…In the result, delays to the completion of the MUDFA Works which cause the Base Case Assumptions to be falsified are properly to be regarded – and, indeed can only be regarded – as being Notifiable Departures to which the provisions of clause 80 (except sub-clause 80.19) of the Infraco Contract apply, rather than Compensation Events governed by clause 65"* [**CEC00407650**].

88. **Subsequent Agreements to Wiesbaden: Rutland, Citypoint and Kingdom Agreements**

89. It is hoped that the rather pejorative term in the Inquiry's note to core participants *'Demands for additional money and additional*

agreements…' (emphasis added) are not suggesting anything other that this was a period of further negotiation. It is Bilfinger's position that during this period, further risks were bought out by those negotiations, as reflected in the Rutland Square Agreement, the Kingdom Agreement and the Citypoint Agreement. To paraphrase the point made by Mr McFadzen as noted at paragraph 26 above, these were the 'further rounds' of the 'buying out process'. It goes without saying that, at any point, either party could have refused to proceed further if it was not prepared to enter into these further agreements or ultimately to sign up to the Infraco Contract in its final form and/or to bring BBS's position as Preferred Bidder to a close.

90. Richard Walker describes the process leading to these subsequent agreements in his Witness Statement:

> *"These particular Agreements provided "snapshots" of the agreements which were reached, but the months in between each of these Agreements involved long discussions and negotiations over the Infraco Contract. The purpose of the Rutland Agreement was all about price. I have re-read this agreement and note that the price had increased to £222,062,426 since the Wiesbaden Agreement. I also note that this is the first time that the "risk basket", which becomes Schedule Part 4 of the Infraco Contract, appears in the formal documentation as an appendix to this Agreement. It is abundantly clear that whilst, as stated in this Agreement, the price will not be increased prior to entering into the Infraco*

Contract, the price will increase immediately post contract." [**TRI00000072_0029, paragraph 54**]

91. It should be noted also however, that clause 2.2 of the Rutland Agreement states that the price would not be increased "*except in respect of...the resolution of the SDS Residual Risk Issue*", this being described as relating to "*the provision of adequate design information, and particularly earthworks design by SDS and the recovery by the BBS Consortium of costs and expenses from SDS in the event that their designs are inadequate"* [**CEC01284179**]. It is clear that the emerging position on available design was therefore something that was clearly going to involve further price increases.

92. There were subsequent price increases including a price increase of £8.6 million agreed on 7 March 2008 [**CEC01463888**]. In giving evidence, Mr McFadzen was asked whether obtaining this further price increase, was contrary to the agreement made in the Rutland Agreement that there would be no further price increases, except for the two items noted in there, and whether this further increase was a breach' of the Rutland Agreement [**Public Hearing Transcript, 14 November 2017, page 109:24**]. It is submitted that it cannot be a breach of one agreement, for parties to have freely entered into a subsequent agreement, and as Mr McFadzen makes clear, TIE were "*getting something in return*" for the further increase, namely "*the impact of changing the Employer's Requirements to 3.5, and the design quality risk*" which the BBS Consortium were accepting [**Public Hearing Transcript, 14 November 2017, page 111:1**].

93. There was a further price increase prior to contract award as reflected in what became known as the Kingdom Agreement [**WED00000023**]. Irrespective of the background to this agreement, it was again an agreement on price but one in respect of which TIE obtained further value, namely the concessions and agreements detailed at conditions Three to Nine of this Agreement. TIE freely entered into this agreement, and it became part of the contractual negotiations ultimately encapsulated in the finalised (and agreed) Infraco Contract.

94. Whilst this final agreement has been spoken of in negative terms by various of the TIE witnesses who were involved in finalisation of the Infraco Contract, again it is an agreement which ultimately TIE were prepared to enter into in order to get the Infraco Contract finalised.

94A It is suggested in the Closing Submissions of the Selected Ex-TIE Employees, in the final paragraph on page 25, that payments to be made to Infraco pursuant to the Kingdom Agreement [**WED00000023**] were dependent upon completion of Sections A to D by certain dates, more specifically the Sectional Completion dates specified in Schedule Part 15 to the Infraco Contract [**USB00000080**]. This is addressed by Richard Walker in his oral evidence to the Inquiry [**Public Hearing Transcript, 15 December 2017, pages 105:14 to 106:13**], where he explained that the dates given in the Schedule Part 15 programme [**USB00000080**] were not fixed and would be subject to adjustment due to design delays. As Richard Walker put it, "*So in actual fact the dates were probably not achievable in the first instance*." [**Public Hearing Transcript, 15 December 2017, page 106:12-13**] As such, the

payments to be made under the Kingdom Agreement were not incentivisation payments. They would be made within 7 days of the issue of sectional completion of each section, whenever that was achieved. As Richard Walker said in his oral evidence, "*It was a matter of fact that we would achieve at some time that sectional completion and be given the 1.2 million*." [**Public Hearing Transcript, 15 December 2017, page 105:20-22**]

95. **Finalisation of the Infraco Contract**

96. The Inquiry has heard much evidence about discussions in the lead up to contract award about the fact that it was anticipated that Notified Departures would occur on signature of the Contract.

97. From the evidence which the Inquiry heard, the individuals within TIE appeared motivated to a large extent to bring the Infraco Price in at a level which reflected the Business Case which had been approved in December 2006, and the Draft Final Business Case dated October 2007 [**CEC01821403**]. The TIE original procurement strategy was that the design being prepared by SDS would be complete when the Infraco Contract was awarded. That, very clearly, was not the case and was not going to happen within the timescales which were driving TIE's procurement process. The result was that the BBS Consortium had submitted a highly qualified tender price (unusually so), with those qualifications being ultimately reflected in the Pricing Assumptions contained within Schedule Part 4.

98. A line of inquiry which the Inquiry developed, and which is relevant to Bilfinger, is the extent to which all of the parties were aware on signing the Infraco Contract, that this was not a fixed price lump sum contract, and that the price was likely to go up after contract award. This was pursued in the context of which Pricing Assumptions various witnesses considered were likely to 'fail' or 'fall' post contract award, and the extent to which matters such as the Value Engineering savings built into Schedule Part 4 were considered to be achievable.

99. During the oral evidence of Mr McFadzen, the Inquiry asked various questions in relation to the "truth" of the Pricing Assumptions [**Public Hearing Transcript, 14 November 2017, page 161:15-163:23**], and also the extent to which the Value Engineering (including that which had been taken into 'Firm Price' in Schedule Part 4 to the Contract) was likely to be achievable.

100. Mr McFadzen's evidence was that at the time of contract award, he considered that the Value Engineering sums were unlikely to be achieved [**Public Hearing Transcript, 14 November 2017, page 155:16**], and that they were being used by TIE as a way to reduce the price associated with the Infraco Contract. The Chairman of the Inquiry, asked as to whether the "*financial engineering*" was "*undertaken by Bilfinger*". Mr McFadzen was clear that any financial engineering "*was TIE – I would say manipulating numbers so that they could put an affordable figure to City of Edinburgh Council*" [**Public Hearing Transcript, 14 November 2017, page 156:10**]. It ought to be noted at this stage that the Value Engineering figures were not figures which

were supplied by Infraco, but by TIE. There was a suggestion from the Chairman of the Inquiry that Bilfinger were "going along with" and were part of TIE's "financial fiction" [**Public Hearing Transcript, 14 November 2017, page 157:3**]. Mr McFadzen's response to this question was as follows:

> "*To an extent, I guess we were. But, you know, in the – the project as far as we were concerned was going to change and the costs were going to go up, and it was essentially a publicly funded project and we would be paid – we would be paid in line with the contract. So if value engineering wasn't delivered, and if Pricing Assumptions came to pass, then one way or another we would be paid for what we did."* [**Public Hearing Transcript, 14 November 2017, page 158:5**].

101. Although Mr McFadzen was not questioned on the wording of Schedule Part 4 as it concerns Value Engineering, it must be noted that what Mr McFadzen stated is absolutely correct. In terms of Clause 5.3 of the Infraco Contract, Infraco was obliged to implement a Value Engineering opportunity (as identified in Appendix C to Schedule Part 4) but subject to the conditions noted at Clause 5.3.1 - 5.3.4, including for example, clause 5.3.3 which notes the obligation to implement the Value Engineering opportunities, provided that:

> *"any Consents required for the implementation of the Value Engineering opportunity are obtained and designs Issued for*

Construction by the date set out in the Programme.." [**USB00000032**]

102. This would require heavy involvement from TIE: in ensuring if it was required (pre-contract) that Value Engineering opportunities were being explored and designed by SDS, and ensuring, both pre and post-contract, that necessary consents could be obtained to allow such a Value Engineering opportunity to be achieved.

103. Mr McFadzen also accurately described the operation of the Infraco Contract, in that Clause 5.6 of Schedule Part 4 provides as follows:

> *"5.6 To the extent that a Value Engineering opportunity is not implemented:*
>
> > *5.6.1 Infraco shall carry out the Infraco Works without the amendment to the Employer's Requirements and Infraco Proposals which would have been made had the Value Engineering opportunity been implemented, and*
> >
> > *5.6.2 Infraco and TIE shall agree amendments to the Schedule Part 5 (Milestone Payments) to increase the Contract Price by the saving applying to the Value Engineering opportunity set out in Appendix C…"*

104. So whilst Infraco was under an express obligation to *'use reasonable endeavours to achieve the savings for each Value Engineering opportunity'* (clause 5.7.5, Schedule Part 4 [**USB00000032**]) and might conceivably have been in breach thereof if it had not used reasonable

endeavours, ultimately the Infraco Contract was drafted such that, whether or not the Value Engineering saving was achieved, Infraco would be paid for the work it ultimately performed.

105. In a similar vein to the point made by Mr Walker about TIE being best placed to know whether Pricing Assumptions would 'fall' (discussed at paragraph 35 above), Mr McFadzen also stated that as regards Value Engineering savings:

> "*It's – it's possible that that was adding to the misleading picture, but, again, I would have thought that the TIE people should have known that some of the value engineering was going to be difficult and possibly impossible to achieve."* [**Public Hearing Transcript, 14 November 2017, page 158:14**]

106. Bilfinger submits that again, this is an accurate statement. As the party closest to the design pre-contract award, and as the party able and obliged to obtain CEC, third party and stakeholder approvals, TIE was in a much better position to know whether the proposed Value Engineering savings were capable of being achieved, and therefore to know the accuracy of what it was reporting to CEC and others.

107. An example which was given by Mr McFadzen was in relation to the Edinburgh Park viaduct. Infraco had suggested a design for that bridge which was far simpler and added up to a circa £1.4m saving. This was also explained in the evidence of Mr Walker:

"A typical one where we could have saved maybe 1.5 million on one structure was the curved bridge – is it at Gogar, the viaduct, which was a seven span structure, and I can remember saying if we can put that down to either a single span or two span across the railway and have earthwork embankments running up to it, instead of a very pretty curved seven span structure, we could probably save 1.5 million there. But it required co-operation of the planning authority. It required co-operation of particular landowners …" [**Public Hearing Transcript, 14 November 2017, page 34:21**].

108. Accordingly, and insofar as it is suggested that there was anything underhand in Infraco agreeing to the Infraco Contract, and what it believed to be the 'fiction' as regards the Contract Price (and the 'financial engineering' which had been carried out by TIE in relation thereto), Bilfinger objects strongly to any such allegation.

109. Similar questions were asked of Mr McFadzen in relation to the expenditure of Provisional Sums (questions in a similar vein as to whether Mr McFadzen considered the numbers to be 'realistic and achievable'). Provisional sums represent work which may, or may not, ultimately be instructed by the Employer (here TIE), which the Contractor, for whatever reason, has not been able to provide a final and fixed price for. In effect, the Provisional Sum, is a 'place-holder' for work which may or may not be instructed. In terms of the operation of Section 4 of Schedule Part 4 [**USB00000032**], if the Provisional Sum in question was instructed by TIE (noting that there were certain

Provisional Sums requiring Instruction and some which did not), then insofar as the Provisional Sum work scope was implemented, it was to be treated as a TIE Change and priced in accordance with clause 80 of the Infraco Contract. In reality therefore, the price against each Provisional Sum item was irrelevant to Infraco, and Infraco would be paid the value of that work according to the agreed valuation mechanism (noting that for "Defined Provisional Sums" these were provisional sums where Infraco was also deemed to have made provisional allowance for programming and planning). Accordingly, the questions which were asked of Mr McFadzen in his oral testimony, about the accuracy or otherwise of the Provisional Sums, are irrelevant and Mr McFadzen is correct in his comments that *'it did not really matter whether they were realistic or not'* [**Public Hearing Transcript, 14 November 2017, page 159:22**], albeit that he also states that he considered they were realistic by the time of contract award [**Public Hearing Transcript, 14 November 2017, page 159:4**].

110. Bilfinger also submits, lest there be any suggestion that it was in anyway underhand in terms of the finalisation of the Infraco Contract and the Contract Price therein, that the Inquiry has heard ample evidence of the efforts which Bilfinger went to in order to ensure that not only TIE but also CEC, were well aware of the nature of the contract which was being entered into.

111. This is perhaps best exemplified by the evidence which the Inquiry has heard concerning the email which was sent by Ian Laing of Pinsent Masons to TIE, on 26 March 2008 [**CEC01465908**] in which Mr Laing

was at pains to ensure that everyone understood the effect of the Pricing Assumptions and the Notified Departure procedure.

112. The email from Ian Laing of Pinsent Masons was sent to Philip Hecht at DLA and others dated 26 March 2008 [**CEC01465908_0002**] and stated:

> "*As we discussed earlier today, the Design Delivery Programme will be V 28. The Pricing Assumption in Schedule 4 of the Contract assumes that the Design Delivery Programme will not change from V26. It follows that there is the possibility that there will be an immediate Notified Departure on contract execution. Given the unusual position that we are in, please can you confirm that this is understood and agreed by TIE."*

113. Upon questioning, Mr Laing accepted that strictly speaking, it was more than a possibility that a Notified Departure would occur but that "*in order for a contractor in those circumstances to intimate a Notified Departure, it would obviously have to have a financial impact*." [**Public Hearing Transcript, 23 November 2017, page 40:6**]. Mr Laing sent a further email on 31 March 2008 [**CEC01465908_0002**], chasing for a response to his original question. When asked why he had sent these emails his position was as follows:

> *"I think, and I still think it to this day, one of the risks, the greatest risks when one is approaching complex and long-term procurement, is that the parties enter into it without a common understanding. Obviously also in the context of any*

procurement, the idea that a contractor will sign a contract and immediately make a claim is not one that might give rise to good relations, and good relations are important over a long procurement period. I suspect what I was trying to do was ensure that if that claim was made, it would have been a clear expectation of it. Therefore there would be no adverse reaction to it, and it wouldn't affect the relationship between the parties" [**Public Hearing Transcript, 23 November 2017, page 42:10**].

114. Mr Laing was also asked about the additional clause he introduced to the Infraco Contract, namely clause 3.2.1 of Schedule Part 4 [**USB00000032**] which provides that:

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

115. It was accepted by Mr Laing that this provision was "unusual" and that he had never included it in another contract [**Public Hearing Transcript, 23 November 2017, page 44:7-9**].

116. When asked why this was included, Mr Laing stated that one of the considerations was that he "*didn't get a response from TIE in relation to those emails, and therefore I was taking one of the few courses that was left to me and put it in the contract so that it was plainly there for everybody to see*" [**Public Hearing Transcript, 23 November 2017, page 45:2**]. In addition, Mr Laing said that he recalled having a concern over the fact that there were an unusually large number of qualifications to the price and that the parties needed to understand clearly what the consequences would be.

117. It has become clear through the course of the oral and written evidence submitted to the Inquiry that although neither TIE nor its legal representatives responded directly to Mr Laing's email, there was an internal acknowledgement of the issue of this immediate Notified Departure. Reference is made in particular to the evidence of Mr McEwan and to document reference **CEC01465933** and **CEC01465908**. Mr McEwan's email of 31 March 2008 acknowledges that Mr Laing is "*factually correct*", but that TIE are working to minimise the impact [**CEC01465908_0002**].

118. Mr McEwan also asked Andrew Fitchie to advise on an appropriate response to Mr Laing's email of 31 March 2007. Mr Fitchie's advice [**CEC01465908_0001**], was that:

"The only approach open to TIE, in my opinion, is a factual one not a contractual one (since the mechanism for Notified Departure puts the advantage with BBS by creating an automatic TIE Change); to capture as many identified key changes that TIE knows will be required and attempt to fix them and agree their likely programme and/or cost impact with BBS prior to contract award...".

119. Mr Fitchie was accurately reporting and commenting on how the Notified Departure mechanism was intended to act, not just in relation to the version of the Design Delivery Programme then in operation but in a wider sense. In response to Mr Fitchie's advice, Mr McEwan wrote directly to Steven Bell of TIE (not copying in others) stating:

"My view is that if we pursue Andrew's steer on this we will open up the whole can of worms on the Infraco contract cost overall, and that we have to take on the chin that the programme version is not consistent, get the deal signed and then fight the notified departure tooth and nail. I understand Andrew's point but if we are at all hopeful of getting this done by the 15th April (this year) we cannot take his suggested approach." [**CEC01465908_0001**]

120. In giving oral evidence, it was clear that Mr McEwan further understood that his 'can of worms' comment was not simply restricted to the issue of the Design Delivery Programme. In further explaining what he meant by 'can of worms', Mr McEwan explained:

"*From my perspective we had two peers in the design company and the construction company, and getting them into alignment had proved a very difficult task and hadn't been achieved effectively.*

My viewpoint was that the only way to get this contract into that alignment was to get the contract, get the design contract, novated to Bilfinger Berger and make them effectively the prime contractor in this arrangement , who were able to express their -- dictate to SDS, and what was required and when…

My viewpoint is that if we had to go through this process, and I can only surmise that there were many, many attempts by the people involved, TIE side, to get alignment between the infrastructure contractor and the designer, then – then we could potentially have chased our tail for a long time and never got to the end of it.

My viewpoint was that we had to translate this contract into a design and build contract by achieving that novation and once we'd done that, we could challenge Notified Departures, challenge changes, and only accept those which were outwith, we felt, the normal degree and normal design development.." [**Public Hearing Transcript, 18 October 2017, page 153:19–155/3**].

121. Bilfinger consider this exchange with Mr McEwan to be highly illuminating of the following:

- The difficulty which had occurred in TIE's original procurement plan, with the fact that the design was not complete (and was substantially incomplete) which meant that both designer (SDS) and contractor (BBS) were reluctant to agree to the design being novated as originally planned;

- This had resulted in a very difficult negotiation between TIE and Infraco and the development of the Notified Departure Mechanism and Schedule Part 4 [**USB00000032**];

- TIE were aware that in novating the designer to the Infraco Contractor, on the basis of a contract of this nature, was likely to lead immediately to Notified Departures and claims;

- As a consequence of the difficulties which had arisen to that point in time, TIE were prepared, for the sake of getting the Infraco Contract executed, to take that risk, and effectively, prepare to challenge the contractor on changes and Notified Departures, and only be prepared to pay for those which, on TIE's view, were considered to fall 'outwith' normal design development.

122. With this attitude, it is hardly surprising that disputes developed almost from the outset. In fact, Bilfinger would go so far as to say that this is an extraordinary approach to procurement of a public contract. It was the potential for disagreements of this nature, which lead Mr Laing to

propose the highly unusual Clause 3.2.1 of Schedule Part 4 [**USB00000032**].

123. These emails were also put to Steven Bell in the course of his evidence. It was put to Mr Bell that the advice from Mr Fitchie represented one approach (closing out as many pricing assumptions as possible pre-contract) and that the approach adopted by Mr McEwan represented a second approach, namely to accept that there would be a Notified Departure and to deal with the consequences after contract close. It was accepted by Mr Bell that this email chain involved discussions of a more general nature about how the Notified Departure mechanism would work, rather than simply in relation to the change to the SDS Design Delivery Programme. When asked what approach, as Project Director, he decided to follow, Mr Bell's response was:

> *"We took the approach that wherever we had a known area of likely Notified Departure, we'd sought to make an appropriate allowance in risk or to minimise the impact of that, and by that I mean there might be some mitigating actions we could take between this point in time and the point it would have an impact on the programme, and consequently while it would still be a Notified Departure, we were able to minimise its cost effect and impact."* [**Public Hearing Transcript, 24 October 2017, page 94:16-24**].

124. When questioned on this again further, it was put to Mr Bell that his approach seemed more in line with the second/ Jim McEwan approach

of seeking to deal with Notified Departures after contract award: *"albeit you sought to satisfy yourself that the risk allowance was adequate for the anticipated changes; is that correct?*" [**Public Hearing Transcript, 24 October 2017, page 104:20-22**]. Mr Bell's response was as follows:

> *"I think for items we believed that we could impact and minimise the likely circumstance, such as some of the design elements, we sought to do that at that time and had been doing that. So we sought to do what we could do before contract close, and to assess: were there likely to be any impacts thereafter; if so, what would be an appropriate quantification of that. I think we were between the two alternatives."* [**Public Hearing Transcript, 24 October 2017, page 104:23-105:5**]

125. Mr Bell was also asked in the questions forming part of his Witness Statement, and in oral testimony, what he considered were the main Pricing Assumptions that were likely to change and result in Notified Departures and why. To summarise his response, he believed that MUDFA delays could result in Notified Departures, and that there could be changes that went beyond normal design development. He stated:

> "…*I thought there was likely to be some third party items at the extremities, both in the Edinburgh Airport Area and in the Forth Ports area. Additionally, in the vicinity of Murrayfield, some of those structures were less well developed than others. So I expected a degree of change which was likely to be beyond*

normal design development at the time" [**Public Hearing Transcript, 24 October 2017, page 107:6-12**]

126. Whatever his thoughts on this at the time, what is clear is that Bilfinger, through Mr Laing, had sought to be entirely open and transparent with TIE about the nature of Schedule Part 4 and what impact it would have on the Contract Price. It is also clear from this exchange that Mr Bell and Mr McEwan were absolutely aware of the operation of Schedule Part 4 and that Pricing Assumptions would likely fail, as was Mr Fitchie of DLA. Bilfinger comments below on the 'tooth and nail' comment made by Mr McEwan which can be see as explaining TIE's behaviour post contract award.

127. To continue on the theme of what was known and understood about the nature of the Infraco Contract in the run up to contract close, the Inquiry also heard from both Mr Laing of Pinsent Masons, and Mr Walker formerly of Bilfinger, that they had concerns in relation to TIE's conduct and approach throughout the course of the negotiation process, and the information which was being reported to CEC by TIE. In particular:

128. Mr Laing gave evidence that a matter of days prior to contract close, a scheduled public Council meeting of CEC took place which was attended by Mr Laing's trainee solicitor. Mr Laing recalled that following that meeting he understood that CEC had been told that the Infraco Contract was a "*lump sum fixed price contract*" [**Public Hearing Transcript, 23 November 2017, page 47/22**]. (Note that paragraph 2.3 of the "Edinburgh Tram – Financial Close and Notification of Contract

Award Report; 1st. May 2008 [**CEC00906940_0001**] provided as follows: '*There has also been a substantial amount of work undertaken to minimise the Council's exposure to financial risk with significant elements of risk being transferred to the private sector. This has resulted in 95% of the combined Tramco and Infraco costs being fixed with the remainder being provisional sums which TIE Ltd have confirmed as being adequate."*)

129. Mr Laing stated in evidence that he was concerned that this may be misunderstood by CEC as the Infraco Contract was not "*fixed price*" and that as a result he spoke to Mr Fitchie of DLA Piper on a one to one basis. Mr Laing's evidence was that he had expressed concerns to Mr Fitchie in relation to the report to CEC and what CEC knew about the Contract. Mr Laing recalled that Mr Fitchie was "irritated" by his enquiry, and that he was told that it was none of his business [**Public Hearing Transcript, 23 November 2017, page 48:8**].

130. During the course of Mr Scott McFadzen's evidence it was noted that Bilfinger "thought about" sending a letter to CEC before the Contract was entered into [**Public Hearing Transcript, 14 November 2017, page 147:2**]. Mr Walker was then asked about such a letter during his evidence, and he produced a copy of the draft letter to CEC [**SIE00000401** and **Public Hearing Transcript, 15 November 2017, page 6:11**]. Mr Walker gave evidence that he drafted this letter following a conversation with Mr Willie Gallagher in April 2008. In the letter, and in the conversation between Mr Walker and Mr Gallagher, Mr Walker "*asked for confirmation that City of Edinburgh were aware of the*

nature of the contract and that it was likely to increase significantly in cost and time, once we had signed it". He went on to state that "*I had concerns and I had voiced them on a number of occasions earlier on that if City of Edinburgh Council were fully aware of what was going on, I could not envisage how they would enter into a contract…*" [**Public Hearing Transcript, 15 November 2017, page 92:11**].

131. Ultimately, Mr Walker's draft letter of 22 April 2007 was not sent to Willie Gallagher with Mr Walker explaining that he was prevented from doing so by his Director, Mr Enenkel. He also explained (and is evident from the content of the letter itself), that it was written to be confirmation of a discussion which Mr Walker had already had with Mr Gallagher:

> *"I had a discussion with Willie Gallagher and I asked him: can you, you know, give me the understanding that City of Edinburgh (are) fully aware of what's going on, and the price is going to go up, and the time is going to go out; and then this was a confirmatory letter. My Chief Executive felt it would spoil my relationship with Willie Gallagher if, having asked him and had verbal assurance, I then went into print."* [**Public Hearing Transcript, 15 November 2017, page 92:15-24**]

132. Mr Walker was asked what he meant about whether City of Edinburgh were aware of what was going on, and confirmed:

> *"The effects of the incomplete design and the woefully inadequate progress of the utility diversions were dramatically going to affect the price by a significant number of tens of*

millions." [**Public Hearing Transcript, 15 November 2017, page 93:21:24**]

133. The witness evidence of both Mr Laing and Mr Walker demonstrates that there was concern and acknowledgement at the highest level within Bilfinger, that CEC were not fully and properly informed as to the nature of the Contract, and the risk exposure from immediate and likely future Notified Departures. It is also clear that these issues were raised more than once with executives from TIE, and there can be no suggestion that Infraco were not open and honest. As explained in the oral evidence of Mr Laing:

> "*bluntly, anybody engaged within the negotiations of Schedule 4 ought to have known that the impact of the schedule gave rise to potential for greater money and more time being awarded to the contractor… and I'm perfectly sure that those attending those meetings will have understood, by which it would, in my memory, have been Jim McEwan, Steven Bell, and Geoff Gilbert*" [**Public Hearing Transcript, 23 November 2017, page 49:20**]**.**

134. Bilfinger would also submit that its efforts to be transparent and to ensure that there was no misunderstanding between the parties, went further than this standing the terms of Clause 3.2.1 of the Infraco Contract. It is therefore clear to anyone reading Schedule Part 4 that the price was not fixed, and that the Pricing Assumptions were known to be based on out of date information (reference is also made to the

evidence of Mr Alastair Maclean of CEC where he confirmed that he reached the view that the Infraco Contract was not fixed price *"when I read Part 4 of the Schedule"* [**Public Hearing Transcript, 20 September 2017, page 31:10**]).

135. **Conclusion on the Finalisation of the Infraco Contract**

136. Bilfinger does not seek to comment on the events leading up to the conclusion of the Infraco Contract, other than from its own knowledge of the continuation of negotiations in that period (January to May 2008); and of the many detailed discussions regarding the nature of the contract which was being entered into. Specifically and other than insofar as it came to Bilfinger's attention regarding reports to CEC about whether or not the Contract was truly 'fixed price', Bilfinger does not wish to engage in debate regarding (i) the extent to which advice was or was not provided by DLA to TIE about the nature of the Infraco Contract; (ii) the extent to which TIE made CEC aware of any legal advice or its own understanding of the nature of the Infraco Contract and particularly Schedule Part 4 thereof; or (iii) reporting to CEC generally.

137. What Bilfinger can say is that it negotiated the Infraco Contract in a particular way: to ensure it was not assuming risks which it could not properly price or allow for, standing the delays to the development of the design; the delays to the utility diversion works; and the extent of outstanding approvals and Third Party consents. Dr Keysberg described the Bilfinger approach in giving his oral testimony as follows:

"*we would have 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"* [**Public Hearing Transcript, 16 November 2017, page 13:3**].

138. Bilfinger believed and believes to this day, that it achieved its objectives in ensuring that the risks which it could not properly accept, were carved out of the Contract Price, by virtue of the Pricing Assumptions and mechanisms for Notified Departures, considered in the next Section of these Closing Submissions.

139. To conclude, there has been evidence before the Inquiry that there was pressure on TIE to enter into the Infraco Contract by a certain date. One consideration that may have borne heavily on TIE's minds was, perhaps, that the Scottish government funding may not have been available had contract close not been achieved by that target date. The Inquiry has also heard evidence about the extent to which individuals within TIE were incentivised to achieve contract award by a particular date and at a particular level. Bilfinger does not comment on that other than noting that conclusions may be drawn by others. Nevertheless, Bilfinger would agree with the observation that TIE were exceedingly anxious to secure contract close quickly, and would point out that TIE were fully aware of the implications of the Pricing Assumptions and the likelihood, if not certainty, that Pricing Assumptions would fall, leading to

additional time and cost consequences for the Project. This is borne out by the evidence. Whether TIE chose to ignore those consequences under the prospect of Scottish Government funding being withdrawn is not something which Bilfinger is able to comment on.

140. Bilfinger would point out also that this was an extremely lengthy, detailed and difficult negotiation process, during which it was put under extreme pressure by TIE to (i) reduce its costs; and (ii) accept full risk of matters such as novation of an incomplete design. Bilfinger could not concede to these two competing pressures. Firstly, this never was nor was intended to be a 'design and build' contract whereby a designer, initially employed by the Employer (but perhaps not) would be novated to the Contractor, or the Contractor would employ its own designer to achieve the Employer's Requirements. In those circumstances, the Contractor would have had much more flexibility in terms of what it could do to achieve the Employer's Requirements. A Contractor in these circumstances however, is likely to have charged a premium for taking on the full design development responsibility.

141. Instead here, TIE's procurement strategy was to complete the design first of all, and then novate that completed design (and the designer) to the Infraco Contractor. If successful and if the design was completed as planned, this would have permitted TIE to have complete control over what it wanted to obtain (the 'Project Vision' being *'the development of a tramway which will stand favourable comparison with the best in Europe. The quality of the tramway provided will be appropriate to Edinburgh's status and role as a European capital city and its city*

centre's designation as a World Heritage Site' (Infraco Contract Recital F [**USB00000032**]), whilst not paying the premium for having a full design and build transfer of risk to the Contractor.

142. It was also envisaged that all preparatory works, including all utilities which would otherwise clash with the path of the tramway, would have been moved in advance of the Infraco Contractor commencing. Again, had this succeeded then it would reduce the cost of the Infraco Contract (the alternative approach being to have the Infraco Contractor also move all conflicting utilities, but again at an increased cost).

143. When it became apparent that these and other aspects of TIE's procurement strategy were unlikely to be achieved (including all necessary approvals and Third Party Consents being obtained), the result was that the BBS Consortium had to insert an unusually large number of qualifications into its price.

144. It was expected by Bilfinger, at least initially, that these qualifications would be bought out in subsequent rounds of negotiation. Either that, or that the procurement process should have been put on hold to allow design to catch up and the MUDFA works to complete (reference is made to the evidence of Richard Walker that the procurement process should have been put on hold for a year to get the design completed [**TRI00000072_009, paragraph 15**]). It was Dr Keysberg's evidence that it was unusual to see a construction contract with such an extensive list of Pricing Assumptions, and he stated that it "*just demonstrates that there was obviously a hurry to enter into the contract*"

[**Public Hearing Transcript, 16 November 2017, page 21:9**]. It was Dr Keysberg's evidence that in his experience parties would normally seek to solve these kind of issues before entering into the contract: *"if you know that there is a problem there, you do it before you sign it or not…if it's something quite important that impacts on the project from day 1, most clients would probably say: I solve this before I enter into the contract"* [**Public Hearing Transcript, 16 November 2017, page 24:4**].

144A It is suggested by the Selected Ex-TIE Employees on page 79 of their closing submissions that witnesses for the Consortium (who are not named), "*envisaged that the provision for normal design development in the clause* [clause 3.4.1 of Schedule Part 4] *would cover minor changes*", and that this "*commercial intent was not borne out by interpretation of the clause in subsequent adjudications.*" Contrary to this assertion, and further to the analysis of the evidence in paragraphs 135 to 144 above, the interpretation of clause 3.4.1 of Schedule Part 4 [**USB00000032**] was borne out as Infraco had anticipated.

145. TIE chose not to resolve these issues, but to live with the consequences of the existence of Schedule Part 4, and in Jim McEwan's terminology, 'fight tooth and nail' the inevitable disputes which subsequently arose (inevitable standing such an attitude).

146. **The Infraco Contract in Operation**

147. The operative clause (3.5) of Schedule Part 4 [**USB00000032**] provides as follows:

"The Contract Price has been fixed on the basis of inter alia the Base Case Assumptions noted herein. If now or at any time the facts or circumstances differ in any way from the Base Case Assumptions (or any part of them) such Notified Departure will be deemed to be a Mandatory tie Change requiring a change to the Employer's Requirements and/or the Infraco Proposals or otherwise requiring the Infraco to take account of the Notified Departure in the Contract Price and/or Programme in respect of which tie will be deemed to have issued a tie Notice of Change on the date that such Notified Departure is notified by either Party to the other. For the avoidance of doubt tie shall pay to the Infraco, to the extent not taken into account in the Estimate provided pursuant to Clause 80.24.1, any additional loss and expense incurred by the Infraco as a consequence of the delay between the notification of the Notified Departure and the actual date (not the deemed date) that tie issues a tie Change Order, such additional loss and expense pursuant to Clause 65 (Compensation Event) as if the delay was itself a Compensation Event". [**USB00000032**]

148. The Base Case Assumptions are defined as meaning the "*Base Case Design Information, the Base Tram Information, the Pricing Assumptions and the Specified Exclusions".*

149. As noted above, the Base Date Design Information meant the *'design information drawings issued to Infraco up to and including the 25th November 2007 listed in Appendix H to this Schedule Part 4'.* Although

Schedule Part 4 was left blank, it was subsequently determined that the Base Date Design Information (or 'BDDI') was comprised in the 5 discs of drawings provided by TIE to Infraco at around this time (in the Tower Place Bridge Adjudication, before John Hunter).

150. There are 4 Specified Exclusions from the Construction Works Price and 43 Pricing Assumptions which are set out at Sections 3.3 and 3.4 of Schedule Part 4 [**USB00000032**].

151. This mechanism provides that where there is a change in certain facts or circumstances from those set out in Schedule Part 4, then this will be deemed a Mandatory *tie* Change, under which BSC will be entitled to additional time and/or money arising from the effects of the change.

152. Clause 4.3 of the Infraco Contract provides that nothing in the Infraco Contract shall prejudice BSC's right to claim additional relief or payment pursuant to Schedule Part 4.

153. Schedule Part 4 also provides (Clause 5 and Appendix C) for a number of Value Engineering ('VE') initiatives, the unique feature being that the full amount of saving which these VE initiatives may produce, was deducted from the Construction Works Price, with a mechanism being agreed for adding these sums back into the Construction Works Price, should the VE saving not be realised. Scott McFadzen provided evidence in relation to this which is also covered at paragraphs 100 to 104 above.

154. The key pricing assumptions concerned design (about which the Inquiry has heard a great deal of evidence) and completion of the MUDFA Works. For pricing purposes it was 'assumed' that these matters were completed when in reality, the parties knew that they were not. The key Pricing Assumptions were as follows [**USB00000032**]:

3.4 Pricing Assumptions are:

3.4.1 The Design prepared by the SDS Provider will not (other than amendments arising from the normal development and completion of designs):

1.1 in terms of design principle, shape, form and/or specification be amended from the drawings forming the Base Date Design Information (except in respect of Value Engineering identified in Appendices C or D to this Schedule Part 4);

1.2 be amended from the scope shown on the Base Date Design Information and Infraco Proposals as a consequence of any Third Party Agreement (except in connection with changes in respect of the Provisional Sums identified in Appendix B); and

1.3 be amended from the drawings forming the Base Date Design Information and Infraco Proposals as a consequence of the requirements of any Approval Body;

For the avoidance of doubt normal development and completion of designs means the evolution of design through the stages of preliminary

to construction stage and excludes changes of design principle, shape and form and outline specification.

2. Design delivery by the SDS Provider has been aligned with the Infraco construction delivery programme as set out in Schedule Part 15 (Programme).

3. The Deliverables prepared by the SDS Provider prior to the date of this Agreement comply with the Infraco Proposals and the Employer's Requirements…

24. That in relation to the Utilities the MUDFA Contractor and/or Utility shall have completed the diversion of any utilities in accordance with the requirements of the Programme save for utilities diversions to be carried out by the Infraco pursuant to the expenditure of the Provisional Sums noted in Appendix B....

32. That the programming assumptions set out in Schedule Part 15 (Programme) remain true in all respects.

155. The 'Specified Exclusions' meant items for which Infraco had made no allowance within the Construction Works Price, and included utility diversions (other than a small amount which Infraco had undertaken to carry out), public realm works at St Andrew Square, ground conditions which could not reasonably have been foreseen from ground conditions reports available pre-tender, and public realm works at Bernard Street.

156. Clause 80.24 of the Infraco Contract provided that:

"Where pursuant to paragraph 3.5 of Schedule Part 4 (Pricing) or pursuant to Clause 14 (tie obligations), tie is deemed to have issued a tie Notice of Change as a result of the occurrence of a Notified Departure, the provisions of this Clause 80 (tie Changes) other than Clause 80.19 shall apply." [**CEC00036952**]

157. Clause 80 sets out detailed provisions for the issue of tie Notice of Change (where TIE itself was instigating a Change), the provision by Infraco of Estimates in relation to tie Notices of Change, and the provisions for agreeing Estimates. For the purpose of the issues which subsequently materialised between the parties, the key provision is Clause 80.13 which provided as follows:

> "…*Subject to Clause 80.15, for the avoidance of doubt, the Infraco shall not commence work in respect of a tie Change until instructed through receipt of a tie Change Order unless otherwise directed by tie."* [**CEC00036952**]

158. Clause 80.15 [**CEC00036952**] provided that where an Estimate has been referred to the Dispute Resolution Procedure for determination, but the work thereunder was deemed by TIE to be urgent, *'tie may instruct Infraco to carry out the proposed tie Change prior to the determination of agreement of the Estimate by issuing a tie Change Order to that effect.'*

159. The dispute which developed between the Infraco and TIE, concerned a fundamental disagreement between them as to the proper operation of these provisions of the Contract, in particular the operation of Pricing Assumption no. 1 and in particular, the meaning of *'normal design development'*.

160. The other major dispute between the parties concerned the operation of clause 80 [**CEC00036952**]; in particular the submission by Infraco of Estimates, and whether Infraco were obliged to proceed with works in the absence of a tie Change Order.

161. On all of these matters, subsequent adjudications determined that Infraco was correct in its interpretation of the Infraco Contract and TIE was wrong. The implications of this and what it meant to the Project, are considered in the following sections of these Closing Submissions.

162. CONTRACT AWARD ON 14 MAY 2008 TO PRINCES STREET DISPUTE 2009

163. A critical period of the Project occurred between May 2008 and March 2009. From the outset of the Works, the risks retained by TIE and reflected within Schedule Part 4 materialised to a significant extent, primarily in respect of the impact of change and approvals on the completion of the design and delay to the preceding MUDFA Works (which were not complete in accordance with the requirements of the agreed Infraco Programme, triggering Pricing Assumption no. 24).

164. It is Bilfinger's position that the behaviour of TIE in the initial period (May 2008 to March 2009) set the tone for the Project, leading to a lack of trust and collaboration between TIE and Infraco for the remainder of the Project, right up until CEC's intervention and the mediation at Mar Hall.

165. The ETI has heard extensive evidence in relation to the circumstances surrounding the dispute which developed shortly before the intended commencement of works on Princes Street in early 2009. When considering the Princes Street dispute in terms of its impact, meaning and outcome, it is important to set the dispute in context. The Princes Street dispute did not appear as an issue overnight; it became an issue because of various matters which had arisen between the parties immediately following contract close in May 2009.

166. **Commencement of the works and allegations of slow mobilisation**

167. The Inquiry has heard repeatedly the criticism that Infraco, in particular Bilfinger, were 'slow to mobilise' immediately after contract close. This criticism derives from TIE's reports to the Tram Project Board and has been repeated in the evidence of several witnesses. This is dealt with substantively in the latter part of these submissions (which deal with particular criticisms made of Bilfinger at paragraphs 315 to 324). These allegations were to the extent that Bilfinger had been slow to enter into subcontracts and slow to commence works. Bilfinger denies these allegations as noted in more detail below.

168. Mr Donaldson, Bilfinger's Construction Manager from July 2008, gave oral evidence in relation to the works which Bilfinger carried out immediately following contract award:

> *"the general project mobilised in accordance with what was available… Edinburgh Park Station area, there was site clearance...First stage earthworks had commenced, and along from Carrick Knowe golf course heading west, again, site…clearance and first stage earthworks had commenced…. they were trying to achieve what was scheduled in the programme at that time, and we were following the overall programme. Or trying to…"* [**Public Hearing Transcript, 16 November 2017, page 104:4-5, and 106:13-17 and 21-24**]

169. In Bilfinger's submission, the evidence of Mr Donaldson regarding the works which Infraco were attempting to complete should be preferred to

unsubstantiated allegations of slow mobilisation on the basis that he was an eyewitness to those works, and his knowledge is based on the physical carrying out of the works. Mr Donaldson was very clear that Infraco commenced works immediately post contract award where they could in an attempt to work to the agreed Programme.

170. **Incomplete MUDFA works**

171. As noted above, the incomplete MUDFA works were a chronic problem immediately post contract (and throughout the duration of the Project). Bilfinger provides further submissions below on the critical impact of MUDFA delays to the Project, but considers MUDFA delays here in the context of the run up to the Princes Street dispute. Insofar as Bilfinger was unable to commence works, in the vast majority of areas this was due to incomplete MUDFA impacting on the Infraco works.

172. **Agreement between Mr Walker and Mr Gallagher**

173. Paragraphs 38 – 42 of Richard Walker's Voluntary Witness Statement produced to the Inquiry provides a succinct summary of the issues which Bilfinger faced, immediately following the signing of the Infraco Contract. He states:

"*It immediately became apparent that Infraco could not progress in line with the programme of work primarily for the following reasons:*

(a) *Underdeveloped, incomplete or missing design; Base Date Design Information was on v25 of the Design*

programme which had progressed to v31 by the time of award and had incurred further delays and slippage.

(b) *Incomplete enabling works i.e. diversion of utilities by the MUDFA contractor;*

(c) *Relocation of fuel storage for Network Rail;*

(d) *Incomplete Third Party Agreements e.g. Edinburgh Airport, Forth Ports;*

(e) *Lack of access;*

(i) *The Infraco Contract provided for us to have an exclusive licence to enter and remain upon the Designated Working Area.*

(ii) *In Leith Walk the MUDFA contractor had not completed the utility diversionary work and TIE was unable to give us exclusive access. In fact we had hardly any access at all and were unlikely to get access for many months. See photos at Appendix 8.*

As a result, we would have been within our rights under the Infraco Contract not to start any works at all. However, as explained in paragraph 44 and 45 below, we commenced certain goodwill works in any event." [**TRI00000072_0100-0101**]

174. Mr Walker went on to explain that he:

> "*had a meeting with Willie Gallagher, Chief Executive of TIE, in May or June 2008 and informed him of the issues outlined…… above and to advise that we were suffering delay and incurring extra cost by our inability to properly get started due to these delays (particularly those caused by MUDFA).*
>
> *I was looking for payment of additional costs associated with these issues from TIE - they were due to us under the Infraco Contract as a result of the Notified Departures in Schedule Part 4. For example, as detailed above, the MUDFA works not being complete on Leith Walk and the relocation of the fuel storage location not being complete, were both Notified Departures. Willie told me that it would be a political nightmare if we started escalating costs before Infraco had even put a shovel in the ground and there was nothing to show for our efforts. Notwithstanding the fact that Schedule Part 4, Clause 3.2.1 contemplated this exact scenario (i.e. that the price would increase "immediately" after the contract was signed), I came to an agreement with Willie Gallagher that we would work over the summer period – June, July and August 2008 - using our best efforts to make what progress we could, and that Willie and I would reconvene in September to reach a resolution on time and money. The agreement we reached was that Infraco would "commence works" which would be visible to the Council and residents of Edinburgh and would allow for money to be paid*

following visible work having been done. The message I got from Willie Gallagher was that we had to be seen to be progressing, even in spite of the fact that immediately post contract real progress was not actually possible as a result of the outstanding issues outlined above." [**TRI00000072_0101, paragraphs 43-44**].

175. Mr Walker has given clear evidence in relation to the issue of commencement of the works to the ETI (**TRI0000072_C_0050**):

"To try and resolve the matter we attempted to manage the project as best we could. We tried to prioritise the designer into giving us the right information. We carried out works in Leith Walk. We undertook that work in a piecemeal fashion, bit by bit, working around the utility contractor rather than just having unrestricted access. So we worked with them. We even worked on one side of the road while they were attending to trackings on the other side of the road. We progressed with reasonable haste with procurement and our subcontractors and major materials. All normal steps. We tried and tried and tried again to resolve all the issues that we could."

176. Infraco commenced certain works which were available on Leith Walk in the summer of 2008. Mr Walker went on to explain that Infraco maintained contemporaneous records of everything that happened over the course of the summer and all of the difficulties encountered, and that he met with Mr Gallagher in September 2008 to reach agreement

as discussed. At this meeting, Mr Walker stated that it was agreed that Infraco would include all of its delay and disruption costs in its payment application at the end of September and that it would be dealt with by the TIE team.

177. Mr Gallagher's oral evidence made some attempt to dispute Mr Walker's evidence in relation to this discussion, but he did accept that once the Project was "built" or mostly built, that TIE "*will be in a good position to perhaps ask for more*" [**Public Hearing Transcript, 17 November 2017, page 124:7**]. Mr Walker's evidence was that he advised Mr Gallagher that he would:

> *"'work in good faith over the summer period and we will get some holes in the ground and some structures up and some works visibly seen and we will keep a record of everything and then we will submit it in September so that you can pay us then, when you have some works on the ground to show what is going on…We merrily went away coping with all the difficulties…We were also actually working outside the contract in good faith…we put that to one side and we carried on working."* [**TRI00000072_43, paragraph 87**]

178. Accordingly, there is evidence that Mr Walker and Mr Gallagher agreed to put the contractual change mechanism to one side and to operate on a goodwill basis for the period immediately after contract award. Mr Walker confirmed what was happening in this period in giving oral evidence as follows:

"*That I would work to the best of my endeavours to progress whatever works that I could, that I had access to. I would keep records of them, and in September we would raise the relevant notices, and we would then evaluate those and submit them with our monthly account, and assuming that they were -- they were fair and reasonable, there may have been a bit of negotiation on the prices, but the monies would be incorporated into our payment.*

"Q. …Why was the agreement you had reached different to the contract in which Bilfinger were obliged to carry out works in any event? What was the difference?

"A. Well, the contract requires that an Infraco notice of Notified Departure -- Infraco notice of TIE change, I think is the word, becomes a Notified Departure which becomes a mandatory TIE change.

"Clause, I think it was 80.13.1, actually forbids the contractor from commencing work until agreement has been reached, and the notice of TIE change issued.

"So we put in Notified Departure number 1. Until that is agreed, we're not permitted by the contract to progress works. Mr Gallagher had said that that wasn't really acceptable because it was, I think possibly too embarrassing to go back to City of Edinburgh Council on day 1 or 2 of the contract and say: we owe these guys some time, which was eventually agreed at 7.3

weeks, and we owe these guys some money, which was eventually agreed some time later at 4.9 million; and had we stuck to the letter of the contract, we were actually not permitted to start work until both the time and the price were agreed.

"That's what clause 80.13.1, I think it is, states.

"…Q. So was it in short your position that this gentlemen's agreement was essentially an agreement to put the strict terms of the contract to one side to allow some work to be carried out in the meantime?

"A. Yes." [**Pubic Hearing Transcript, 15 November 2017, page 124:23-126:17**]

179. Mr Walker's evidence was that the works which were carried out in 2008 were part of this "goodwill" gentlemen's agreement which he had reached with Mr Gallagher of TIE.

180. Mr Walker explained that having done this, and having submitted all of the Infraco claims for Notified Departures in the application for payment for September 2008, all of the claims for Notified Departures were rejected by Willie Gallagher [**TRI00000072_0102, paragraph 46**], albeit he undertook to sort this out in the October payment round. It should be noted that the September and October 2008 payment certificates were put to Mr Walker when he gave oral evidence, apparently to ascertain where these applications for Notified Departures were to be found. Mr Walker explained that they were not in these applications but would

have been submitted in prior documents [**Public Hearing Transcript, 15 November 2017, page 133:9**].

181. Despite Infraco having put the express contractual provisions to one side to allow Infraco's works to continue, TIE subsequently refused to honour the agreement which had been reached between Mr Gallagher and Mr Walker. Mr Walker's evidence was that the Infraco's September 2008 application for payment was not approved by TIE [**TRI0000072_C_0052**]. Mr Walker stated that he had a conversation with Mr Gallagher where Mr Gallagher stated that he would "sort them out" [**TRI0000072_C_0044**]. In October 2008, a further Infraco application for payment was rejected. Mr Walker's evidence was that he:

> "*went back to Willie Gallagher with some photographs to show the level of disruption and an indication of what this was going to cost. At that time we had undertaken that the cost of our disruption was around £2.5m. I explained to Willie Gallagher in fairly simple terms what was going on and where we were at and that we would resubmit in our November application and it needs to be paid before year-end for our year-end figures as we were £2.5m down. If this did not happen then the goodwill would disappear and we would have to revert to the contract and not commence works subject to a TIE change*." [**TRI0000072_C_0044**]
>
> and

that Infraco "*would have no alternative than to strictly abide by the terms and conditions of the contract, particularly in respect of the change control (Notified Departure) process*" [**TRI0000072_C_0053**].

182. Soon after this discussion, Mr Gallagher then resigned from his position as the Chairman of TIE and was replaced by Mr Mackay. Mr Walker's evidence was that his impression was that Mr Gallagher had "*decided that the 'kitchen was going to get too hot', so he would get out while the going was good. Or he made an estimate of what he thought the increases were going to be and reported those upwards and he was told to get out*" [**TRI00000072_0053, paragraph 98**]. Mr Gallagher's evidence was that the reason he left was a personal matter because he had a 'health issue'. [**Public Hearing Transcript, 17 November 2017, page 156:23**].

183. A letter which was sent by TIE to Infraco at about the point of Mr Gallagher's departure, demonstrates the beginning of the disagreement between the parties as to the meaning and intent of the Schedule Part 4 and Pricing Assumption 1 in particular. TIE's letter addressed to Mr Walker of 14 October 2008 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*" [**DLA00001672**]. The parties had opposing views of what constituted normal design development.

184. Mr Walker's evidence was that the culmination of these events was a signal that the relationship was deteriorating. Infraco decided that "goodwill" works, and putting the contractual mechanisms to one side was not an option given the behaviour of TIE, and that matters would have to be dealt with using the contractual mechanisms available to both TIE and Infraco. This was evidenced by Mr Walker's description of one of Mr Mackay's first interactions with Infraco and the press following his appointment as Chief Executive of TIE:

> "*Willie had not kept his word regarding payment for works carried out in the summer of 2008, and the new Chief Executive had gone to the press in complete contravention of their own Confidentiality Clause (Clause 101) of the Contract to state that Infraco would be paid 'not a penny more'. This demonstrated either a fundamental misunderstanding of the Infraco Contract from David Mackay, or that he was misleading the press as to the terms of the Infraco Contract, particularly Schedule Part 4, which always meant that the out-turn cost would be more than the 'Price' which had been quoted in the press"* [**TRI0000072_C_0103**].

185. Bilfinger would submit that the evidence from Mr Mackay, on his arrival, also demonstrates the point at which the relationship rapidly deteriorated. Whilst Mr Mackay does acknowledge that this was not a fixed price contract [**Public Hearing Transcript, 21 November 2017, page 85:24-86:12**], his evidence demonstrates a particular animosity towards Bilfinger (he would appear to be the source of the oft repeated

phrase *'delinquent contractor'* which subsequently lead to a particularly bitter dispute between him personally and Bilfinger). On taking over from Willie Gallagher following his departure, Mr Mackay's evidence was as follows:

> *"I also recognised that poor Willie has not been firing on all cylinders… I just didn't think we were tackling various issues as appropriately as we should have been."* [**Public Hearing Transcript, 21 November 2017, page 87:20-88:9**]

When asked in what way they should have been tackled, Mr Mackay responded:

> *"Well, using the contract where we could, being much more direct with Bilfinger Berger, trying to manoeuvre a gap between Bilfinger and Siemens."* [**Public Hearing Transcript, 21 November 2017, page 88:12-14**]

Mr Mackay also expanded his evidence to state that he thought TIE had been *"outwitted by Bilfinger"*, when asked in relation what to, he responded *"the contract..."* both *"pre and post"* contract signature [**Public Hearing Transcript, 21 November 2017, page 90:10-14**]

186. It is in this context that the Princes Street dispute must be set in order to fully understand why the dispute occurred and why Bilfinger consider that this was a key turning point in the Project. In particular, Mr Mackay appears to have joined as the Chief Executive of TIE, with the specific aim of challenging Infraco (and Bilfinger in particular) on the Contract

with the goal (even at that stage) of having Bilfinger removed from the Project [**Public Hearing Transcript, 21 November 2017, page 88:17-24**]. It was not, as has been repeatedly suggested by Mr Fairley QC on behalf of certain individuals he represents from TIE, a dispute about a £1,500 difference on a Notified Departure concerning a bus lane.

187. **The Princes Street Dispute**

188. A number of factors culminated in the Princes Street dispute in March 2009. The Princes Street dispute arose relatively soon after the events in the summer of 2008 (described above) occurred. In addition, since late 2008 and into 2009, there were further Infraco Notification of TIE Change ('INTC')'s which had not been agreed and meetings were held between TIE and Infraco which Mr Walker described as attempts to try "*to resolve the escalating disagreements that were bubbling up to the surface"* [**TRI0000072_C_0055**]. Mr Walker's evidence, in relation to a meeting which took place between Infraco and TIE on 9/10 February 2009, and notes taken at that meeting by Stewart McGarrity, was that:

> "*BSC had estimated our projected outturn costs on the project as between £50 million and £80 million, comprising broadly £20 million of direct costs due to notified departures / TIE changes, £20 million extension of programme and £10 million delay and disruption…if we were supposed to start working at one point, but we did ten metres and then we packed up and we went across the road and put traffic management out, we did ten metres over there and then we packed up and we went and did*

20 metres over there and then we came back, it has a cost and that cost was the £10 million. Potentially you could have another £30m of the same because of the same problems of changed design, poor design, utilities in the way, utilities not cleared even when the utility contractors had ostensibly finished" [**TRI0000072_C_0056**].

189. It is against this background of escalating cost, and TIE's refusal to acknowledge, deal with and accept INTCs that the parties approached the next phase of the works; Princes Street.

190. On Princes Street, there were major issues with the MUDFA works. In some sections, the poor condition of existing utilities (such as leaking water mains), meant that deeper excavations and ground improvement works were required prior to installation of the tram infrastructure. To resolve the MUDFA problem, Infraco would have been required to work around the MUDFA contractor in small, disjointed sections as it had attempted to do on Leith Walk as described by Richard Walker and set out in these submissions [**TRI0000072_C_0050**]. Inevitably this was going to render the Infraco works more difficult to complete and result in delay.

191. Infraco's experience prior to March 2009 of trying to work with TIE and putting a strict application of the Infraco Contract to one side had not proved successful because of TIE's complete failure to acknowledge the way in which the Infraco Contract was intended to operate and Infraco's entitlements thereunder. Within Bilfinger it was therefore

considered that Infraco could not proceed with the Princes Street works without requiring strict compliance with the terms of the Infraco Contract, and getting agreement on Infraco Estimates for the various outstanding INTCs. To work outside of the contractual mechanism again (as had been done in the summer of 2008) would have meant Infraco were taking on a huge commercial and financial risk, exposing itself to a very substantial financial liability. Given the circumstances (and the blatant hostility from David Mackay and others within TIE), Infraco were not willing to do so.

192. It has been repeatedly suggested in cross examination that the true cause of the Princes Street dispute was TIE's insistence that Infraco should maintain a bus lane in operation along Princes Street whilst the Infraco Works were being carried out (see Mr Fairley Q.C.'s cross examination of Dr Keysberg [**Public Hearing Transcript, 16 November 2017, page 83:3–91:20**], Mr Mackay [**Public Hearing Transcript, 21 November 2017, page 153:4–162:1**] and Mr Foerder [**Public Hearing Transcript, 5 December 2017, page 191:14–195:19**]). Reference has been made to the minutes of a meeting of the Tram Project Board of 22 October 2008 [**CEC01053731**] which record Colin Brady of Infraco stating that a bus lane could be accommodated by Infraco although the matter would need to be resolved when works started in January 2009. It was suggested to Dr Keysberg (amongst other witnesses) in cross-examination by Mr Fairley Q.C. that, "*there's nothing in this minute that suggests that BBS are going to exercise a contractual right not to start work on Princes Street because they're not*

being given unimpeded access" [**Public Hearing Transcript, 16 November 2017, page 85:21-24**]. Mr Fairley QC then referred Dr Keysberg to an email dated 18 February 2008 from Robert Sheehan of Bilfinger to Steven Bell of TIE [**CEC00867153**]. Mr Sheehan refers in his email to maintenance of the bus lane impeding the consortium's exclusive access to the Designated Working Area and to the need for TIE's agreement on Infraco's Estimate for this change before any works can commence. It was suggested to Dr Keysberg by Mr Fairley Q.C. that this email represented a change in Bilfinger's position from October 2008 and that Infraco were subsequently using the bus lane change, as an excuse for failing to commence works. Mr Fairley also suggested that Infraco were refusing to commence works on Princes Street without prior agreement that Infraco would be paid on a demonstrable cost basis (see the passage of cross-examination at **Public Hearing Transcript, 16 November 2017, page 88:12-91:19**).

193. The suggestion that the Princes Street dispute related to a £1,500 estimate in relation to a bus lane is, with respect, ridiculous. The value of the bus lane change is immaterial. The true point of contention was fundamental: Infraco insisted on compliance with the terms of the Infraco contract and holding TIE to the bargain as they were contractually entitled to do. This point was eloquently expressed by Martin Foerder in his oral evidence to the Inquiry, where he said:

> "…*As I said earlier, it was the principle, because it was a continuation from the start of the contract that TIE was not respecting the contract. For what you sign a*

contract if you don't respect what is written down there? So I think that we had reached here a limit, that was the minimum, the way I was briefed, which made the situation for us to -- to try to get here an agreement prior to continue the same, because this numbers which you mentioned are, of course, negligible. They are not really of excessive amounts. But it was the principle, and the monies which haven't been paid before, and if this could have continued, then we would have been under enormous commercial risk." [**Public Hearing Transcript, 5 December 2017, page 195:5-17**]

194. As explained in the evidence of Dr Keysberg, Infraco were concerned that the Princes Street works would be significantly delayed by the incomplete MUDFA works, and were concerned, based on experience up to that point, that TIE would not honour the Notified Departure process in the Infraco Contract which would further slow down the works. Dr Keysberg explained:

"*we would have just stopped at the first utility and said: that is a change, we go now into design, we go into estimate, we go into agreement, and once everything is agreed, we get the TIE change order and then we pick up this utility or we - - whatever it was, and do the work. But that would have taken half a year. I don't have to explain that is absolutely unworkable"* " [**Public Hearing Transcript, 16 November 2017, page 32:5**].

"*And my other concern was - - I said this constantly - - we will bring the whole city to a stop, because we will enter into a certain location, we block the roads, and then we come to a change, and the whole thing comes to a standstill. Once we have reached agreement on a certain change, we come to the next one*" [**Public Hearing Transcript, 16 November 2017, page 39:10**].

195. Dr Keysberg's evidence to the Inquiry was that as a result of the problems anticipated on Princes Street caused by the incomplete MUDFA works, the Project should be suspended for a year because *"with this type of contract, and all the obstacles and the unfinished design, both together wouldn't work"*. [**Public Hearing Transcript, 16 November 2017, page 37:18**] Dr Keysberg recalled clearly suggesting to David Mackay at a meeting (which he agreed may have taken place in December 2008) that the Infraco Works should be suspended to allow design and MUDFA works to be completed, and to allow the works to be repriced and reprogrammed. Dr Keysberg's Witness Statement confirms that he considered that the Infraco Works should be

"suspended to allow the utilities to be 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 that in a fully disrupted mode" [**TRI00000050_0016**]

196. Dr Keysberg's oral evidence was that the suspension of the works would have been a *"far cheaper way to do it, rather than being there, fully mobilised and working in a completely disrupted mode"* [**Public Hearing Transcript, 16 November 2017, page 38:8-10**]. When pressed by the Chairman of the Inquiry, Lord Hardie, as to the cost implications of the suggestion made by Dr Keysberg to Mr Mackay, Dr Keysberg's evidence was that:

> *"it is really about demobilising officers, people, getting them back and mobilising them in again, and certainly you would have claimed a certain price increase of inflation...but still the alternative was just to stay in a disrupted mode...what you can renegotiate is the inflation...so the contract price would have more or less stayed the same. But it is really a price about demobilisation and coming back a year later"* [**Public Hearing Transcript, 16 November 2017, page 38:22-25, 39:1-4, 40:2-3 and 40:7-9**]

197. Ultimately, TIE were not interested in this proposal and were determined to push on with the works without any postponement, even though the break in works could have resulted in significant cost savings for the project. In making this offer, the consortium was providing a potential solution to the problems caused by incomplete MUDFA works.

197A At this point, Bilfinger considers it necessary to respond to the submissions which have now been made on behalf of the Selected Ex-

TIE employees on the background to the Princes Street dispute. The Closing Submissions for TIE are generally very difficult to read without cross referencing to other documents, mainly as a consequence of the fact that only document numbers are used in the cross referencing and there is no explanation of the document itself.

197B However, more concerning is the way in which the contents of documents are misquoted. As a consequence, the submissions made for TIE are misleading. For example, at Section 8B on page 96, it is stated that in a meeting on 10 February 2009, Richard Walker *"announced that unless the construction programme was paused for six months to a year, Bilfinger would only work on a costs plus basis until design and utilities diversions were complete*." The source of this reference is said to be document TIE00089656_003. This is in fact an email from Stewart McGarrity of 25 January 2010, in which he attaches his note of a meeting on 9 and 10 February of 2009. In fact, when page 3 of this document is reviewed, it states:

"*They outlined 2 options they thought sensible:*

(i) They will only work on a cost plus basis for any work progressed prior to completion of design and utilities (they described this as "piecemeal work"). When challenged on the value for money incentive for such an arrangement, they alluded to a costs plus fixed fee proposal they currently operated in Stockholm; or

(ii) They could go away for 6-12 months until your utilities and your design are completed and then come back to work as per the original contract sequence."

197C As the Inquiry will see, this is contrary to what is stated in the TIE submissions, but in line with Bilfinger's evidence that they proposed a halt on the works until design and MUDFA caught up. On review, there are many such misquotes in the TIE submissions and Bilfinger would suggest that the Inquiry carefully check the documents referred to.

197D Beyond this, the TIE submissions also seek to once again, create confusion. It would seem that TIE continue not to understand the proper operation of the Infraco Contract. For example, at page 97, it is stated that "*On 19 February TIE instructed Infraco to proceed under clause 80.15 notwithstanding the disputed amount of £1500*". This relates to the bus lane. The reference for this quote is said to be document **CEC01032608_0003**. This is reference to the TIE Position Paper on the mediation on Princes Street, not to any instruction itself. It is assumed that TIE are making reference to paragraph 3.5 of that document which provides:

"By letter dated 19 February 2009 …tie affirmed the agreement and implementation of the tie Change, and secondary to that agreement, instructed Infraco to implement the Change pursuant to Clause 80.15 and directed Infraco in the same terms pursuant to Clause 80.13. The letter was relayed to Infraco by tie's Representative as an instruction."

197E It is further stated by TIE in its submissions, on page 97, that *"Infraco did not accept this instruction and demanded the £1500 in dispute before doing any work."* The reference to this quote is said to be Richard Walker's witness statement at paragraph 104 [**TRI00000072_0057**]. What is not quoted is that Richard Walker stated that: "*They knocked the sum of £1500 off an estimate for £8000. But they were actually in breach of the requirements of the contract so we could not agree it. Because we could not agree, the contract prevented us from starting work*."

197F Richard Walker was absolutely correct in his contention. Bilfinger would refer the Inquiry once again to the decision of Lord Dervaird in the Murrayfield Underpass adjudication [**BFB00053489**]. Bilfinger was absolutely within its rights not to commence work until in receipt of a tie Change Order, which could only be issued where there was agreement of an Estimate. There was no agreement of an Estimate. The submissions made by TIE do not appreciate at all that it was subsequently found to be wrong on this point and that Bilfinger had been within its rights to take this stance. Again, the reference made to Mr Foerder and extracts from his transcript, are misquotes and/or continue to demonstrate a misunderstanding. Mr Foerder did not say that the introduction of a bus lane was 'unforeseen': his evidence being that it was not 'originally foreseen' and which when introduced was a Notified Departure. In addition, his evidence was to the effect that TIE may have issued a tie Change Order, but, absent agreement of the value of the Estimate, it was not a valid Change Order and was not one which Bilfinger was obliged to comply with. Mr Foerder actually stated:

"*No, I think we don't have got agreed Change Order from tie. That was my understanding.*" [**Public Hearing Transcript, 5 December 2017, page 194:17]**

197G Accordingly, and as can be seen from this, the Inquiry ought to be cautious when reviewing the submissions made on behalf of TIE on this issue.

198. Further to Dr Keysberg's evidence that Infraco had offered TIE the option of demobilising for one year in order to progress the MUDFA works in order to save money and avoid significant disruption, the Inquiry has also heard evidence from Mr Donaldson that a delay of one year on Princes Street would not have caused any delay to completion of the project overall:

> *"Princes Street is only one area of the project, it wasn't in the critical path. That's why I'm saying you could have delayed it for a year, and for the overall completion it would have made no difference"* [**Public Hearing Transcript, 16 November 2017, page 143:1-5**]

199. Infraco could not take the commercial risk of not receiving payment for the significant costs and delay it would incur in carrying out works on Princes Street due to incomplete MUDFA works. It was this principle, and not merely a £1,500 dispute, which brought works to a halt at Princes Street. This is appreciated by David Mackay at least, who in his oral evidence to the Inquiry rejected the suggestion that the Princes Street dispute was about a mere £1,500 cost to maintain a bus lane and

confirmed that *"it was very much more than that*" [**Public Hearing Transcript, 21 November 2017, page 95:19**].

200. The lack of any progress on Princes Street attracted much media attention, and TIE used this to its advantage at the time. It was publicly reported (by TIE) that the consortium refused to proceed with the Princes Street works until TIE paid the consortium a further £80 million (see Martin Foerder's Voluntary Witness Statement, paragraph 7.7 [**TRI00000118_0027-0028**]. Clearly, this message was widely propagated by TIE. Various witnesses have repeated this comment, including Kenneth Hogg [**TRI00000045_0103-0104**], Donald McGougan [**TRI00000060_0067, paragraph 180**], Tom Aitchison [**TRI00000022_0056-0057**, **paragraph 167**], and Phil Wheeler [**TRI00000092_0037-0038, paragraph 92**]. Steven Bell gave an account of his understanding of the cause of the Princes Street dispute in early 2009. This account, from someone who was actually involved in the discussions about Princes Street (as opposed to the Councillors and others quoted above who were not), acknowledges that the discussion about a price increase of £50 to £80 million, was in relation to the overall potential increase, and was not a demand for payment of this sum before works would commence on Princes Street. Mr Bell said:

> "*Primarily…round about February 2009, Richard Walker and some of his colleagues from Bilfinger, and Michael Flynn and a colleague from Siemens met with Stewart McGarrity and I, and advised us of a, in their view, the likelihood that the Infraco*

contract was going to cost Infraco GBP50 million to GBP80 million more than originally intended, and they believed that that was a -- in the main, a TIE liability.

"They also advised at that time they weren't prepared to start on Princes Street without an agreement on recompense for items they viewed as would fall under the TIE change clause, including matters such as utilities diversions, but also any other items that would fall under the pricing assumption schedule. As a consequence, they had confirmed to us they did not intend to mobilise at the scheduled time to start work in Princes Street unless we came to a different agreement on how that would be valued." [**Public Hearing Transcript, 25 October 2017, page 38:20-39:13**]

201. A similar allegation has been made that the consortium used the Princes Street dispute as leverage to change the Infraco Contract to a cost-plus arrangement, utilising the public importance of Princes Street for their own contractual advantage. Such comments have been made, for example, by Damian Sharp (see **Public Hearing Transcript, 5 October 2017, page 193:13-14**; and see also lines **194:4-9**, where he refers to the consortium "*visibly escalat[ing] the dispute to the public domain so early on in the process*"). Gordon Mackenzie also commented that the consortium's motive behind the Princes Street dispute was that, *"the contractor was trying to put pressure on TIE and Council particularly to cough up more money*" [**Public Hearing**

Transcript, 1 November 2017, page 52:3-4]. Furthermore, David Mackay said:

> "…*Princes Street is the most important street in Edinburgh, if not in Scotland. To have it closed for any period of time was an obvious huge pressure on TIE to agree to all sorts of things. I believe the Princes Street tactics by Infraco were appalling. They had done their preliminary searches. They knew how old the infrastructure was below the street. They were desperately keen to change the fabric of the contract. And to have supplemental agreements throughout*." [**Public Hearing Transcript dated 21 November 2017, page 95:5-14**]

202. The suggestion that it was Infraco using the Princes Street works to apply pressure on TIE is not supported by the facts. In fact, the converse is true. Dr Keysberg explained that Bilfinger perceived TIE as putting pressure on the consortium to start works on Princes Street so that the weight of the public eye and media attention would force the consortium to continue working regardless of issues presented by incomplete MUDFA and disputes about payment (see ETI Transcript dated 16 November 2017, Day 36, lines 45:3-22). Dr Keysberg clearly explained in his oral evidence following a question from the Chair of the Inquiry, that there was no intention on the part of Bilfinger to place pressure on TIE, but to resolve issues relating to Princes Street before the work commenced and the street was brought to a standstill. He said:

"…[F]irst of all, I had discussions with Mackay, and I think there were others as well, not to do the whole blockage at all before we have finalised an agreement how to work in this area." [**Public Hearing Transcript, 16 November 2017, page 47:8-47:11**]

"They still did it, in my recollection and there were a few days or weeks of road blockage without physical works in there, and now -- I mean, under our interpretation of the contract, there was -- I think there was no reason why we should try to put pressure on them. For us it was very clear, nobody could really argue under the contract that we were obliged for all the utilities that were still there in Princes Street. And if you had our belief of the contract, and our interpretation, I think it has to a certain extent been confirmed, at least by the adjudications, then you could only come to -- there was nothing about putting pressure on them." [**Public Hearing Transcript, 16 November 2017, page 47:18-48:5**]

203. An accusation originating from Richard Jeffrey has emerged that Infraco used the contract to *"hold TIE to ransom*", and this phrase has also been applied to the Princes Street dispute. Richard Jeffrey says that at a meeting of the principals of TIE and the consortium in July 2009, Dr Keysberg (for the consortium), said, "*this contract allows us to hold you to ransom*" [**Public Hearing Transcript, 8 November 2017, page 64:2-6**]. Richard Jeffrey prepared a note of this meeting almost a year later in April 2010 (at the height of "Project Pitchfork" which is dealt with

below), following a discussion with Andrew Fitchie [**CEC00335390**]. The notion that Infraco were "*holding TIE to ransom*" has clearly been spread widely within TIE and CEC as numerous witnesses have referred to this, including Iain Whyte [**TRI00000125_0039**], Marshall Poulton [**TRI00000115_0049, answer to question 229**], Tony Rush [**Public Hearing Transcript, 9 November 2017, page 118:17-18**], and David Mackay [**Public Hearing Transcript, 21 November 2017, page 104:2-3**]. These people were not party to any such discussions and their evidence in this regard was hearsay - presumably based on what they were told by Mr Jeffrey.

204. Dr Keysberg strongly refuted the allegations made by Richard Jeffrey in oral evidence when he said "*definitely 100 per cent I never used these words. That is for sure because they are simply not words which -- that I know or that I would frequently use...I wouldn't have said this to a client*" [**Public Hearing Transcript, 16 November 2017, page 50:15-51:16**]. The suggestion that Bilfinger and the consortium took a principled stance on the Princes Street works for such a malicious purpose stands in direct contrast with the suggestion made by Dr Keysberg to David Mackay in December 2008 that the Infraco Works should be suspended to allow design and MUDFA works to be completed, and to allow the works to be repriced and reprogrammed [**Public Hearing Transcript, 16 November 2017, page 36:25-38:14**] (by which he explained he meant [**37:18**]: *"It was quite obvious with this type of contract, and all the obstacles and the unfinished design, both together wouldn't work. So we either changed the contact into something like a cost plus fee*

based or re-measured the contract, or the conditions for a fixed lump sum contract need to be prepared and that means the design has to be finished and the utilities have to be removed,…"). It undermines the suggestion that the consortium's mind-set was to hold TIE to ransom. Dr Keysberg's evidence was clear; Infraco's intention was not to hold TIE to ransom. To the contrary, Infraco were attempting to avoid bringing the city to a complete standstill while parties dealt with the contractual disputes relating to potentially hundreds of Notified Departures:

> "*So it was not us saying: we don't work there, once the whole street was blocked. So we told them very clearly beforehand: let us find an agreement how we work in there, and don't do the road blockage beforehand; so it's not -- that we don't come to a situation where the road is blocked and nothing is going to happen there."* [**Public Hearing Transcript, 16 November 2017, page 47:12–17**].

205. In summary, the incomplete MUDFA works on Princes Street presented a significant obstacle to the progress of the Infraco Works and the Infraco Contract change mechanism which had to be followed would add yet further delay. TIE was determined for works to commence on Princes Street as a public demonstration of progress on the project. It is correct that Bilfinger chose not to sacrifice its contractual rights and risk non-payment by proceeding with the works on a goodwill basis. There was no deliberate public stance taken by Bilfinger: works simply could not progress due to the vast number of un-diverted utilities beneath the

road surface, or if they had commenced, would immediately have had to stop whilst Notified Departures were raised, Estimates produced and TIE Change Orders ultimately issued. Whereas TIE issued press releases announcing Infraco's refusal to start work on Princes Street without payment of a further £50 million to £80 million (which as noted above, was not Bilfinger's position), the consortium was effectively gagged by clause 101.14 of the Infraco Contract [**CEC00036892**] and by TIE from being in a position to respond to this, (see the oral evidence of Richard Walker [**Public Hearing Transcript, 15 November 2017, page 139:6-140:4**]; see also the oral evidence of Dr Keysberg [**Public Hearing Transcript, 16 November 2017, page 49:11-14**]). This is yet another example of TIE misreporting the facts to the Infraco's (and particularly to Bilfinger's) detriment.

206. Despite what TIE may have said publically, it was ultimately acknowledged by both parties that there was a requirement to reach an agreement in relation to Princes Street which allowed works to commence without the need to revert to the Notified Departure mechanism in the Infraco Contract as this would have resulted in an incredible amount of starting and stopping, delay and disruption.

207. Therefore in March 2009, Infraco and TIE entered into the Princes Street Supplemental Agreement ("PSSA"). This agreement meant that Infraco were to be paid on a demonstrable cost basis for the work carried out on Princes Street which Mr Foerder explained to the ETI meant that Infraco "*would be paid for all of the work carried out by our subcontractors (Crummock and MacKenzie Construction) on the basis*

of actual time spent carrying out the work at rates which were agreed and were set out in the PSSA" [**TRI00000095_0016**].

208. The practical effect of this was that because Infraco were being paid for works actually carried out on the basis of time actually spent completing the work, the Notified Departure mechanism was not required, and therefore works could progress smoothly rather than having a Notified Departure arise every few metres which would inevitably have slowed down the works. Mr Foerder explained that the PSSA was

> "*a workable agreement, allowing works to proceed even though we didn't have agreement with TIE on the consequences of the Notified Departures which affected every element of these Works*" [**TRI00000095_0016**].

209. The PSSA allowed works on Princes Street to commence while avoiding delay which would otherwise have been occasioned by the Notified Departure procedure, which, although a necessary contractual mechanism in the circumstances that prevailed at contract award, was not being operated properly by TIE such that works would otherwise have ground to a halt.

209A Bilfinger's position in relation to the facts and circumstances surrounding the Princes Street dispute are as set out above. Following review of the submissions made by CEC in relation to the Princes Street Dispute, Bilfinger considers that it is necessary to respond to the allegations made by CEC in its closing submissions.

209B The first point to note is that CEC were not actively involved in the Princes Street Dispute. The discussions and negotiations which took place leading up to the agreement of the PSSA took place between TIE and Infraco.

209C CEC incorrectly state that it was suggested by Infraco that the dispute was restricted to the issue of a £1,500 bus lane (paragraph 17.2). During the oral evidence it was accepted by both witnesses from TIE and Infraco that the Princes Street Dispute was about "*very much more than*" a £1,500 bus lane [**Public Hearing Transcript, 21 November 2017, page 95:19**]. It is, with respect, not correct to suggest that the "principal" issue regarding the Princes Street Dispute was restricted to this issue.

209D The key issue in relation to the Princes Street Dispute was best articulated by Dr Keysberg in his oral evidence quoted at paragraph 194 of these submissions:

> *"we would have just stopped at the first utility and said: that is a change, we go now into design, we go into estimate, we go into agreement, and once everything is agreed, we get the TIE change order and then we pick up this utility or we - - whatever it was, and do the work. But that would have taken half a year. I don't have to explain that is absolutely unworkable"* **[Public Hearing Transcript, 16 November 2017, page 32:5]**.

209E In paragraph 17.3 of its closing submission, CEC state that its "*principal submission*" is that the Princes Street Dispute was an "*opportunistic*

and orchestrated attempt to secure additional monies available for the project". CEC also alleges that Bilfinger's strategy was "*cynical*" (paragraph 17.27). Bilfinger strenuously refutes this allegation. It is clear from the evidence of Dr Keysberg that contrary to what CEC may assert, the Princes Street Dispute was in fact a dispute in which Infraco was attempting to enter into discussions with TIE in relation to how best to progress the Princes Street works. This was because in the circumstances, the strict operation of the Infraco Contract would have resulted in significant delays to the works while parties dealt with the procedure required by the Notified Departure mechanism in the Infraco Contract to deal with the fact that the utilities works in Princes Street were far from complete. In this context, it is unreasonable to suggest that Bilfinger were acting in an opportunistic manner.

209F In paragraph 17.4 of CEC's closing submissions, it is stated that the requirement for an instruction was only brought to the attention of TIE one week prior to the commencement of the Princes Street works, and reference is made to Mr Donaldson's witness statement in support of that assertion [**TRI00000033_0014**]. Mr Donaldson's witness statement narrates a number of documents in relation to this issue and quotes from an email from Mr Brady of Bilfinger who stated that with one week to go, TIE had not issued an instruction. There is no evidence in Mr Donaldson's statement which explains whether this was the first time that this had been brought to tie's attention. CEC's submission distorts Mr Donaldson's evidence and takes it out of the context in which it must be read. Contrary to CEC's submission, the ETI has seen evidence that

Mr Brady informed TIE in at least October 2008, some 4 months prior to the commencement of the works, that the bus lane issue would require to be resolved [**CEC01053731**].

209G In paragraph 17.10 of its closing submissions, CEC takes Mr Bell's evidence out of context in seeking to support its view that Bilfinger were opportunistically seeking to secure additional payments. CEC state that Mr Bell's evidence was that the failure to commence works on Princes Street was "*an attempt to obtain additional sums of between £50M and £80M".* Mr Bell's oral evidence to the Inquiry was that in Infraco's view there was a:

> "*likelihood that the Infraco contract was going to cost Infraco GBP50 million to GBP80 million more than originally intended, and they believed that that was a -- in the main, a tie liability. They also advised at that time they weren't prepared to start on Princes Street without an agreement on recompense for items they viewed as would fall under the tie change clause, including matters such as utilities diversions, but also any other items that would fall under the Pricing Assumption Schedule."* [**Public Hearing Transcript, 24 October 2017, page 38:24-39:9**].

It is clear from this quotation that Mr Bell's evidence was that Infraco's view was that the total cost for all of the Infraco works was likely to be £50-£80million more, this number was not limited to the Princes Street works. Additionally, Mr Bell confirmed in his oral evidence that this price range discussion was not what was stopping work on Princes

Street, but that Infraco advised that "*they weren't prepared to start on Princes Street without an agreement on recompense for items they viewed as would fall under the tie change clause, including matters such as utilities diversions".* Mr Bell therefore confirmed in oral evidence that the £50-£80million price discussions were not presented as an "*ultimatum*" as he had previously described in his witness statement [reference to CEC closing submissions, paragraph 17.10 and **TRI00000109_106**].

209H With regard to paragraph 17.11 of CEC's closing submission, and the comment that Infraco were not entitled to refuse to undertake the works, reference is made to paragraph 197F above.

209I In paragraph 17.13 of CEC's closing submission, it is suggested that Mr Walker is *"wholly lacking in candour"* when he stated that the Princes Street Dispute related to a £1,500 dispute. CEC's submission again fails to take account of the evidence in its full context. It is correct that Mr Walker gave evidence that there was a dispute in relation to the bus lane, however Mr Walker went on to say there was a:

> *"breach of the words of the contract, in my opinion, and therefore, in accordance with clause 80.13.1, we weren't in agreement. So we were prevented from starting work.*
>
> *Q. Would it be fair to say the underlying cause of the dispute from your perspective is essentially that the consortium insisted on compliance with the contract, as you interpreted it?*

A. Yes."

[Public Hearing Transcript, 15 November 2017, page 137:2-10]

Mr Walker's evidence was therefore clear that the Princes Street Dispute related to the interpretation of the Notified Departure mechanism in the Infraco Contract which was a key issue of principle which was disputed between Infraco and TIE, and that the dispute arose out of the breakdown of the relationship towards the end of 2008, in particular from Bilfinger's perspective, driven by a refusal by TIE to accept the correct operation of Schedule Part 4.

209J In paragraph 17.16 of its closing submission CEC states that Dr Keysberg's evidence was inaccurate when he suggested that there were only two options available on Princes Street, and that those options were to cease works or to agree to the PSSA. CEC's submission is that the work could have been undertaken as it had been previously. CEC are of course correct that Infraco and TIE could have proceeded with the works on Princes Street in accordance with the terms of the Infraco Contract. What CEC completely fails to appreciate is the cost and time implications of doing so. As described by Dr Keysberg in his evidence, and quoted above, this would have meant working in an *ad hoc* fashion, discovering Notified Departures every day, and going through the Notified Departure mechanism possibly hundreds of times in relation to one stretch of road. This would have caused huge amounts of delay and disruption, and the cost would likely

have increased upon the discovery of each Notified Departure given the status of the incomplete MUDFA works. TIE itself recognised that this was not a sensible way of carrying out the works when it instructed Infraco to stop working in Leith Walk following months of relatively unproductive work [**CEC00630202**].

209K It is correct that Infraco accepts that the Princes Street Dispute attracted huge amounts of media attention. If CEC is inferring that this was Infraco's intention, then it fails to appreciate that much of the media attention directed towards Infraco, and particularly Bilfinger was very negative, and was potentially damaging to Bilfinger's reputation. Clearly no commercial company operates with the intention of seeking negative attention in the media.

209L In its closing submission, CEC alleges that the PSSA *"was but one of Infraco's attempts to erode what had been agreed in 2008"* (paragraph 17.32). CEC seek to develop this argument further in paragraph 17.37 of its closing submissions when it states that the PSSA negotiations *"were not an attempt to make the contract workable to enable Infraco to undertake the works as suggested by Mr Walker but rather to secure more monies not otherwise available under the Contract"*. This allegation completely fails to appreciate and acknowledge the Notified Departure mechanism within Schedule Part 4 of the Infraco Contract which required Infraco to submit Estimates in relation to each and every Notified Departure. The CEC allegation that monies were not available under the Infraco Contract completely fails to acknowledge that had the Princes Street works proceeded in accordance with the

Infraco Contract as opposed to the PSSA, that Infraco would have been entitled to be paid additional sums in accordance with the (potentially hundreds) of Notified Departures which would have arisen during the course of those works, and that the works would have suffered significant delays due to TIE's failure to acknowledge, accept and agree any Estimate submitted by Infraco. It is not credible for CEC to suggest that Infraco had no contractual entitlement to secure additional sums in relation to the Princes Street works, particularly given the MUDFA delays; the Infraco Contract had a very specific mechanism built into it to allow such sums to be paid. Additionally, it is not credible for CEC to suggest that, had work proceeded in accordance with the Infraco Contract as opposed to the PSSA, that Infraco would not have been entitled to significant sums in relation to the inevitable Notified Departures which would have arisen.

210. EVENTS IN 2009 AND 2010 FOLLOWING PRINCES STREET SUPPLEMENTAL AGREEMENT

211. In this section of these Closing Submissions, Bilfinger addresses events following the Princes Street Supplemental Agreement, through to the decision to cease all goodwill works, following the letter issued by Martin Foerder to this effect on 29 September 2010 (**TIE00409574**). Although the Note concerning closing submissions would suggest that 2009 and 2010 be viewed separately, Bilfinger considers that throughout the remainder of 2009 and into 2010, the Project suffered from an escalation of problems which had existed prior to this point, and that this is best dealt with collectively by understanding the issues which affected the Project throughout this period.

212. Martin Foerder who joined the Project as Project Director for Infraco in March 2009, commented on the relationship which he observed with TIE on arriving on the Project:

> "*The relationship which we had with TIE was not at all good. Everything was a battle and to my mind, seemed to stem from a basic disagreement about the background to and interpretation of the Infraco Contract*." [**TRI00000118_35, paragraph 8.3**]

213. Bilfinger submits that this is a short and succinct summary of the main issue which plagued the Project throughout 2009 and into 2010: in short, and despite adjudication decisions which gave clear guidance on Infraco's interpretation of the Contract being correct, there was a continued failure by TIE to accept this. TIE instead took every

opportunity to challenge Infraco (and Bilfinger in particular) on almost every aspect of the Contract.

214. Mr Foerder provides more detail in his Voluntary Witness Statement, on the nature of this relationship and the problems which arose [**TRI00000118_35 to 41, paragraph 8.3 to 8.16**]. Some particular aspects of this are worthy of note.

215. In July 2009, and conscious of the growing gulf between the parties as to the proper interpretation and operation of the contract, there was a further week long attempt at mediation which Mr Foerder describes as follows:

> "*We attempted a further mediation from 29 June to 3 July 2009 which was much more ambitious in scope. This dealt with 12 issues identified by the CEOs of Infraco and TIE (following a meeting on 22 June) covering all of the major issues then in dispute, including: the valuation of extension of time ('EOT') 1 (which was the 2 month initial delay due to the SDS programme moving from version 26 which was what the price was based on, to version 31 by the time of signature of the Contract); the time due to us in respect of EOT 2 (MUDFA delays as at March 2009); how to interpret Schedule Part 4; the valuation of BDDI to IFC Changes etc. This was also the start of the discussions on what became known as the 'On Street Supplemental Agreement' which was a proposal that all On-Street Works be dealt with on a similar basis to the PSSA. …… Unfortunately,*

we were unable to reach agreement with TIE at this mediation because it became clear that we had fundamental disagreements on the interpretation of key aspects of the Contract. We followed the mediation up with a 'Without Prejudice' offer to TIE on 8 July 2009. In this letter, as well as making proposals in relation to many of the things discussed at mediation, I also urged TIE to 'abandon its passive behaviour in favour of an active decision making process'. By this I meant that the issues between us were only likely to get much worse if decisions on how to proceed were not taken early. In response in a letter dated 9 July 2009, Steven Bell took the position that TIE remained open to taking decisions but it was Infraco's failure to provide information which was making this impossible. It was clear that we were very far apart on many issues." [**TRI00000118_36-37, paragraph 8.7**]

216. The provenance and outcome of the On-Street Supplemental Agreement is dealt with in further detail below. Although this mediation was not successful, it was agreed (on a suggestion made by Richard Jeffrey) that some of the bigger issues of contractual interpretation should be sent to the Dispute Resolution Procedure, on the basis that this would provide some guidance and unlock the dispute [**TRI00000118_37-38, paragraph 8.8**]. The outcome of these adjudications is dealt with below (paragraphs 266 to 305). In short, although Infraco was successful on the major issues of contractual principle which divided the parties, TIE continued to refuse to

acknowledge the outcome of these decisions, or to change the approach it took in relation to key issues such as the interpretation to be placed on Pricing Assumption 1 and the meaning and operation of Clause 80.13 of the Infraco Contract.

217. In the following parts of this Section, Bilfinger considers

- The continuing delay to the MUDFA Works
- Continuing problems with the design being prepared by SDS
- The On-Street Supplemental Agreement
- TIE's apparent campaign against Infraco (subsequently understood to be 'Project Pitchfork')
- The Dispute Resolution Procedure and the outcome of the Adjudications.
- Infraco's decision on 29 September 2010 to cease all goodwill works

218. **Continuing delay to the MUDFA Works**

219. Schedule Part 4 of the Infraco Contract contains the following Pricing Assumptions:

3.4.24: *That in relation to utilities the MUDFA Contractor and/or Utility shall have completed the diversion of any utilities in accordance with the requirements of the Programme save for utilities diversions to be*

carried out by the Infraco pursuant to the expenditure of the Provisional Sums noted in Appendix B.

3.4.25: That the Possessions (as defined in Clause 16.1) shall be available as noted in the Programme at Schedule Part 15 (Programme).

3.4.32: That the programming assumptions set out in Schedule Part 15 (Programme) remain true in all respects

220. Further assumptions are contained within Schedule Part 15b (Programming) itself, including:

"3.1: The Programme is based on MUDFA having completed all works and all utilities being diverted that would conflict with Infraco operations by the following dates:

1A 31 October 2008

1B 01 August 2008

1C 31 October 2008

1D 19 December 2008

2A 16 May 2008

5A No constraint

5B 11 April 2008

5C 16 May 2008

6 SGN Diversion, 18 April 2008

Watermain Diversion 30 May 2008

7A 16 May 2008"

[All of these dates were in advance of commencement by Infraco of any of its Works in each of Sections 1A to 7A.]

"3.2 No enabling works shall be required to be undertaken by INFRACO before MUDFA (or other Utilities) can complete their works. The programme is based on the Utilities in the Victoria Dock Access Bridge and Tower Place Bridge area being temporarily diverted away from INFRACO works by MUDFA in advance of the INFRACO works."

221. In summary, the Programme was based on the utility works in any Designated Working Area (defined in the Contract as being "*any land, worksite or area of the public road which the Infraco occupies for the purposes of executing the Infraco Works*), being complete before Infraco commenced the Infraco Works in such Designated Work Area, and that no works were required to be undertaken by Infraco to enable the MUDFA Contractor to proceed. By virtue of Clause 18.1.2, of the Infraco Contract, TIE granted to Infraco:

"*a non-exclusive licence to the Infraco to enter and remain upon the Permanent Land for the duration of the Term and an exclusive licence to the Infraco to enter and remain upon the Designated Working Area for the duration of the time required (pursuant to Schedule Part 15 (Programme)) for completion of the Infraco Works to be executed on such Designated Working Area"*

222. If the utility works carried out by the MUDFA Contractor and/or other utilities works had not been completed in accordance with the requirements of the Programme, and/or the Programming Assumptions

were not met (the MUDFA and utilities diversion works are not completed by the dates shown in the Programming Assumptions document included at Schedule Part 15 b of the Agreement), then a Notified Departure had occurred which entitled Infraco to additional time and money.

223. Martin Foerder in his Voluntary Witness Statement produced to the Inquiry [**TRI00000118_43-44**], deals with the impact of delays to the MUDFA Works as follows:

"*9.5…..delay by the preceding MUDFA Contractor was the major contributing factor which delayed the Infraco Works…. The Infraco had no contractual relationship with the MUDFA Contractor. TIE controlled that relationship entirely. We struggled to get updated information from TIE as to when the MUDFA Works would be completed. We needed that information in order to be able to properly programme the Infraco Works.*

9.6 As I mention above, the original MUDFA Contractor was Carillion plc. TIE replaced Carillion with Farrans Construction and Clancy Docwra but gave the Infraco no notice of this. At no point did TIE provide the Infraco with notice of a) the reasons for the delay to the completion of the MUDFA Works, b) when TIE became aware of such delays and c) reliable anticipated completion dates for the MUDFA Works (which would have allowed us as Infraco to know when we could expect reasonable access dates for the commencement of our Works). Had TIE provided us with this information, it would have made our job

much easier. The closest we got was sporadic marked up drawings from TIE's sectional Project Managers on site regarding anticipated completion dates for certain MUDFA activities in various locations. There was no formal communication of this information from TIE.

9.7 In a report to Council dated 12 March 2009, TIE reported that the MUDFA works were "on target to be substantially completed by July 2009". In the Edinburgh Tram MUDFA Update Report dated 22 March 2010, TIE reported to the Council's Tram Sub Committee that "The majority of the utilities works are complete (97%) with the remaining work being concluded by September 2010." In the corresponding report dated 24 June 2010 TIE reported "The utility diversions are now substantially complete". In the Edinburgh Tram Update Report dated 14 October 2010 TIE reported that the utility diversions were "over 95%" complete. The Audit Scotland Report of February 2011 states "Utilities work is now 97 per cent complete". The substantial utilities diversion works carried out post Mediation (including planning, design and approvals) indicate that the above percentage completion rates were inaccurate. The utility diversion works were finally completed in late 2013. Clearly, the reports issued by TIE to CEC reporting MUDFA completion percentages could not be relied on. I believe that it is clear from the above (assuming that TIE did not deliberately report inaccurately to CEC) that TIE did not at any stage have a grasp of the full scope, cost, timescale or impact of the utility diversions required".

224. Mr Foerder also provided detailed evidence of the specific problems with the preceding (and not completed) MUDFA Works insofar as they

related to Princes Street, (at paragraphs 59 and 60 of his Witness Statement provided to the Inquiry [**TRI00000095_C_0017**]) and more generally (at paragraphs 71 to 80, particularly in relation to the continued existence of utilities in Leith Walk (which is also dealt with at paragraph 323) below in relation to the allegations made about Infraco's 'slow mobilisation' post contract).

225. It is Bilfinger's position that delays to the utility works which should have been completed in accordance with the Programme and in advance of the commencement of Infraco's Work in any Designated Working Area, was the critical delaying factor throughout the Project and up to the mediation at Mar Hall. Whilst it has been suggested by others, including Ian McAlister of Acutus, that delay to the design subsequently became the dominant cause of delay, that is disputed by Bilfinger and is not borne out by the facts. Bilfinger relies on the evidence from the Bilfinger and Siemens' witnesses to this extent, in particular: Richard Walker [**TRI00000072_0055, paragraph 101**], Martin Foerder [**TRI00000095_0018 paragraph 60 and _0022-0024 paragraphs 71-74**; **TRI00000118_0005, paragraph 2.7 and section 9 on pages _0042-0049**; and **Public Hearing Transcript, 5 December 2017, page 105:21-106:7**, **111:5-11**, **115:25**, **134:25-135:5**, **135:19-136:2**]; and Axel Eickhorn [**Public Hearing Transcript, 7 December 2017, page 28:4-22**]. The factual evidence of those working on the coal face of the project on a daily basis was that MUDFA was the dominant cause of delay throughout the life of the project.

226. Post mediation, the evidence from Julian Weatherley of Turner & Townsend was that utilities presented a significant risk to the Infraco Programme running on time. He said:

> *"…[I]n order for the Infraco works to progress as set out within the contract programme, they required access to areas that didn't have utilities in, or at least they required that the works would not be held up by utilities. The programme didn't provide -- the Infraco programme didn't provide for their works being held up by utilities.*
>
> *"And therefore there was a risk that if their works were held up by utilities, that they couldn't deliver to their programme."* [**Public Hearing Transcript, 7 December 2017, page 44:23-45:7**]

227. Mr Weatherley stated in his evidence that from his experience working on the project with Turner & Townsend from August 2011, utilities were identified as, *"the biggest risk to the project"* [**Public Hearing Transcript, 7 December 2017, page 45:11-12**]. Later in his evidence, Mr Weatherley categorically contradicts the evidence of Mr McAlister, that lack of design was the critical cause of delay to the project. Mr Weatherley was referred to the question and answer number 30 in his Witness Statement to the Inquiry [**TRI00000103_0022**] on the extent to which design was incomplete when Turner & Townsend arrived on the project. Mr Weatherley lists some discrete design issues which were outstanding at that time. In that connection, the following exchange

took place in Mr Weatherley's oral evidence to the Inquiry on 7 December 2017:

> *"Q. …There isn't a general reference, any general reference here generally to the Infraco design works throughout the whole of the route. Would you take it from that that there was no design impediment to works starting in the areas other than those referred to here?*
>
> *A. Well, that is not necessarily a complete list. We had ongoing design meetings throughout my time on the contract. I was on it for 18 months and there were design issues discussed at meetings throughout that period.*
>
> *So there was a list of discrete design issues that needed to be dealt with. I'm not aware of many or any -- I can't think of any examples where the lack of design, with the exception of utility works, held up the construction.*
>
> *Q. When you say with exception of utility works, could you explain what you mean there?*
>
> *A. There were circumstances where utility works or works relating -- works adjacent to utilities had to be redesigned, and* ***there were examples where that did hold up the programme****…*
>
> *Q. Just for clarity's sake once again, in terms of the -- other than utility works, just looking at the design of the infrastructure*

works themselves, ***have I understood your answer to be that there were no design impediments to actually getting the work started on the infrastructure contracts****?*

A. I can't think of any examples, but -- there may have been, but I can't think of any." (emphasis added) [**Public Hearing Transcript, 7 December 2017, page 64:1-65:8**]

228. Throughout the period from commencement to settlement at mediation in March 2011, the critical delay to the Project was the delay to the preceding MUDFA Works. Even had there not been a dispute between Infraco and TIE, leading ultimately to the cessation of all goodwill works on 29 September 2010, ultimately Infraco could not have completed its works when there were many utilities still within the proposed route of the tram line and which would have conflicted with the Infraco Works.

229. Bilfinger would invite the Inquiry to dismiss the evidence of Ian McAlister of Acutus, insofar as he formed a different opinion. Mr McAlister's evidence covered (i) the adjudication which took place in 2010 in relation to the MUDFA delay before Robert Howie QC; and (ii) the Work he carried out on TIE's behalf leading to the mediation in March 2011 and his reports thereafter. This is for two reasons: firstly, Mr McAlister's evidence demonstrated that he fundamentally did not understand the decision which was issued by Robert Howie QC in the first adjudication, believing his approach to delay analysis had been accepted when in fact it had been rejected; secondly, it is also clear that his analysis leading up to mediation was carried out using the same

(incorrect) method of delay analysis and because the conclusions he reached were based upon what he seems to have been told by TIE, rather than his own investigation into the facts. His conclusions are also in stark contrast to those involved in constructing the works both pre and post mediation, that it was utilities which were holding up the work, rather than any design impediment.

230. On the first of these points (his fundamental misunderstanding of the MUDFA adjudication decision), and whilst this is a rather technical point, it is one which the solicitor for Bilfinger attempted to explore with Mr McAlister when he gave evidence.

231. Mr McAlister prepared a report for the Adjudication which took place before Robert Howie QC [Decision - **CEC00407650**]. Mr McAlister's approach to delay analysis was determined by Robert Howie to be wrong in certain material respects. Mr McAlister does not acknowledge this Decision (commenting only that TIE were pleased with the decision *'because Mr Howie supported TIE's view that Infraco's (BSC's) interpretation of its contractual rights was wrong'*). The extent to which Mr Howie's decision did not support Mr McAlister's report and his approach to delay analysis, includes the following:

232. Mr McAlister states at 24(b) (page 11 of his answers) [**TRI00000122**], that BSC's chosen method of delay analysis avoids the need to consider any culpability on its part. "*Noting that there appeared to be significant delay for which BSC was culpable, the chosen method does not properly establish causation. In my opinion, the contract provisions*

required BSC's estimate to establish causation". This was found by Mr Howie to be incorrect in the following respects:

- **CEC00407650_0012**: "*Appendix D* (which was Infraco's delay analysis) *was criticised by TIE because it did not provide a full retrospective delay analysis, showing the effect of the Notified Departure, as opposed to other causes, on the overall delay to the Works. In essence, an objection not dissimilar to the familiar global claim objection was being advanced. The JV replied to that criticism by pointing out that the Estimate calls for a Prospective analysis of the likely delay, and so, in the nature of things, precluded any retrospective delay analysis from which one could derive final and correct answers to questions of causation, critical paths and so forth. Therefore, argued the JV, the criticisms advanced by TIE in relation to these matters are ill-founded…..On this question, I agree with the JV…...It is, it seems to me, quite clear that even in the case of a mandatory TIE Change which cannot be withdrawn, the programming analysis, and the agreement as to any necessary extension of time...is a prospective one….It follows from that that it will not be possible to determine an ultimately correct critical path, and that it may be difficult, if not impossible, to determine the dominancy among concurrent causes, because actual events which occur in the future and their effects will inevitably be unknown. The description of the Appendix D exercise advanced by TIE,*

namely, that it is a 'theoretical exercise' may therefore be correct, but it is not a valid criticism".

233. Mr McAlister's criticisms were not accepted by Mr Howie, who preferred the approach which had been adopted by Infraco. What the JV had to do was to show the effect on the contractual programme of the falsification of the Base Case Assumptions which is the foundation of the Notified Departure.

234. Mr McAlister's response to question 38 can also be criticised on this basis. He was not applying the correct method of delay analysis relative to this contract, irrespective of the approach taken elsewhere by the UK courts.

235. It is Bilfinger's position that all of the reports produced by Acutus therefore suffer from a similar misunderstanding of what the Infraco Contract requires, and therefore none of the conclusions reached as to the causes of delay and Infraco's entitlement, should have been capable of being relied on by TIE. Likewise they are of little benefit to the Inquiry now.

235A In the closing submissions of the Selected Ex-TIE Employees, on page 43, reference is made to the evidence of Iain McAlister of Acutus and TIE reiterate the position taken in their mediation statement [**BFB00053300**], which states at paragraph 8.2 on page 0011, "*The true causes of delay in connection with the project are the responsibility of Infraco.*" TIE's closing submissions note thereafter that CEC conceded to the contrary position adopted by Infraco at mediation. In addition to

the analysis of Mr McAlister's evidence given in this Section above, Bilfinger comments that CEC conceded that there were fatal flaws in TIE's analysis because TIE's analysis was incorrect, and further, the position adopted in the TIE mediation statement which relied on clause 65.11 of the Infraco Contract, once again ignored the resulted in the Lord Dervaird, Murrayfield Underpass adjudication decision. Infraco were not responsible for project delays. The dominant cause of delay was MUDFA.

236. **Continuing delay to the design being prepared by SDS**

237. There has been a significant amount of oral evidence about design and the performance of SDS in relation to the pre-contract phase of the Project. The progress and state of the design at the time of the close of the Infraco Contract is dealt with elsewhere in these submissions, as are allegations which are made against Bilfinger in relation to a failure to manage SDS and an agreement which was entered into between Bilfinger and SDS during the course of the Project.

238. In this section, Bilfinger seeks to provide its views in relation to the ETI's sub-issue of "Progress of SDS (including reasons for difficulties)" under the issue of "Events in 2009" from Lord Hardie's note on closing submissions.

239. The ETI has not heard significant oral evidence in relation to the continuing development of the SDS design throughout 2009 and 2010. Bilfinger submits that the best evidence in relation to this issue can be

found in the Witness Statement of Mr Foerder [**TRI00000118_50-62**]. This evidence summarises the key issues as follows:

> ***Approvals process:*** *"There were numerous delays in receiving third party (mainly CEC approval) for the design, this being a matter in respect of which TIE has retained the risk in terms of the Infraco Contract (under Clause 10.1, it was TIE's contractual obligation "to procure that CEC reviews the Deliverables in accordance with Schedule Part 14"). The approval delays were due to two main reasons. The first was the delay in receipt of comments or approvals for sections submitted to CEC. The second was that within comments received as part of the approval process or comments post approval, CEC sought changes that constituted scope changes and hence become Notified Departures. Infraco/SDS were entitled to recover costs to amend the design. The design change process then became "locked up" within the contractual change mechanism and impacted the completion of the design to IFC status, a significant number of approvals were outstanding".*
>
> ***Conflicting Planning and Technical Requirements:*** *"In many instances there were conflicting planning and technical requirements or conflicting requirements between the approval authority and a third party. These were outwith the control of Infraco or SDS to manage".*

Betterment and Preferential Engineering: *"CEC through its Technical and Planning Departments sought additional improvements to the city centre (new road pavements, higher specification materials etc.) that, in other projects, would not normally have formed part of the core tram works or tram budget. Usually, additional requirements to be carried out at the same time (for cost efficiencies) would be funded by separate budgets. Examples include high specification OLE poles and street lighting columns, setts, etc. Whilst Infraco did not have sight of the original tram budget, it would be highly unlikely for it to have allowed for the high specification materials ultimately requested through the Planning Process. TIE made few if any attempts to "reign in" or control CEC or seek to value engineer any of the high specification items".*

Third Party Issues: *"TIE were frustrated by a number of third parties that contributed to the delays and additional costs. TIE failed to acknowledge or recognise that this was their risk under the Infraco Contract and delays due to third party issues entitled Infraco to additional costs and/or time".*

BDDI to IFC: *"The design changed substantially from BDDI due to the late issue of approvals and comments from the approval bodies (CEC, SW etc). The comments that were eventually provided with or prior to the approval required the design to be substantially amended from that priced by Infraco in the majority of instances. As had been flagged to TIE at the time by*

Infraco, the level of design at BDDI stage was lacking detail and there was considerable risk that in finalising the design, there would be significant additional costs. Once the IFC design was issued to Infraco, this needed to be reviewed against the BDDI design to understand the changes and assess whether the changes constituted a Notified Departure and the cost and time impact of these changes. Due to the size, scale and complexity of the project, this was a time consuming exercise".

TIE's involvement: *"There are numerous examples of TIE's failure to manage the elements of the design process which they had the obligation to manage under the Infraco Contract. I think part of this failure was a lack of understanding of their contractual obligations as well as their fundamental need to keep the design "open" in order to allow them to (incorrectly) maintain their positions that ""Infraco was not managing SDS" or "the Infraco works could not commence as the design was not complete" and deflect attention from the fact that they had insufficient funds to complete the entire project".*

Design Changes: *"between the novation of SDS in May 2008 and March 2011, over 300 design changes were raised by or issued to the SDS Provider. Whilst some changes were raised by Infraco, the majority of the changes were raised to address additional CEC comments, new third party requirements or changes by TIE or Transdev (TIE's tram operator). This demonstrates the lack of control of the overall project by TIE*

and their inability to manage CEC and other Third Parties in a timely manner in line with the Programme. The design changes impacted the completion of the design to IFC status and in some instances directly prevented the commencement of the construction works".

Development Workshops: *"tie departed from the Development Workshop process contained within the Contract. The Development Workshop process was necessary to identify misalignments between the SDS Design and the Infraco Proposals (i.e. trackform, overhead line equipment etc.) and amend (through a Mandatory tie Change under the Contract) the Deliverables in order to achieve an Integrated Design* **(this relates to Pricing Assumption 3 which is quoted above at paragraph 154).** *Unfortunately, in the majority of cases, these Mandatory tie (Design) Changes were neither acknowledged nor instructed by tie. A Mandatory tie Change is contractually a deemed Change and is automatic. By rejecting the Infraco entitlement, tie effectively prevented Infraco from carrying out any of the changed works."*

240. Mr Foerder's evidence in relation to the design issues experienced in 2009 and 2010 was not challenged during his oral evidence. Bilfinger therefore considers that Mr Foerder's evidence can be considered to be an entirely accurate account of the progress of SDS and the reasons for the difficulties encountered during 2009 and 2010.

241. **On Street Supplemental Agreement**

242. There has been a suggestion in Counsel to the Inquiry's line of questions, and in certain of the witness's evidence [Richard Jeffrey **TRI00000197_0023, paragraph 141** and **Public Hearing Transcript, 8 November 2017, page 101:8-24**; and Steven Bell **TRI00000109_137, paragraph 101(2)**], that following the PSSA, Infraco, and Bilfinger particularly, demanded that a further supplementary agreement was entered into before any on-street works would be carried out. For example, David Mackay's evidence was that, following the Princes Street Supplemental Agreement, Bilfinger demanded similar agreements before they would do any work in any on-street areas: *"The strategy was that they required on-street Supplemental Agreements elsewhere whenever there was some sort of complication"* [**Public Hearing Transcript, 21 November, page 109:8**].

243. This is incorrect. Following the success of the PSSA, the option of carrying out the remaining on street sections under a similar agreement was considered by both parties and became known as the On Street Supplemental Agreement ("the OSSA"). Many of the same issues as arose in Princes Street (i.e. the closing of the road, the incomplete MUDFA works and the constant discovery of Notified Departures) were also apparent in other areas of on street works. As explained below (paragraph 323), difficulties had been encountered with incomplete MUDFA works in the on street sections in Leith Walk which were so problematic that TIE instructed Infraco to withdraw from those areas [**CEC00630202**]. Mr Jeffrey, in his oral evidence, accepted that he did

not remember which party had originally suggested the OSSA, but that the idea emerged at about the same time as he was holding discussions with Dr Keysberg and Dr Scheppendahl of Infraco [**Public Hearing transcript, 8 November 2017, page 62:6-15**].

244. Regardless as to which party originally had the idea for the OSSA, it is important to note that it was a solution which was actively pursued by both parties, and the evidence to the Inquiry has shown that TIE's involvement in discussions working towards an OSSA were approved by Mr Jeffrey and the Tram Project Board [**CEC00681328_0009**].

245. Ultimately, the OSSA was not entered into. In 2009, TIE recorded that this was because they were concerned that the OSSA was a breach of procurement rules [**TRI00000097_40**]. However, Mr Jeffrey accepted in his oral evidence that *"I think that is possibly overstated at the time. It may have been a genuinely held view, although my recollection is that it was a bit of a side issue…The real issue was that it was a cost plus contract with no agreed programme, no agreed cost, no certainty and, more importantly, at this point the consortium had the control of the design"* [**Public Hearing Transcript, 8 November 2017, page 67:11**].

246. **Tie's campaign against Infraco/Project Pitchfork**

247. In his Witness Statement to the ETI provided in July 2017, Mr Foerder described the behaviour of TIE as an *"on-going campaign to deny our entitlements under the Infraco Contract"* (**TRI00000095_C_0079**). During the course of this Inquiry, Bilfinger has discovered firstly that

there was a "campaign" by TIE and secondly that the campaign was called "Project Pitchfork".

248. It is interesting to note that TIE called this campaign "Project Pitchfork". An explanation was given in oral evidence by Mr Jeffrey that it received its name following a session where TIE "*drew up all the options on a flipchart, and by the time we'd finished drawing them up, it looked like a pitchfork, and that's where the name came from*" [**Public Hearing Transcript, 8 November 2017, page 103:15–18**]. It is tempting to contrast the name of TIE's strategy with that of Infraco's "Project Phoenix" which sought to find a resolution to the Project's problems and has altogether more collaborative connotations.

249. The Inquiry has heard from many witnesses that in late 2009 through to mediation, TIE employed a commercial strategy to address the various problems which it perceived to exist with the Infraco and with the Project. Richard Jeffrey appears to have been the driving force behind Project Pitchfork, and he explained that this strategy was necessary because TIE had "*a commercially aggressive contractor and a weak contract.*" [**TRI00000091_0033**, **paragraph 188**]. Of course, one other way of dealing with the perceived *'weak contract'* would have been to accept what that contract said, and to have tried to resolve the underlying problems - that did not happen until TIE's removal post mediation at Mar Hall.

250. The minutes of the TPB meeting on 10 March 2010 [**CEC00420346**] record that the aim of that strategy was to do the following:

"*Continue to pursue TIE's rights under the existing contract with vigour and seek acceptable resolution of the main disputes in accordance with the agreed action plan*…" [**CEC00420346_0008 at 2.1**]

251. In his Witness Statement, Richard Jeffrey explains that project Pitchfork "*was a two-pronged strategy: firstly to find a way of terminating the contract and secondly to reduce the scope of the project*." [**TRI00000097_0034, paragraph 196**]. He also referenced an email he sent on 11 February 2010, indicating an intention "*to pull together a case that BB was in breach of contract and to terminate the Infraco Contract.*" [**TRI00000097_0036, paragraph 205**]. David Mackay echoed these sentiments in evidence when he stated that Project Pitchfork and other strategies were attempts "*to try and force Infraco to get to work*" [**TRI00000113_0095, paragraph 342**] or "*preparing the case to kick out Bilfinger Berger*" [**TRI00000113_0096, paragraph 345**].

252. The evidence from Martin Foerder was that in early 2010, it was clear to Infraco that TIE were applying a very aggressive strategy. He said,

> *"From around early 2010 until mediation, TIE ramped up the amount of correspondence we received on a daily basis. On occasion we were receiving up to 50 letters a day. These letters continuously made unsubstantiated allegations that we were failing to perform and failing to comply with our contractual obligations. It took an enormous amount of time, effort and manpower to respond to this correspondence…At the heart of*

almost all of it was the same disagreement about the way in which the Infraco Contract was intended to operate." [**TIE00000118_0075**, **paragraph 13.1**]

253. Responding to the voluminous correspondence from TIE placed an unnecessary administrative burden on Infraco and more importantly diverted focus, energy and resources away from the progress on the project on the ground. Martin Foerder provides evidence in his Voluntary Witness Statement **[TRI00000118, Section 13]** about a particular chain of correspondence which commenced with a 10 page letter from TIE dated 1 April 2010. The letter chain which followed from this considered nearly all the matters in dispute between the parties (many of which are covered in these Closing Submissions) including: the inability to agree a workable Construction Programme; the operation of Clauses 65 and 80; whether TIE could instruct Infraco to proceed with works in the absence of a TIE Change Order; continued allegations about Infraco's mismanagement of the SDS Provider, and the alleged inflation of Estimates by Infraco etc. This is representative of the volume and range of issues covered in the very antagonistic correspondence being exchanged at this time.

254. Another of the methods TIE employed as part of Project Pitchfork was the use of the audit process. Martin Foerder has explained that in using the audit process which formed part of the Infraco Contract, TIE were not seeking to conduct audits for the good of the Project, but that TIE was "*looking for ammunition to use against Infraco in its ongoing attempt to wear us down and to persuade us that we were incorrect in*

our interpretation of the Infraco Contract and our attempts to pursue our contractual entitlements" [**TRI00000118_0087, paragraph 16.3.6**].

255. A further example of Project Pitchfork tactics was, as Martin Foerder explains, TIE's changed position in March 2010 regarding what was required from Infraco before Permits to Work would be issued. TIE used spurious reasons for refusing to grant Permits to Work, and Mr Foerder cites the example of the Haymarket area, commenting:

> "*Given that the Project was so far behind schedule at this time, it was absurd for TIE to introduce spurious reasons (for not issuing the Permits to Work) which would not have prevented us from progressing (such as subcontracts not signed by all three Infraco members) with the physical works."* [**TRI00000118_0088, paragraph 16.4.4**]

256. At the same time as TIE's Project Pitchfork was ramping up, Richard Walker sent a letter to CEC on 8 March 2010 [**CEC000548728**]. This is discussed by Martin Foerder [**TRI00000118_0079-0080**, **paragraphs 14.2-14.3**] and Richard Walker [**tri00000072_0070-0071, paragraph 124**] in their Witness Statements. This letter referenced TIE's refusal to acknowledge the principles decided at adjudication, TIE's misleading correspondence containing serious allegations about Infraco which were based on misrepresentations of the truth, and it expresses Infraco's willingness to find a way forward. Martin Foerder described that Infraco were, "*committed to finding a consensual approach with all project parties which would enable the project to proceed*"

[**TRI0000118_0080, paragraph 14.3**]. Project Pitchfork, in contrast, was a campaign focussed on continuing to challenge Infraco (and Bilfinger in particular) on every respect of the Contract.

257. **Remediable Termination Notices**

258. A further example of TIE's Project Pitchfork tactics was the service of Remediable Termination Notices. On 9 August 2010 [**TRI0000118_0095**] Infraco received the first 3 (of 10) Remediable Termination Notices and the first of 3 Underperforming Warning Notices from TIE. Mr Foerder's Witness Statement sets out the content of the Remediable Termination Notices which were received from TIE:

> *"2 letters dated 9 August 2010: Both dealing with defects on Princes Street;*
>
> *Letter dated 9 August 2010: Clause 10.4 and 10.16 - Failure to Provide Extranet and Information in respect of Infraco Claims;*
>
> *Letter dated 16 August 2010 – Infraco Default (a) : Clause 60 (Programming issues);*
>
> *Letter dated 1 September 2010 – Bilfinger Berger/ SDS Provider Minute of Agreement*
>
> *Letter dated 8 September 2010 – Design: Trackworks*
>
> *Letter dated 21 September 2010 – Failure to Progress Demolition Works at Plots 97 and 102 Russell Road*

Letter dated 29 September 2010 – Clause 80 – TIE Change

Letter dated 30 September 2010 – Breaches Evincing Course of Conduct

Letter dated 12 October 2010 - Failure to Manage Design at Gogarburn Retaining Wall W14C and W14D." [**TRI0000118_0095**, **paragraph 18.2**]

259. Clause 90 of the Infraco Contract operated such that on receipt of a Remediable Termination Notice, Infraco had 30 days to provide TIE with a rectification plan as to how it intended to rectify the alleged Infraco Default. Once that rectification plan had been submitted, TIE had 10 days to indicate, at its absolute discretion, whether it accepted the rectification plan or not. If it did not accept the rectification plan, then after giving a further 5 days notice, TIE could terminate the Infraco Contract.

260. Mr Foerder explained in his Witness Statement that Infraco:

> *"treated the receipt of these notices very seriously – the consequences of a contract termination could have been extremely expensive for Infraco given that, if it were right in its decision to terminate, TIE would have ultimately been entitled to bring in another contractor to complete the Project and Infraco would have been liable for all the additional costs incurred in having to do so, as well as being required to pay the difference between what TIE would have to pay to that new Contractor,*

over and above what it would have been obliged to pay Infraco"

[**TRI0000118_0097, paragraph 18.7**]

261. Mr Foerder also confirmed in his Witness Statement that Infraco did not accept the basis for the Remediable Termination Notices, and *"would have disputed TIE's entitlement to terminate had it subsequently gone on to do so"* [**TRI0000118_0097**, **paragraph 18.7**]. Section 18 [**TRI0000118_0095 to 0101**] of Mr Foerder's Witness Statement explains the issues and context surrounding certain of the Remediable Termination Notices and the reasons why, whilst treating the notices "*very seriously",* Infraco considered that the Notices were not valid and could not amount to valid grounds for termination of the Infraco Contract.

262. During the course of the evidence which has been heard by to the Inquiry, Bilfinger has observed the evidence relating to the Remediable Termination Notices from the perspective of those within TIE. It is clear that TIE received legal advice from both solicitors and Counsel in respect of the Remediable Termination Notices which were served. That advice was as follows:

"To the extent that Remediable Termination Notices have already been issued, it would be unsafe to rely on them:

(a) Without the benefit of the outcomes of the forensic exercise referred to above; and

(b) Because there is a material risk associated with the formulation of the Remediable Termination Notices (based on the sample which has been considered by McGrigors and Richard Keen QC1)." [**TIE00080959_0004**]

263. Similarly, TIE received advice from Richard Keen QC to the effect that:

"I would have to conclude that in the event of TIE giving notice of termination of the Agreement in reliance upon the specified RTN's, there would be a material risk of their acting being found to be a wrongful repudiation of contract." [**TIE00080959_0045**]

264. The evidence is therefore clear, from both Infraco and TIE itself that the issue of Remediable Termination Notices was, whilst a major distraction for both parties, entirely ineffective. It is yet further evidence of TIE's approach of fighting *"tooth and nail"* regardless as to its contractual entitlement to do so.

265. In any event, TIE's Project Pitchfork efforts were ultimately in vain. Project Pitchfork was not successful as TIE achieved neither submission from Infraco nor termination of the Infraco Contract. Project Pitchfork was a barrier to progress and a further illustration of TIE's overarching strategy throughout the project, to challenge Infraco on virtually every point, regardless of the facts, the terms of the Infraco Contract, and the consequences for the Project. It is Bilfinger's position that TIE's strategy throughout 2010, only served to exacerbate and prolong the project stalemate until mediation in March 2011.

266. **Development of the Dispute: Adjudications**

267. Bilfinger notes that the Inquiry would like to be addressed on the DRP processes in 2009 and 2010, including in relation to outcomes, how outcomes were reported, and subsequent further advice which was sought and whether this resulted in changed tactics.

268. Bilfinger was very heavily involved in both defending and pursuing adjudications throughout 2009 and 2010, and indeed into 2011. It is Bilfinger's position that TIE wrongly reported the result of adjudications throughout this period, not only to the press and media, but also to Transport Scotland and to the City of Edinburgh Council.

269. The reason that Bilfinger considers this to be important, is because in Bilfinger's submission, a key reason why the Project was delayed and incurred considerable additional costs, is that, faced with very clear adjudication decisions on key points of principle which went against it, TIE refused to accept the outcome of these adjudications. TIE could have taken the initiative much earlier, at least by early 2010, to accept that its interpretation of the Infraco Contract on certain key points was wrong, and to seek to address those issues at that time. It did not do so.

270. In this section of these Closing Submissions, Infraco seeks to debunk the 'myth' that the adjudication decisions were 'finely balanced' or 'mixed' and indeed, that TIE had to pursue the adjudications because Infraco frequently sought far more money that it was entitled to, such that the sums awarded at adjudication were on average, only 52% of

the sums originally claimed [Steven Bell, **Public Hearing Transcript, 25 October 2017, page 29:5-15**].

271. These statements were made not only by various TIE witnesses, but were reflected also in reports which were made to the City of Edinburgh Council. An example is the report to the City of Edinburgh Council by the Directors of City Development and Finance dated 24 June 2010 which stated:

> "*although the formal adjudications under the DRP have produced mixed results, the advice received has reinforced TIE's interpretation of the contractual position on the key matters under dispute, and has also saved circa GBP 11 million from the initial claims submitted by BSC*." [**CEC02083184_0002**]

272. An analysis of the Adjudication Decisions which had been issued by this time, shows that this is not correct in any way. Of the 'key matters under dispute', the most contentious was the extent to which Infraco was entitled to a Notified Departure as a result of changes to the design between BDDI and IFC ('Issued for Construction'), and the operation of Pricing Assumption 1 of Schedule Part 4 of the Infraco Contract. By this point in time, Infraco's interpretation of the Contract had been determined by three adjudicators to be correct: John Hunter on Carrick Knowe and Gogarburn [**CEC00479431** and **CEC00479432**] and Alan Wilson on Russell Road Retaining Wall [**CEC00034842**].

273. Further, what appears to have been misrepresented by all of the TIE witnesses, or those who were advised of the outcomes of the adjudications, including CEC Officials and Council members, is that the majority of the disputes were not about quantum at all, but about important points of principle which, if followed, would and should have helped to unlock disputes going forward. In fact, of the 11 disputes which proceeded all the way to an adjudicator issuing a decision, only 4 of these involved one party or the other seeking payment of a sum of money (namely the adjudications in respect of Russell Road Retaining Wall, Tower Place Bridge, S7A track drainage and the Depot Access Bridge). The remaining 7 related to points of principle.

274. The Inquiry is referred to Appendix 1 to the Witness Statement of Martin Foerder [**TRI00000132**] which provides detailed commentary on each of the adjudication decisions and Bilfinger's perception of them. The following table also provides an analysis of each of the Decisions, whether they related to a point of principle alone, quantum, or both and the outcome of the adjudication.

Decision	Date	Principle ?	Quantum ?	Outcome on principle in favour of?	Outcome on quantum in favour of?
Hilton Car	15.10.0	Yes	No	Tie	N/A

Park	9				
Carrick Knowe Bridge	15.11.09	Yes	No	Infraco	N/A
Gogarburn Bridge	16.11.09	Yes	No	Infraco	N/A
Russell Road Retaining Wall	04.01.10	Yes	Yes	Infraco	Infraco
Tower Bridge	18.05.10	Yes	Yes	Infraco	TIE
S7A Track Drainage	24.05.10	Yes	Yes	Infraco	Infraco
MUDFA	4.06.10 16.07.10 26.07.10	Yes	No	Infraco	N/A
Depot Access Bridge	22.09.10	Yes	Yes	Infraco	Infraco
Landfill Tax	26.10.1	Yes	No	Infraco	N/A

	0				
Approval of Subcontract Terms	15.12.10	Yes	No	TIE	N/A
Payment of Prelims	03.03.11	Yes	Yes	Infraco	No

275. This table demonstrates Infraco's over-whelming success on important points of principle and belies the statements made, by Steven Bell and others, that there was 'mixed success'.

276. In giving evidence, Steven Bell was asked whether by late 2010, he had begun "to form the view that TIE were beginning to lose more adjudications than TIE were winning?" His response was:

> "*I think it's simplistic to call it winning and losing. On certain points of principle, we were successful. On a number of others the Infraco were held to be successful by the adjudicator on that item. Generally also there was – if we had asked for a valuation, there was a resolution that was nearer our estimate that the Infraco's. So I don't recognise it was winning or losing, but there was certainly a number of adjudications where the adjudicator found for the argument of principle in late 2010, and probably one that springs to mind would be Lord Dervaird on Murrayfield underpass, where it was around our ability to*

instruct the Infraco to progress works." [**Public Hearing Transcript, 24 October 2017, page 46:24-47:12**]

277. It is submitted that Mr Bell's view of success is simply not correct and it is not credible that Mr Bell continues to believe that this was in fact the outcome of the adjudications. To the extent that that is his genuine belief, then it might explain why the Project and the disputes took so long to resolve.

278. To unpick this further, by late 2010, the only adjudications in which TIE had been successful related to:

- the very first adjudication on the Hilton Hotel carpark, about the definition of Accommodation Works. As Martin Foerder explains, this was a minor matter of low value [**TRI00000132_0002**] and was not an issue which related to any point of principle which could be used elsewhere by the parties.

- Tower Place Bridge to the extent that the quantum was considered to be closer to that presented by TIE than Infraco (albeit that TIE lost on the principle of what constituted the BDDI which was an important issue between the parties);

- Approval of Sub-contract terms, specifically, whether all three members of the Infraco had to be party to each and every subcontract (which as explained by Martin

Foerder, was a finding which was subsequently agreed by the parties to be unworkable and the contract was redrafted to negate this decision by virtue of MoV5).

279. In contrast to what Mr Bell says, it is very easy to speak in terms of winning and losing, and analysis of the adjudication decisions shows that there were winners and losers. The ones of most import for the issues between the parties, were those which related to the BDDI to IFC design changes (Carrick Knowe, Gogarburn and Russell Road), and Lord Dervaird's decision on the operation of Clause 80.13. These are considered in further detail below.

280. However, a further analysis also shows that Mr Bell's recollection of the outcome of the adjudications which did relate to quantum, is also wrong and misleading. This was a matter repeated by many of the TIE witnesses or Council Officials/ Councillors, to whom the decisions were reported (for example, the evidence from Ian Whyte [**Public Hearing Transcript, 7 September 2017, page 84:18**], and Nick Smith [**Public Hearing Transcript, 13 September 2017, page 48:16**]. Of the four adjudications in which quantum was considered, the outcomes were as follows:

Decision	Amount claimed	Amount awarded	Percentage of amount claimed
Russell Road	£1,840,407.73	£1,461,857.21	Infraco awarded 79%
Tower Bridge	£469,627.41	-£180,039.16	Infraco awarded 24%
S7A Track Drainage	£325,006.57	£242,068.63	Infraco awarded 74%
Depot Access Bridge	£1,819,180.29	£1,230,624.88	Infraco awarded 68%
Total	**£4,454,222.00**	**£2,754,511.56**	**Infraco awarded 62%**

281. As can be seen from this, where quantum was at issue, and with the exception of the Tower Place Bridge adjudication, Infraco were substantially successful. Only the Tower Place Bridge adjudication skews the overall success percentage. Of particular note, is the extent to which Infraco were successful in the Russell Road Retaining Wall adjudication, which had repeatedly, and wrongfully, been identified as a 'win' for TIE. This analysis also belies the numbers reported in the report by the Directors of City Development of 24 June 2010, that circa

£11 million had been saved from the initial claims made by BSC. As far as the matters referred to adjudications are concerned, Infraco never claimed as much as £11m.

281A In their closing submissions, the Selected Ex-Tie Employees comment in the second paragraph on page 110 that, "*The savings through the DRP process were significant; the process reduced claims totalling £24m down to £11.2m.*" This comment is made with reference to the Audit Scotland Report dated February 2011 [**ADS0000046**], at page 0021. However, TIE have misquoted what is said there. The relevant passage is in paragraph 44, on page 0021 of this report, which provides commentary on the settlement of Notified Departures, not the outcome of the adjudications. This is a common and repeated misunderstanding propagated by TIE. Reference is made to Bilfinger's analysis of the adjudication outcomes in this Section above and submits that the Inquiry should prefer this analysis.

282. **Carrick Knowe, Gogarburn and Russell Road**

283. All three of these adjudications dealt with the operation of Pricing Assumption no. 1 and the principle of what constituted 'normal design development'. All three adjudications were in favour of Infraco, albeit that the Adjudicator in the Russell Road adjudication, arrived at his decision using slightly different reasoning.

284. In each of these adjudication decisions, Infraco had identified changes between the BDDI design and IFC design (issued by SDS), which Infraco considered triggered the Notified Departure mechanism in

Schedule Part 4, entitling Infraco to additional sums of money. In contrast, TIE's position was that the identified changes were not Notified Departures but rather were simply part of Infraco's obligation to complete the design of the Edinburgh Tram Network including, but not limited to, the achievement of full compliance with the Employer's Requirements for the deliverables to enable the Edinburgh Tram Network to be procured, constructed and commissioned. They maintained that all other items of work which flowed from the Infraco Notification of TIE Change, came about through normal development and completion of the designs.

285. These adjudications therefore challenged the concept of 'normal design development' about which the Inquiry has heard a great deal. In short, Infraco's interpretation of the Contract was preferred (Appendix 1 to Martin Foerder's decision provides further detail on the reasoning of John Hunter and Alan Wilson).

286. In finding for Infraco, Mr Hunter determined:

> "*My finding is that Schedule Part 4 was included because the design was incomplete and therefore some unknowns existed that were beyond the capabilities of the Responding Party to include within their price. In other words how the BDDI was to be developed to IFC could be known in respect of certain factors but not all factors and the unknown or insufficiently developed elements were captured by the provision of the wording in Schedule Part 4."* [**CEC00479431_0013**]

287. In response to TIE's belief that Infraco's obligation was to achieve the Employer's Requirements for the fixed Contract Price, and in relation to what constituted design development, Mr Hunter determined:

> *"My finding is that (the) position is best summed up as follows. The risk which ought properly to be transferred to the Referring Party is where development and completion of designs is outside of the normal course of development of the detail shown in the initial design i.e. the Base Date information, into the detail needed to construct the works as described all to meet the Employer's Requirements. I would go one step further and clarify that the Employer's Requirements have to be sufficiently well developed within the BDDI procedure as a baseline for proceeding in such a manner. I include this further step as it is clear to me that the Employer's Requirements have in terms of the price for the works been limited by the BDDI and the Schedule Part 4 agreement in respect of the agreed price. I find that to arrive at any other conclusion would, in my view, make Schedule Part 4 meaningless."* [**CEC00479431_0013**]
>
> "*The Responding Party accepts that it has carried out a due diligence exercise on the design, it accepts that SDS was novated to it, it accepts that it was responsible for development of design and ultimately for delivering the Edinburgh Tram Network. There has been no omission by the Responding Party in not referring to these obligations in its analysis of pricing assumption 3.4.1. That is because Schedule Part 4 relates not*

to what the Responding Party is obliged to do under this contract but how it is to be paid for performing those obligations....the Responding Party fully accepts that the Employer's Requirements require anti pigeon measures. The Responding Party's obligation to provide anti pigeon measures is entirely distinct from how it is to be paid for carrying out this work. The same could be said about all of the change identified, the Responding Party accepts that it has an obligation to complete the design in all respects and to construct in accordance therewith, but this is a separate matter to how it is to be recompensed for doing so." [**CEC00479431_0017**]

"I am sufficiently persuaded by the Responding Party's argument on this point to concur with them that there is a distinction between their obligation to design the works and the price that they are to be paid and I reach this conclusion as it is clear from clause 4.3 of the Infraco Contract that "nothing in this agreement shall prejudice the Infraco's right to claim additional relief or payment pursuant to Schedule Part 4 pricing." [**CEC00479431_0019**]

288. In this adjudication, TIE also sought to challenge the adequacy of Infraco's submitted Estimates, which was a theme throughout (and which is dealt with in further detail at paragraphs 402 to 408 below). TIE had sought to state that it would have no obligation to deal with an Estimate which was not 'sufficient, adequate and competent'. On this point Mr Hunter determined (in relation to Gogarburn) that these were

matters associated with the administration of the change mechanism and he held that *'timeous administration of the change mechanism is not a condition precedent to establishing whether or not a Notified Departure has occurred and I therefore need say nothing further in relation to the submissions of the Referring Party on that point'*. [**CEC00479432_0029**]

289. Russell Road was a matter referred to adjudication by Infraco. Although this has been presented by TIE as a 'win', this is categorically not true. It is correct that in this adjudication, the adjudicator (Mr Wilson) arrived at his decision by a slightly different route, believing that something must have 'gone wrong' with the wording of Pricing Assumption no. 1. However, he still determined that the changes here to the piles and foundations at this structure, were Notified Departures and awarded Infraco a total of £1,461,857.21 out of the total being sought by Infraco of £1,840,407.73. TIE's previous 'commercial proposal' had been only an offer to pay £292,237.22. An important point here is that by the time that the matter had been referred to adjudication, TIE denied that this was a Notified Departure at all, and were offering nothing in relation to it. This is also an adjudication where TIE wrongly reported the result in the press. This is dealt with at paragraphs 38 and 39 of Martin Foerder's Witness Statement [**TRI00000095_11-12**]:

> "*TIE lost the Russell Road adjudication on an important point of principle. Rather than accept that they had lost, they went to the press and sought to misrepresent what had happened. The issue of the Russell Road Retaining Wall was first put forward*

to TIE in October 2008. In his opening statement at Mar Hall, Richard was explaining this as part of his presentation. In October 2008 it was clear that there were changes to the original anticipated design. In May 2009 we submitted an estimate of £4.5m. This basically identified the changes to the original BDDI design. It detailed the additional work required. There was a requirement to construct foundations on large piles. It was now a retaining wall system. This was a considerable change to the original proposition (the design as contained in the BDDI). The original estimate referred to all components. When it was referred to dispute, the soil contamination part of the estimate was removed as TIE accepted this was their responsibility. The amount of estimate put forward to adjudication was therefore £1.84m not £4.5m. The resulting adjudication clearly ruled in our favour with an award of £1.46m. That was a considerable degree of success. When you compare this with the submitted figure of £1.84m there is not a great deal of a difference. In addition all the costs of the adjudication were to be borne by TIE which shows that it was a clear win for BSC.

TIE continually used the public domain and the media to misrepresent what had really happened. It was an attempt to show themselves in a positive light. TIE presented to the public, through the media, that the Russell Road adjudication was a win for them. TIE stated that the BSC estimate of £4.5m had

been reduced to £1.4m. The fact was the amount taken to the adjudication was £1.8m. TIE used the figure of £4.5m to make the result appear to be a big win for them. So in answer to your question, we did not believe or agree that our Estimates were overstated but this was the angle that TIE took to justify the fact that they lost adjudications (i.e. that it was technically a win for them as BSC was not awarded all the money it was looking for)."

290. The decision in Russell Road received a fair degree of interrogation during the course of witness evidence. Certain key individuals within TIE clearly still sought to present this adjudication as a win (in particular, Richard Jeffrey, albeit his misunderstanding from the outset is clear as he believes it was TIE who launched this adjudication when in fact it was Infraco [**Public Hearing Transcript, 8 November 2017, page 120:8**], and indeed, Counsel for TIE sought to present it as such with various witnesses. However, the fact remains that this adjudication was a clear loss for TIE, and despite some of the wording given by Mr Wilson, he still arrived at a finding that a Notified Departure had occurred, and proceeded to award Infraco 79% of the sum sought.

291. To put it in simple terms, one of the largest areas of dispute between the parties was in relation to the meaning and operation of Pricing Assumption no. 1. By the end of 2009/very early 2010, TIE had three adjudication decisions which showed that third party adjudicators believed Infraco's position to be correct, not TIE's. The fact that TIE continued to misrepresent the outcome on what was one of the most

contentious areas of dispute, was deeply concerning to Bilfinger at the time, and should also be of concern to this Inquiry.

292. **Murrayfield Underpass**

293. This was an important adjudication decision, which dealt with the interpretation to be placed on Clause 80.13 of the Infraco Contract, in short, whether Infraco were obliged to proceed with work which was the subject of a Notified Departure, where a TIE Change Order had not been issued, or the matter had not been referred to the dispute resolution procedures under the Contract.

294. Lord Dervaird found in favour of Infraco holding that Infraco was both required and entitled to refuse to carry out changes where there was no TIE Change Order issued.

295. This was an important decision and there appears at least for some of the TIE witnesses to have been an acknowledgement of the implications of this (including David Mackay who stated "*We had very strong advice…that we'd a good case, and when the judgement came through, we were all shattered by the judgment*" [**Public Hearing Transcript, 21 November 2017, page 136:5-7**]. However, and as Martin Foerder explains in his Witness Statement, it did not stop TIE from issuing further correspondence and ultimately, a Remediable Termination Notice on the basis of Infraco's refusal to proceed with work where there was no TIE Change Order [**TRI00000095_0059, paragraph 179**].

296. Right up until the decision to proceed to mediation in late 2010, and despite the original intention being that key matters would be referred to adjudication in order to provide guidance to the parties, TIE refused to accept the results of these adjudications or that its interpretation of the Contract was wrong. For all the talk of 'robustly' enforcing the Contract, the adjudication decisions demonstrate clearly that TIE was seeking to enforce the Contract in a way that was contrary to the very terms of the Contract. An example of this is Tony Rush's statement that when he came on board, he put an end to TIE paying Preliminaries to Infraco:

> "*On top of which TIE certified Preliminaries on a basis of monthly tranches without reference to milestones. In effect, I think Bilfinger Berger could get £1 million a month even if they did nothing. This could well explain, at least in part, their unwillingness to progress the Works. I instigated a change and TIE stopped paying Preliminaries until what had been paid reflected what had been done. I think this hit Siemens more than Bilfinger Berger*". [**TRI00000141_10**].

297. Infraco considered this to be contrary to the terms of the Contract, and referred the matter to adjudication, again before Lord Dervaird. The decision in that adjudication was also in favour of Infraco [**BFB00053489**] – TIE had not been entitled to stop paying Preliminaries simply because it did not consider sufficient progress was being made, and so Mr Rush's decision to instigate this change was in fact in breach of the Infraco Contract.

298. The Inquiry has also heard evidence that towards the end of 2010, there was a realisation within CEC that TIE were not properly presenting the results of the adjudications, or that there was a significant degree of spin being employed by TIE to present adjudications lost, as 'wins'. Nick Smith, head of legal at CEC, gave evidence in relation to a report he had prepared on 3 December 2010 [**CEC02082694**] which sought to provide a commentary on the report presented to CEC on 24 June 2010 [**CEC02083184**] which is referred to above. Mr Smith's conclusion on that report was as follows:

> "*In conclusion, whilst TIE's summary is not inaccurate, it appears to present the DRP findings in the best possible light as opposed to giving a clear and concise presentation of the facts. We would agree that BSC are indeed entitled to claim a 13:2 win rate, the overall increase in project costs being reduced by taking these matters to DRP."* [**CEC02082694_003**]

299. This is a fairly damning statement regarding how TIE had been reporting matters. It should also be noted that this analysis was itself based on certain misrepresentations by TIE. For example, and from a review of Mr Smith's note, it is clear that TIE were taking into account agreements reached on the value of Notified Departures which had not been referred to adjudication e.g. his comments on page 1 of the note in relation to the value of the Notified Departures which were the subject matter of the Carrick Knowe and Gogarburn adjudications. Neither of these adjudications were about value – they were only about the point of principle which TIE categorically lost. The value of the Notified

Departures was discussed and negotiated thereafter. Had TIE accepted that these matters were Notified Departures, there would have been no need to refer the disputes to adjudication and the values could have been negotiated and agreed between TIE and Infraco. In any case and as regards these two adjudications, it was inaccurate and misleading for TIE to have indicated that the reduction in value from the original Estimate constituted a "win" for TIE.

300. This is also confirmed by Mr Smith's predecessor, Alastair Maclean, who formed a similar view on the outcome of the adjudications:

> *"People's definition of what was successful in adjudication and what was unsuccessful were different. That sounds pretty basic to me. You just need to look at how the adjudication costs were divided and you generally know, but my view was that you win or lose based upon the argument you are putting forward. If you argue something and find that the principle is lost, that's a loss. It think TIE - - and I understand looking back, TIE sometimes felt if they argued something, even if they lost the principle but they managed to save some money on the claim or the award, then that was a win. So people were playing, I think, with what was a win or what was a loss*". [**Public Hearing Transcript, 20 September 2017, page 68:4**].

301. In conclusion, Infraco was substantially successful at adjudication, and successful on every significant point of principle which divided the parties. These points of principle were summarised in Infraco's

mediation statement [**BFB00053260_0019-0021**] and included the following:

- *"That in the absence of an agreed Estimate, BSC is not obliged or permitted to commence or carry out works associated with a TIE Change (Mandatory or otherwise)* (**Lord Dervaird: Murrayfield Underpass adjudication**)"

- "*That there is a distinction between BSC's obligation to complete the Works in accordance with the Employer's Requirements and BSC's entitlement to be paid for these Works - in this regard Schedule Part 4 to the Infraco Contract takes primacy as far as entitlement to payment is concerned* (**Hunter: Carrick Knowe and Gogarburn**)"

- *"That in determining whether there has been a Mandatory TIE Change to the design, the starting point is the BDDI information, not the Employer's Requirements. BDDI should be compared with IFC drawings to determine whether there has been a change in facts and circumstances, with changes being established as changes in design principle, shape, form or specification; thereafter the changes should be assessed to establish whether they should be categorised as design development, the latter being determined by what could be construed from the information available to BSC at BDDI.* (**Hunter: Carrick Knowe and Gogarburn**)";

- "*That in respect of Estimates (to be submitted following the occurrence of a Notified Departure) :*

(a) *the Infraco Contract does not provide a quality standard for Estimates* (**Wilson: Russell Road Retaining Wall**)

(b) *it is possible (and permissible) to submit 'Part Estimates'* (**Wilson: Russell Road Retaining Wall**)

(c) *compliance with all of the provisions of Clause 80 is not a condition precedent to BSC's right to obtain an extension of time* **(Howie: Delays Resulting from Incomplete MUDFA Works**)".

- "*Where a Notified Departure has occurred, Clause 80 applies and the matter giving rise to the Notified Departure cannot also be a Compensation Event* **(Howie: Delays Resulting from Incomplete MUDFA Works**)".

- "*That the following principles should guide BSC's entitlement to an extension of time as a consequence of preceding delays to the MUDFA work*s **(Howie: Delays Resulting from Incomplete MUDFA Works**):

(d) *BSC is both bound and entitled to work to the Programme. The Programme remains in Revision and this forms the basis of BSC's analysis of critical delays.*

(e) *It is correct to consider the impact of the Notified Departure on the Programme without a full retrospective delay analysis and without consideration of other potential causes of delay.*

(f) *BSC is obliged to propose potential mitigation measures in its Estimate but these:*

(i) *do not include acceleration measures (contrary to TIE's assertion);*

(ii) *do not require BSC to give up any of its contractual right including, specifically, the right not to have to work alongside others (including the MUDFA contractor) within a Designated Working Area;*

(iii) *do not make assumptions regarding the possible relaxation of contractual restrictions (again contrary to TIE's assertion that in order to mitigate delay, BSC should have sought relaxation from certain 'embargoes' on working).*

(g) *Mitigation seeks to limit an over-run on the Programme (a) without increase in overall resources applied to the works or (b) the abandonment of BSC's contractual rights.*

(h) *Accelerative measures increase the rate of progress to pull back an already mitigated delay.*

(i) *Designated Working Areas are not synonymous with the Intermediate Sections (as BSC had asserted)."*

- *"BSC is entitled to be paid or reimbursed Land fill Tax for the disposal of contaminated materials (subject to following the Notified Departure procedure). Insofar as any exemptions may be or may have been applicable, it was for TIE to apply for the exemption being the ultimate beneficiary of it* **(Lord Dervaird: Landfill Tax"**).

302. TIE sought to misrepresent the outcome of those adjudications, and also refused to accept what they meant in terms of how the Contract was, and should have been administered. From Bilfinger's perspective, it was only when Bilfinger succeeded in getting an audience with the Scottish Government and with CEC towards the end of 2010, that the true picture of who was succeeding and losing at adjudication, was finally understood.

303. **Infraco's decision on 29 September 2010 to cease all goodwill works**

304. Martin Foerder provided evidence in his Voluntary Witness Statement [**TRI00000118**] (Section 19) about the decision taken by Infraco to cease all goodwill works and the letter sent in this regard dated 29 September 2010 [**TIE00409574**]:

> *"By late September 2010, and with no sign of any change on the part of TIE to accept what the Infraco Contract said and to agree Estimates which they were currently sitting on, we reluctantly took the decision to cease all good will works. Our letter of 29 September 2010 set out the Infraco's position in this*

regard. This decision was made reluctantly and against the backdrop of all of the other correspondence and communication we were having with TIE at this time, as discussed in this statement and as should be evident from the correspondence provided to the Inquiry. We had come to build a tram system for Edinburgh, not to get embroiled in disputes. However, faced with the intransigence of TIE, we felt we had no other option but to minimise the risk to Infraco of proceeding with Works where TIE were refusing to recognise our contractual entitlement to payment and extensions of time". [**TRI00000118_0102**]

305. In providing oral evidence, Mr Foerder expanded upon this as follows:

"As I explained earlier, they had the kind of campaign running in 2010 which consisted first of all of not paying us an anymore. I think we had payments missing from early 2010 on several issues, subjects, which basically put both companies under commercial risk. So we were both heavily cash negative on the project….

So we have come to this point and all these other initiatives which TIE have taken in 2010 not agreeing anything and to escalate the situation further, that we have reached a point where we had to protect our companies and we had decided to cease all the works… which meant basically that we have stopped working on the project." [**Public Hearing Transcript, 5 December 2017, page 123:11**].

306. Richard Walker provided evidence on this matter as well. In his Witness Statement [**TRI00000072_C_0078, paragraph 139**] he commented on the Schedule attached to the letter of 29 September 2010 in the following terms:

> "*There is a schedule of the works. It is attached to the back of that letter…There are 70 or 80 things. 'Goodwill' works are where there are INTCs but there is no Change Order issued, therefore, Infraco under 80.13 cannot proceed to do the work. At this point we knew from Lord Dervaird's decision on the Murrayfield Underpass that Infraco was right on that interpretation of the contract….We had the adjudicator's decision that said we were right to comply with clause 80.13 and not undertake these works; and secondly, the behaviours being displayed by TIE did not encourage us to carry out any goodwill works. We knew we had the contract on our side and we had been right all along."*

307. Both Mr Walker and Mr Foerder comment on the effect of that decision which was that Bilfinger made a significant number of people redundant with the work on the ground coming to a halt.

308. **PARTICULAR CRITICISMS DIRECTED AT BILFINGER**

309. In the evidence which the Inquiry has heard throughout this period (and indeed throughout the project), certain criticisms were made of the Infraco Contractor and of Bilfinger in particular. Bilfinger considers that it is necessary to address some of these allegations which it considers to be false and damaging to its reputation. The issues which Bilfinger address here, are:

- that Bilfinger under-priced the works;
- the allegations that Bilfinger was slow to mobilise after contract close;
- Trackform Design;
- Programme;
- That Bilfinger failed to manage SDS effectively post mediation;
- The Minute of Agreement between Bilfinger and Parsons Brinckerhoff; and
- Infraco's Operation of the Contract Change Mechanism.

310. **Bilfinger under-priced the works**

311. Allegations have been made by several witnesses (including Jim Inch [**TRI00000049_C_0055, paragraph 139**]; David Anderson [**TRI00000108_0130**]; Marshall Poulton [**Public Hearing Transcript, 24 January 2018, page 147:21**] and Steve Reynolds [**TRI00000069_0138,**

paragraph 374 and _0141 paragraph 371; **PBH00035854_0003**; **Public Hearing Transcript, 12 October 2017, page 53:1-54:25**]), that Bilfinger adopted a strategy of "going in low" and claiming variations to the Contract Price. This allegation cannot be evidenced by any witness or documentary evidence and is patently untrue. For example, when Mr Poulton was asked to explain what he meant by there being a "*gap at the tender stage*" he stated that he was not involved in any of the tendering process as he was not working for CEC at that time, he had not investigated the allegation, and that it was not informed in any way by knowledge of the facts; Mr Poulton accepted that it was "*just my own personal thought*". Given that Mr Poulton's allegation had no basis, Counsel to the Inquiry then asked Mr Poulton "*if it was your own personal thought, uninformed by knowledge of the facts, would you withdraw the statement"* [**Public Hearing Transcript, 24 January 2018, page 147:13-150:15**]. Mr Poulton did not take the opportunity to withdraw the statement, but again accepted that it was "*just my own personal thought*" [**Public Hearing Transcript, 24 January 2018, page 148:16 and 148:20**].

312. These written closings have described in detail, the process leading to conclusion of the Infraco Contract, the reason why Schedule Part 4 [**USB00000032**] was included and Infraco's inability to provide a fixed price contract in a situation where the design was substantially incomplete, the utilities diversion works were considerably delayed, and third party and other approvals had not been obtained.

313. The allegations made by some former TIE employees, including Steven Bell [**Public Hearing Transcript, 24 October 2017, page 54:6-15**), that Bilfinger ought to have been able to take a view on the significantly incomplete design package which was available at the time and to have priced the works based on its experience is completely unfounded. Bilfinger has provided clear evidence that it could not have taken such risk without incorporating a significant risk premium into the Infraco Contract Price. This was clear from the oral evidence of Mr Walker and Dr Keysberg as set out above. It was also the evidence of TIE's own Design Director who was *'astonished*' to hear that anyone could expect a fixed price on an incomplete design (see paragraph 61 above).

314. Standing the terms of Schedule Part 4 [**USB00000032**] and the primacy which that document has over any competing parts of the Contract, the statements made to the effect that Infraco under-priced the works and therefore had to adopt a litigious approach to the administration of the Contract, are entirely unfounded. Infraco sought to apply Schedule Part 4 of the Contract and it was TIE who refused to acknowledge Infraco's clear entitlements, leading to the dispute. It is notable that, with the exception of Mr Bell, the vast majority of the witnesses who made these particular statements, had never read the Infraco Contract (including Schedule Part 4), nor had they read the adjudication decisions.

This appears even to have been accepted by Marshall Poulton later in his evidence, as the following exchange demonstrated:

"*Q:…was it your view that they were not contractually entitled to do what they were doing?*

A: I think they were contractually entitled to do what they were doing…

Q: If it's the case that Bilfinger were acting in accordance with their contractual entitlement, there's not much wrong about that, is there?

A: No.

…

Q: In coming to the view that they were unwilling, had you formed a view on what Bilfinger or the other contractors were contractually entitled to do?

A: I think I have answered that earlier, that yes, they were perfectly within their contractual obligations...

Q: So when you refer to a willing partner, should we read that as meaning willing to depart from what they saw as their contractual entitlements?

A: As I say, it's more the willingness to come to the table. But notwithstanding there needs to be a contract behind it. [**Public Hearing Transcript, 24 January 2018, page 150:4 to 152:15]**

Bilfinger was Slow to Mobilise after Contract Award

315. The Inquiry has heard repeatedly the criticism that Infraco, in particular Bilfinger, was slow to mobilise immediately after contract close. This criticism derives from TIE's reports to the Tram Project Board and has been repeated in the evidence of several witnesses. Gordon Mackenzie expressed his concern in this regard when he gave evidence to the Inquiry on 1 November 2017. In commenting on the papers for the Tram Project Board meeting on 22 October 2008 [**CEC01210242**], he said:

> *"It was a cause for concern that Infraco did not appear to be mobilising and taking forward the construction of the tram. That was the overarching concern.*
>
> *"I think in relation to the specific question I was given…this particular report would have reflected what we understood to be the position, which is basically that they weren't getting on with the job"* [**Public Hearing Transcript, 1 November 2017, page 50:10-17**].

316. The papers for the meeting, which were prepared by TIE, reported:

> *"The project continues to experience problems with slow mobilisation and, in particular, appointment of direct BSC resource and final appointment of the main package contractors."* [**CEC01210242_0011**]

317. This had been reported in papers for various other meetings of the Tram Project Board. Susan Clark was asked about the perceived issue with Infraco's mobilisation. She said:

> *"…we were reporting that Infraco had been slow to mobilise sub-contractor & direct resources which was impacting on their progress [in December 2008]. My view was that Infraco were using MUDFA and late designs to mask their slow mobilisation."* [**TRI00000112_C_0046, answer to question 76(1)**]

318. This appears to be a personal view held by Susan Clark and is not supported by any evidence in her Witness Statement. Indeed, later in her statement she acknowledges that delivery of SDS design and MUDFA works was delayed, in direct contradiction to her comment above that Infraco were simply using these factors as an excuse to mask the "actual" cause of delay – their slow mobilisation (see her **answer to question 125(1) in TRI00000112_C_0069**).

319. Others, including Phil Wheeler [**Public Hearing Transcript, 2 November 2017, page 69:4-7**], Kenneth Hogg [**Public Hearing Transcript, 13 December 2017, pages 125:2-6 and 140:19-20**], and Michael Heath [**Public Hearing Transcript, 21 September 2017, page 110:12-22**] have repeated this accusation about slow mobilisation. Kenneth Hogg and Michael Heath have particularly focused on Infraco's failure in their view to appoint subcontractors on formally executed subcontractors months after contract close which, to them, proved that Infraco was ill-prepared for the job. However, this is founded on a

fundamental misunderstanding of the terms of the Infraco Contract, the obligations imposed on Infraco and the circumstances on the project at that time.

320. Infraco prepared as best as it could to mobilise its workforce as and when work areas became available. In order to do that, subcontractors were appointed on the basis of letters of intent. Martin Foerder explains this clearly in his Witness Statement dated 12 July 2017:

> *"…we had all these changes and no clear scope. The arrangements we had with our sub-contractors at that time was that they were all working on a scope defined in letters of intent (not formal subcontracts). This was done for the benefit of the Project. If we had not followed this procedure, our subcontractors could have issued a massive amount of claims against us due to the fact that they would have been unable to get on with their works as intended. This would not have been beneficial or cost-effective for the client. If we received these claims and they were caused by obligations which TIE or CEC had to provide, we would have had to claim this back.*
>
> *117. The letters of intent basically defined that we intended to go into a sub-contract relationship with the sub-contractor for a certain scope. They would not define the full scope and full outline of the work to be undertaken. The sub-contractor would then invoice us for the works executed. Letters of intent were only ever used for a specific part of work. BSC had multiple*

sub-contractors. Each individual section of work had its own sub-contractor. We had six main sub-contractors. There were then sub-contractors for the smaller areas of work." [**TRI00000096_0037, paragraphs 116-117**]

321. Scott McFadzen made similar comments in his evidence to the Inquiry on 14 November 2017 [**Public Hearing Transcript, 14 November 2017, page 169:10-170:1**]. Proceeding on the basis of letters of intent is a common and acceptable practice in the construction industry, allowing a contractor some flexibility at the beginning of the project, should any delays prevent timeous commencement of the works. This protects against delay and prolongation claims from subcontractors being passed up the line to the employer, in this case to TIE. Having subcontractors engaged on informal letters of intent allowed Bilfinger to stand down work forces in areas where works could not progress due to, *inter alia*, incomplete MUDFA. As Martin Foerder has explained in the extract from his Witness Statement quoted above, Bilfinger used letters of intent for the benefit of the project, to minimise disruption and cost which would, ultimately, be borne by TIE/CEC. There was no critical delay caused to the project due to any issues with Infraco's mobilisation of its subcontractor workforces (see Scott McFadzen's Witness Statement dated 18 June 2017 [**TRI00000058_0053, paragraph 185**]).

322. It would have been totally insensible for Infraco to have executed formal subcontract packages when subcontractors were only able to work in a piecemeal fashion due to the late provision of design (Witness

Statement of Martin Foerder dated 12 July 2017 [**TRI00000096_0038-0039, paragraph 120**]). David Crawley, who was appointed by TIE to undertake a review of the project in early 2007 due to concerns about design progress, agreed. He was asked to comment on the BBS Design Due Diligence Summary Report [**DLA00006338**] which reported: "*Insufficient design for pricing does not only affect the Infraco contract with TIE but would also prevent BBS from letting comprehensive subcontract packages. From experience, any design variations that occur after a subcontract is placed are likely to lead to excessive claims from subcontractors*." [**DLA00006338_0009**]. In response to this comment in the design report, David Crawley confirmed that this was an "*absolutely valid*" point [**Public Hearing Transcript, 4 October 2017, page 105:1-8**].

323. Bilfinger carried out the Infraco works as and where it was able to do so. However, incomplete MUDFA works were a chronic problem. Bilfinger was repeatedly prevented from carrying out infrastructure works because utilities had not been diverted by the MUDFA contractor. Bilfinger's inability to commence and complete works in these areas was not, therefore, attributable to any deficiencies of its supply chain, but rather incomplete MUDFA stymying the Infraco works. For example, in relation to Leith Walk Infraco had commenced works in the summer of 2008 but had been unable to make progress in any meaningful way as a result of the continued presence of the MUDFA contractor. TIE ultimately acknowledged this and instructed Infraco to cease all works by way of a letter from Steven Bell dated 6 March 2009,

[**CEC00630202**] acknowledging the impossibility of progressing the Infraco Works alongside the MUDFA Contractor.

324. Accordingly, the assertion repeatedly made that Bilfinger ought to have had its subcontractor work force fully engaged under formal subcontractors is misguided, ignores the facts and circumstances on the project at the time and is simply incorrect.

324A In their closing submissions, in the second paragraph on page 91, the Selected Ex-TIE Employees make the comment, "*It appears to have been suggested by Colin Brady of Bilfinger that there were instructions not to mobilise and instead to build claims based on design and delay.*" TIE cite paragraph 8.21 of the Witness Statement of Andrew Fitchie [**TRI000000102_C_0247**] in support of this statement. However, it is important to refer to the text of Mr Fitchie's Witness Statement in order to understand its evidential value in this regard. Mr Fitchie said:

> "*I recall Dennis Murray telling me that his BBS counterpart at Edinburgh Part, Colin Brady, had told him off the record that BB Germany was monitoring all contractual exchanges. He told me in early summer 2008 that Colin Brady had told him that BB UK were under instructions not to mobilise, but to invest in building claims based upon the state of SDS design and the chronic MUDFA delay.*" [**TRI00000102_C_0247, paragraph 8.21**]

324B Colin Brady has not given evidence before the Inquiry. Mr Fitchie's evidence here is hearsay at best and, moreover, this allegation was not

put to Dennis Murray who was the purported source of the information and stands in direct contrast to other eyewitness evidence.

324C Furthermore, the Selected EX-TIE Employees say in their closing submissions (on page 91, second paragraph), that "*TIE's observations on the ground*" were that "*Infraco's technical and construction teams on site were built up gradually,* [but] *the commercial team of 30 claims staff came on site immediately*". The sources of evidence which TIE say support this allegation are: the Witness Statement of Damian Sharp [**TRI00000085_0089, paragraph 207**], the Witness Statement of David Anderson [**TRI00000108_0095, answer to question 124**], and a reference in a Consortium meeting note that a Change Team was being built up under the management of Tom Murray [**SIE00000228_0004**]. However, this statement is not supported by any credible or reliable witness evidence, or indeed common sense. Damian Sharp has made a number of general and unfounded criticisms of the Consortium, and Bilfinger in particular, such that the credibility of his evidence is fundamentally undermined. David Anderson does not explain the basis of this allegation in his Witness Statement, and the Inquiry may deduce therefore that he was relying upon information received from TIE in this regard. Martin Foerder rejected the allegation that the Consortium's focus was building a claims team. He explained in his oral evidence [**Public Hearing Transcript, 5 December 2017, page 182:7-25**], that it was impossible for Infraco to execute formal subcontracts given the uncertainty in the programme and scope of the project, but the letters of intent which Infraco put in place enabled subcontracts to commence

work in available areas. Moreover, this allegation is refuted by the theme which emerged from the oral evidence of Dr Keysberg on the proposal to demobilise works on Princes Street for 6 months to a year, to allow utilities works to progress, and to remobilise thereafter [**Public Hearing Transcript, 16 November 2017, pages 36:21 to 43:7**]. His evidence portrays Bilfinger's commercial common sense and willingness to work efficiently and economically, rather than in a disrupted, piecemeal fashion. This contradicts the notion that Bilfinger and the Consortium were simply claims-focused.

Trackform Design

325. The issue of the trackform design has been raised on several occasions throughout the oral evidence hearings, particularly in connection with the Princes Street works. The evidence of Parsons Brinckerhoff witnesses Steve Reynolds and Jason Chandler generated much confusion on this topic. In short, their evidence has been that the consortium proposed a cheaper, shallow-form trackform design which was less robust and less safe than the SDS design. This, they said, resulted in the trackform works on Princes Street needing to be redone at significant cost to the project. Steve Reynolds said, "*there was a significant difference of opinion from BBS versus our view" on the trackform design*" [**Public Hearing Transcript, 12 October 2017, page 10:18-19**]. He continued:

> *"…in our view there was a need for a more complex design for the trackform…*

CHAIR OF THE INQUIRY: Whose view prevailed about trackform design?

A. Well, interestingly, I think you could argue that we did, because much later on in the process, we were being pressured by TIE to accept a much cheaper, much simpler trackform design, and we pointed out the risks inherent in doing that, and subsequently, when Princes Street was excavated, we were proved to be right. So the need for the more robust trackform design was proven then.

Now, that ensured quality of delivery, but what that did mean was that the original BBS offer couldn't be implemented. It had to be the more robust solution.

CHAIR OF THE INQUIRY: And that would involve additional cost.

A. Yes." [**Public Hearing Transcript, 12 October 2017, page 41:1-23**]

326. Bilfinger is concerned to deal with any implied criticism that the BBS Consortium design was inadequate, leading to rework and additional cost. This is not correct as explained in this Section of these Closing Submissions.

327. Mr Reynolds further described the difference between SDS' trackform proposal and that which was proposed by the consortium [**Public Hearing Transcript, 12 October 2017, page 42:9-18**]. The SDS

design, said Mr Reynolds, was for "*full depth reconstruction*" which involved a sub-base beneath the immediate trackform foundation. Whereas he understood the Consortium's proposal was for "*a prefabricated trackform which would only require planning off, in their words, of the immediate surface and then insertion of that prefab trackform in place*". This form of trackform, in Mr Reynolds' view, was entirely unsuitable for the project and particularly Princes Street because it would not be capable of spanning voids and cavities which would most certainly exist beneath the road surface. The result would be potential rail breakage and derailment [**Public Hearing Transcript, 12 October 2017, page 43:22-44:11**].

328. In his evidence, Mr Reynolds confirmed that the Consortium initially pursued its simpler trackform proposal, but this subsequently had to be changed to meet the SDS design [**Public Hearing Transcript, 12 October 2017, page 42:21-25**]. He then directly associated the Consortium's initial implementation of its own trackform proposal with the faults which developed on Princes Street in early 2010 and subsequent remedial work which was required. Mr Reynolds stated:

> *"…The faults that I think you're referring to with the **initial implementation of the trackform**, yes, because a part of the trackform design, just to amplify what I was talking about there, is the so-called shoulders that run alongside the rails, and our preference was for concrete shoulders to contain the trackform, as it were, whereas the initial BBS offer didn't have those concrete shoulders.*

"That then resulted in problems with the heavy traffic on Princes Street cutting across the track, the buses and so on and so forth, and then you got the cavities that you were just talking about." (emphasis added) [**Public Hearing Transcript, 12 October 2017, page 43:6-17**]

329. It is quite clear in this passage of his evidence that Mr Reynolds links the "*initial implementation of the trackform*" by Infraco (that is the simpler "*planning off*" prefabricated design without full-depth reconstruction which he refers to in the extract quoted above in paragraph 328), with the problems which emerged on Princes Street in early 2010. However, in the passage quoted above, Mr Reynolds identifies a second issue with Infraco's trackform design: the absence of any concrete shoulders which resulted in cracks and gaps opening up between the tram tracks and surrounding surfaces. Mr Reynolds' evidence appeared therefore to suggest that Infraco initially implemented its trackform design which did not include a reinforced concrete slab (track improvement layer) or any concrete shoulders, which resulted in road cavities. His evidence suggested that the Princes Street trackform had to be re-laid to rectify these two defects in the trackform.

330. Jason Chandler's evidence was effectively the same as Mr Reynold's on trackform. He said that Infraco's proposal was to shave off the upper layer of the road pavement and lay a very thin layer of trackform on top. It did not include the reinforced concrete slab which would be required to support the trackform and to span voids beneath the road surface.

Parsons Brinckerhoff were concerned about this proposal because the trackform might fail under the load of the tram [**Public Hearing Transcript, 13 October 2017, pages 57:10-58:5**]. Both Jason Chandler and Steve Reynolds confirmed that the requirement for the deeper, reinforced concrete slab layer beneath the trackform layer – which they say was absent from Infraco's proposal and initial implementation of the trackform – would have resulted in millions of pounds of additional cost to the project [**Public Hearing Transcript, 12 October 2017, pages 59:22-60:2** (Steve Reynolds), and **Public Hearing Transcript, 13 October 2017, pages 119:5-12** (Jason Chandler)].

331. The evidence presented to the Inquiry by Steve Reynolds and Jason Chandler on Infraco's trackform proposal and implementation can be summarised as follows:

332. Infraco's trackform proposal was for a shallow, pre-fabricated trackform design which would be laid on top of the shaved road surface. It did not include or anticipate construction of the reinforced concrete slab (track improvement layer).

333. This trackform proposal was unsuitable for the project and was potentially unsafe. Parsons Brinckerhoff strongly advocated that the trackform should be laid on top of a reinforced concrete slab.

334. Infraco initially implemented their allegedly inferior trackform proposal.

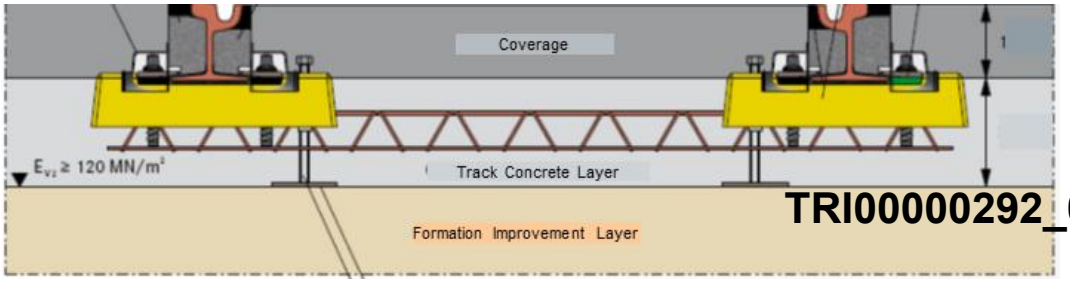
335. Infraco's initial implementation of their trackform proposal did not include any concrete shoulders.

336. The trackform works on Princes Street had to be rectified both because there was no reinforced concrete slab, which was necessary, and because cavities had developed on the road surface due to the absence of any concrete shoulders.

337. This rework potentially cost the project millions of pounds in additional cost.

338. Mr Reynolds' and Mr Chandler's presentation of the trackform design and construction is fundamentally flawed, and unhelpfully obscured and fused two very separate issues. Those issues are, firstly, Infraco's trackform design and, secondly, the road / rail interface on Princes Street which did not form part of Infraco's proposal. Martin Foerder submitted a Supplementary Witness Statement to the Inquiry giving a full factual account and explanation of these two discrete issues [**TRI00000183**]. The content of Mr Foerder's Supplementary Witness Statement will not be repeated in these Closing Submissions, however it may assist the Inquiry to draw together the threads of oral and written evidence of Mr Foerder and some other witnesses which helpfully resolves the materially inaccurate evidence of Mr Reynolds and Mr Chandler.

339. The Consortium's trackform design proposal was the Rheda Trackform.



This required beneath it a formation or track improvement layer consisting of a reinforced concrete slab capable of achieving 120MPa support for the life of the trackform [**TRI00000183_0003**, **paragraph 3.1** and **Public Hearing Transcript, 5 December 2017, page 30:13-22**]. By way of illustration, reference is made to the diagram on page 7 of Mr Foerder's Supplementary Witness Statement [**TRI00000183_0007**], an extract of which is copied below:

340. The above diagram shows three layers to the trackform: a "Coverage" layer, a "Track Concrete Layer", and a "Formation Improvement Layer". As Martin Foerder explained in his oral evidence [**Public Hearing Transcript, 5 December 2017, page 43:8-44:11**], Infraco's Rheda Trackform proposal is the "Track Concrete Layer" shown in the above diagram. The "Formation Improvement Layer" is the 120 MPa reinforced concrete slab. Infraco's proposal required but did not include the "Formation Improvement Layer", but the construction of the trackform required this track improvement layer and could not be installed without it. Clearly Parsons Brinckerhoff were aware of this as they strongly advocated the reinforced concrete slab which would form the "Formation Improvement Layer". TIE accepted the Rheda Trackform proposal. However SDS' recommendation for the "Formation Improvement Layer" was not included in the BDDI by TIE/SDS. The BDDI only included the Rheda Trackform layer and this was priced by Infraco. The cost of constructing the "Formation Improvement Layer" was not therefore included within the Contract Price although it was

ultimately required (see Martin Foerder's Supplementary Witness Statement [**TRI00000183_0003**, **paragraphs 3.1-3.3**]).

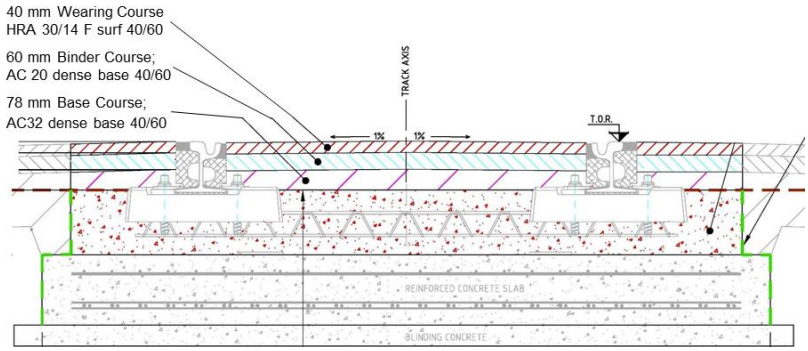
341. Contrary to what Steve Reynolds and Jason Chandler have said, the Rheda Trackform was not inherently unsafe or unsuitable. It was anticipated by the Consortium that the "Formation Improvement Layer" would need to be constructed before the Rheda Trackform could be laid. The absence of a "Formation Improvement Layer" in the BDDI resulted in a misalignment which was, or should have been, expected by TIE. This misalignment was addressed in the Development Workshop Process outlined in the Infraco Contract, as Martin Foerder has explained in his Supplementary Witness Statement [**TRI00000183_0003**, **paragraphs 3.4-3.5**]. The construction of the reinforced concrete slab for the "Formation Improvement Layer" became a Mandatory TIE Change. From the outset of the construction of the trackform works on Princes Street, Infraco constructed both the "Formation Improvement Layer" and the "Track Concrete Layer" shown in the diagram in paragraph 339 above. Mr Foerder has given a full explanation of the method of construction of the trackform in paragraph 73 of his Supplementary Witness Statement to the Inquiry [**TRI00000095_0023**] and in his oral evidence [**Public Hearing Transcript, 5 December 2017, page 57:2-60.20**].

342. No remedial works were carried out in connection with the construction of the track improvement layer or the Rheda Trackform layer of the trackform works. Therefore, Mr Chandler and Mr Reynolds are wrong insofar as their evidence was that Infraco's trackform design had to be

changed in any way to incorporate a reinforced concrete slab for the track improvement layer, or that there were any faults or defects in the construction of the track improvement layer which required subsequent rectification. However, because of the misalignment in the BDDI, which TIE ought to have anticipated, the construction of the track improvement layer became a Mandatory TIE Change. Accordingly, Infraco were paid additional sums to account for this change to the BDDI. These costs were, or should have been anticipated by TIE and there was a mechanism in the Infraco Contract for awarding these costs (clause 80 [**CEC00036952**]). For the avoidance of doubt, there was no additional cost to the project for any rework or remedial work for the track improvement layer (see paragraphs 3.8 and 3.9 of Martin Foerder's Supplementary Witness Statement [**TRI00000183_0003-0004**]).

343. The diagram at paragraph 339 above shows a "Coverage" layer as the final top layer of the trackform. This is the interface between the road and the tram rails. As Martin Foerder explained in his oral evidence, this "Coverage" consisted of three component layers: a base course, a binder course, and a wearing course [**Public Hearing Transcript, 5 December 2017, pages 44:4-23**]. This is depicted in the diagram below, extracted from Mr Foerder's Supplementary Witness Statement [**TRI00000183_0008**]:

Pavement Design 'As Built' in Princes Street



344. Infraco's trackform proposal did not include any detail for this "Coverage" for the road / rail interface. It had always been intended that this would be addressed through the Design Integration process [**TRI00000183_0003, paragraph 3.2**]. Through that process, it was agreed that the binder and base courses would be constructed of asphalt and topped with a finishing wearing course. Together, these three sections of the "Coverage Layer" would form the road-running surface, bringing the track rails to road level. At the time, there was no proposal or recommendation from SDS that the "Coverage" should be constructed entirely of concrete [**TRI00000183_0004**, **paragraph 4.4**].

345. Mr Foerder explained in his oral evidence that these works were carried out in late November 2009, in very harsh, cold, wet weather conditions, entirely unsuitable for the laying of asphalt. Notwithstanding, TIE forced the Consortium to work around the clock through these adverse weather conditions to achieve the opening of Princes Street for the Christmas embargo in late November 2009 [**Public Hearing Transcript, 5 December 2017, pages 36:10-37:8**]. Within only a matter of hours of finishing the asphalt lay, TIE permitted buses to run

on Princes Street [**Public Hearing Transcript, 5 December 2017, pages 42:8-15**]. Furthermore, TIE's haste prevented Infraco from being able to lay joint filler along the road / rail interface to finish the trackform installation [**Public Hearing Transcript, 5 December 2017, pages 36:20-35:8** and **38:11-16**]. TIE ignored Infraco's warnings that the trackform works were not fully complete [**Public Hearing Transcript, 5 December 2017, pages 47:10-48:19**].

346. Following investigations in 2010 after the Princes Street trackform works had been completed, defects were identified along the road / rail interface in the form of cracking along the joint. This is depicted in the Consortium's slideshow presentation [**SIE00000402**]. The consortium were unable to determine the definitive cause of the cracking (see the evidence of Jim Donaldson, [**Public Hearing Transcript, 16 November 2017, page 150:25-152:12**]); however, with the harsh weather conditions, the lack of joint filler, the excessive traffic running on Princes Street before the asphalt had properly set, and the generally high volume of bus traffic on Princes Street with heavy loads turning over the rails, it was decided that asphalt was not a suitable "Coverage" solution, even though asphalt is used successfully in other tram projects throughout Europe [**Public Hearing Transcript, 5 December 2017, page 45:20-46:4**].

347. Steve Reynolds and Jason Chandler suggest in their evidence that the use of asphalt for the "Coverage" layer was a deficiency in the Consortium's trackform design and instead a concrete "Coverage" layer should have been constructed. However, at no stage did Parsons

Brinckerhoff raise this issue during the Design Integration process [**TRI00000183_0005, paragraph 4.6**]. Parsons Brinckerhoff ought to have identified the need for concrete shoulders during this process, allowing Infraco to prepare an Estimate for the installation of concrete shoulders as a Notified Departure. In any event, following mediation in 2010, Infraco agreed to replace the asphalt "Coverage" layer on the Princes Street trackform with concrete shoulders at Infraco's own cost [**Public Hearing Transcript, 5 December 2017, pages 49:1-15**], and to implement this solution throughout the entire on-street works [**Public Hearing Transcript, 5 December 2017, page 52:9-11**].

348. In summary, faults did manifest in the Princes Street trackform works, however these were solely in connection with the asphalt "Coverage" layer forming the road / rail interface and not at all in relation to the track improvement layer which was fully implemented by Infraco. A variety of factors contributed to the failure of the asphalt layer, not least TIE's insistence that Princes Street would be handed over irrespective of whether the trackform works were complete. However, Infraco agreed to rectify this defect entirely at its own cost, without any addition cost of time or money to the project (as MUDFA remained the critical delay throughout).

349. A separate issue has arisen which has been associated with the trackform works, and that is road reconstruction. For the avoidance of doubt, this "full-depth road reconstruction" is entirely separate from the trackform works. As Martin Foerder has explained, this relates to the road pavement, i.e. the sections of road on either side of the trackform

[**Public Hearing Transcript, 5 December 2017, page 175:8-176:9**]. The Employer's Requirements initially required full-depth road reconstruction on these sections, however Infraco's proposals only included planning the road surface and replacing the wearing course. Pricing Assumption no. 12 of Schedule Part 4 [**USB00000032**] provides that no full depth reconstruction will be required in the majority of the on-street sections, such that, if full depth reconstruction was required, then this was a Notified Departure. CEC's ambition for the project was to have full-depth road reconstruction on the carriageway on either side of the tram track throughout the on-street sections. In other words, CEC wanted the "*gold standard*" finish to the carriageway surfaces [evidence of Jim Donaldson, **Public Hearing Transcript, 16 November 2017, page 153:23-159:10**], which was impractical and uneconomical. After mediation, it was agreed between Infraco and CEC that full-depth road reconstruction would not be necessary, and Infraco could lay the asphalt wearing course where the ground conditions did not require full-depth excavation [**Public Hearing Transcript, 5 December 2017, page 176:17-177:2**].

350. **Programme**

351. Susan Clark [**Public Hearing Transcript, 25 October 2018, page 164:6-165:12**], and Tom Hickman [**Public Hearing Transcript, 25 October 2018, page 196:23-197:6**], amongst others, have made repeated statements to the effect that Bilfinger failed to cooperate in producing a revised version of the Schedule Part 15 – Programme ("the Programme"). In Susan Clark's evidence, she said that TIE could not

provide Transport Scotland with an up-to-date revision to the Programme because BSC had failed to supply a revised Programme which TIE could "*accept and agree*" [**Public Hearing Transcript, 25 October 2017, page 165:11-12**]. She also stated:

> *"…we were also pressing constantly Infraco to come back with a mitigated programme which they were required to provide under the contract."* [**Public Hearing Transcript, 25 October 2017, page 164:20-22**]

352. The Inquiry has heard evidence from John Ramsay, formerly of Transport Scotland [in **TRI00000065_C_0042-0043** and **Public Hearing Transcript, 28 September 2017, page 6:4-8:24**], that Infraco were working to revision 3A of the Programme, whereas TIE continued to report to Transport Scotland based on revision 1, in Susan Clark's words, because they could not "accept and agree" the programmes which Bilfinger were submitting for acceptance.

353. Bilfinger was not idle in this regard, but actively engaged with TIE over a prolonged period of time, to negotiate revisions to the Programme. It is Bilfinger's belief that TIE were unable to accept any programme submitted for approval because to do so would mean that TIE would have to publicly acknowledge the impact of delays in the MUDFA works and design programme, on the Infraco works. Reference is made to the very detailed letter dated 1 March 2010 from Martin Foerder on behalf of the consortium to TIE [**CEC00578330**]. This letter clearly narrates the history of the development of the Programme and the difficulties

encountered by Bilfinger in trying to get TIE to agree to revisions to the Programme. Furthermore, as Martin Foerder explains in his voluntary Witness Statement to the Inquiry [**TRI00000118_0043**, **paragraph 9.5**], Infraco struggled to obtain information from TIE as to when the MUDFA works would be completed, which information was required to enable BSC to properly programme the Infraco Works.

354. One of the biggest hurdles to attempting to get agreement on the Programme, was that TIE continually confused Infraco's obligation to mitigate delay, with acceleration. TIE believed that Infraco should take any steps which might have been possible to pull back delay, including at its own cost. Bilfinger repeatedly expressed the view that TIE were confusing mitigation with acceleration. As Martin Foerder explained:

> *"I sent a letter to Steven Bell dated 1 March 2010* ***(CEC00578330)****. Within the letter, at para 3, I noted that prior to contract award the parties had agreed that Infraco would incorporate the SDS Design Delivery Programme v31 into the Schedule Part 15 – Programme and the result would be the first TIE change. It was further noted that the proposed revised Programme was submitted to TIE on 2 June 2008 but remained without agreement until 17 December 2008. This letter demonstrates the difficulties we had and the reasons why. We agreed a process with TIE, but fundamentally they would never accept a programme that showed delayed completion. They continuously required us to mitigate. Mitigation is one thing, but they wanted us to accelerate. This means spending our own*

money to reduce their delay. They would not accept any obligation to pay for this. The whole programme experience was a mess." [**TRI00000095_73, paragraph 219**]

355. This was part of the dispute which was before Robert Howie QC in relation to Infraco's entitlement to an extension of time as a result of delays to preceding MUDFA works. Mr Howie determined [**CEC00407650**]:

"…All this, in my view, allows the reader to conclude that the obligation on the JV to bend its mind to mitigation measures when putting forward an Estimate under clause 80 does not involve it in presenting to TIE an accelerative measure which has not already been instructed by TIE and put through the clause 61 procedure." [**CEC00407650_0009**, **second paragraph**]

356. Mr Howie went on to define the distinction between acceleration and mitigation [**CEC00407650_0009**, third paragraph]:

"…The crucial distinction, as it seems to me, is between a measure which, without increase of overall resources applied to the works or the abandonment of a party's contractual rights, limits an over-run on the Programme on the one hand and a measure which increases the rate of progress to pull back an already mitigated delay on the other. The former is mitigatory, the latter accelerative."

357. The evidence which Susan Clark and Tom Hickman gave to the Inquiry failed to acknowledge this decision or the attempts which Bilfinger went to, to try and agree an updated Programme with TIE (and accordingly should be disregarded for those reasons).

358. In any event, and irrespective of the inability of Bilfinger to get agreement to a revised Contract Programme, Bilfinger continued to produce 12-week look ahead programmes, monthly and weekly programmes, all of which would have informed TIE as to the state of progress. Reference is made to the evidence of Jim Donaldson in this regard [**Public Hearing Transcript**, **16 November 2017, pages 112-115**], and at paragraph 8 of his Witness Statement [**TRI00000033_0004, paragraph 8**], where he makes it clear that even in the absence of an approved programme, Bilfinger kept updating and progressing the programme.

359. Accordingly, Bilfinger rejects all criticism that is made that it was slow in producing updated programmes or that it failed in terms of its obligations under the Contract to provide the information required.

359A The Selected Ex-TIE Employees note in their closing submissions, on page 50, "*Martin Foerder conceded that BSC were contractually obliged to report against the agreed programme but nevertheless attempted to justify the Infraco's departure from this contractual obligation on the basis that this programme was "unrealistic".*" This refers to Martin Foerder's oral evidence on 5 December 2017 [**Public Hearing Transcript, 5 December 2017, page 117:6-17**]. However, this

description of the evidence of Mr Foerder is misleading. Mr Foerder's evidence was as follows:

> "*Contractually we are -- we were obliged to report against the agreed contract programme, this was revision 1. In March 2011 the contract was almost completed from a time consideration, and we had to report contractually against this revision 1 programme which of course brought completely unrealistic end dates.*
>
> *So -- because it was still not moved. So it was basically confirming, we finish in four months, out of the circumstances, and issues you have heard earlier, it was completely unrealistic.*
>
> *There was a time when we started parallel to reporting against the contractual programme about a more realistic programme which was a basis of what we had submitted and tried to agree with tie. I think it started with revision 2. 3, 3A, I don't know exactly about the names of these programmes, but we had basically with more information available constantly updated the programme. We had also joint initiative through the schedulers of tie and ourselves to analyse this, and to agree on a programme, but when it came at the end, to agreeing something, they have rejected it. They have constantly rejected. They have not acknowledged the delay. I think they had problems to report this back to the Council because it then would have been obvious. Later on it became obvious, but in*

the early stage, I think they had hoped to get away with it, and somehow -- I don't know. As I said earlier, a completely unprofessional approach from the client side." [**Public Hearing Transcript, 5 December 2017, pages 117:6 to 118:11**]

It is necessary to look at the evidence of Mr Foerder here in full, in order to appreciate its context and meaning. Insofar as the Selected Ex-TIE Employees submit that Infraco failed to submit a mitigated programme, there was no such concession from Mr Foerder. Conversely, Mr Foerder explained in the passage of his oral evidence quoted above that the agreed programme was so wholly outdated, that there was a need for a programme which actually reflected progress. The agreed programme (revision 1) was of no effective use and Infraco were instead endeavouring to be pragmatic and realistic by reporting against updated programmes. It is clear from their closing submissions that TIE still fail to understand this point.

Bilfinger Management of SDS post novation of the SDS Contract to Bilfinger

360. It is a matter of record that at the same time as the Infraco Contract was executed, SDS were novated to Bilfinger. Many of the TIE witnesses and Councillors had a false understanding that upon novation, Bilfinger became fully liable and responsible for further development of the design by SDS. As now understood, that is not correct (as a consequence of Pricing Assumption no. 1 of Schedule Part 4 [**USB00000032**]).

361. However, a further criticism which has been made during the Inquiry hearing is that the Infraco Contractor, failed to properly manage the development of the SDS design after novation of the Contract. This is categorically denied by Bilfinger.

362. In his Witness Statement to the Inquiry, Damian Sharp remarked:

> *"After SDS novation, May 2008, there was a continuation of the difficulties experienced before novation in completing detailed design, and in obtaining all necessary approvals and consents. There were also new issues one of which was that BSC was showing no urgency in terms of achieving the consents. With regard to the issues with getting consents from Scottish Water, that was typical of everything that was going on before. Then there was BSC not progressing it with any urgency and not honouring their contractual obligation in relation to managing the design and given them the assistance they needed."* [**TRI00000085_C_0113**, **paragraph 263**]

363. Mr Sharp's evidence is of limited evidential value: by his own admission [**TRI00000085_C_0113**, **paragraph 262**], he was no longer responsible for the SDS contract, no longer the SDS representative and TIE were no longer the client of SDS. His opinion is purely speculative and he gave no concrete examples to demonstrate his point.

364. Nevertheless, Mr Sharp repeated his unsubstantiated views on this topic in his oral evidence to the Inquiry. He testified:

"In my view BBS were not taking a particularly active management of SDS. It suited them for the design to not progress as rapidly as it could." [**Public Hearing Transcript, 5 October 2017, page 169:25-170:2**]

365. Mr Sharp's view is shared by some TIE witnesses. For example, Richard Jeffrey stated in his evidence to the Inquiry that the "*principal issue*" which impeded the progress of design after contract close was, "*the failure by the Infraco to manage the design provider*" [**Public Hearing Transcript, 8 November 2017, page 18:2-3**]. Mr Jeffrey then narrates two examples where late approvals were caused by a lack of design (the examples being the Edinburgh Airport tramstop and the crossing at International Business Gateway [**Public Hearing Transcript, 8 November 2017, page 18:11-19:10**]), although neither of those examples prove any lack of management by BSC and Bilfinger would submit that there is no actual evidence before the Inquiry of BSC's alleged failure to effectively manage SDS post-novation. On the contrary, one TIE employee who was directly involved in the design process has applauded the efforts made, at least at ground level, between TIE and Consortium employees to drive progress of design. Tony Glazebrook spoke in complimentary terms of Bilfinger and Siemens' engineers, describing them as "*excellent*" and commenting, "*I perceived no funny agenda or desire to inflate prices at all*." [**Public Hearing Transcript, 4 October 2017, page 203:19-20**].

366. Mr Glazebrook's evidence was that he worked at the coal face. He was involved on behalf of TIE in the day-to-day review of the design being

prepared by SDS and assessing whether the design met the requirements of the design assurance statement process [**Public Hearing Transcript, 5 October 2017, page 19:1-9**]. From this first-hand perspective, Mr Glazebrook praised BSC's efforts to progress design post-novation, contradicting the speculative views expressed by Damian Sharp. In particular, Mr Glazebrook commented:

> *"It was apparent to me that once Infraco had come on board, they had a genuine and evidential desire to bring to a close the many outstanding design issues, and my recollection is that they were very helpful in trying to bring that resolution about."* [**Public Hearing Transcript, 5 October 2017, page 20:12-16**]

367. Jason Chandler was also asked about the quality of BSC's management of the design work after contract close. Like Mr Glazebrook, Mr Chandler described their leadership in approving terms:

> *"BSC were -- were very strong in their leadership of the completion of the design. I think they were surprised at the level of uncertainty post contract award, and signing of the documents. They drove the completion very hard. So the leadership that -- in that sense definitely ramped up.*
>
> *Unfortunately the management and the completion of the design by TIE and CEC didn't match that of BSC. So we didn't see the determination to complete, make all of the decisions, resolve the misalignment workshops and then complete the design such that we could issue the final issue for construction*

drawings, and BSC were incredibly frustrated by that." [**Public Hearing Transcript, 13 October 2017, page 101:19-102:7**]

368. In summary, Mr Chandler applauds Infraco's leadership in the management of SDS design after contract close and complains of a lack of determination and effective management by TIE before the SDS contract was novated. Mr Chandler flatly refuted that there was any deficiency in the Consortium's management of SDS design [**Public Hearing Transcript, 13 October 2017, page 102:14-17**].

369. Richard Walker has explained in his evidence how the progress of design was impeded by a lack of crucial information from TIE/CEC [**ETI Transcript dated 15 November 2017, Day 35, lines 145:20-146:12**]. Martin Foerder has also given a full explanation of the various design issues which were encountered by Bilfinger during the life of the project in section 10 of his Witness Statement dated 10 December 2015 [**TRI00000118_0050-0060**]. Mr Foerder also concisely summarised the issues in his oral evidence. He said:

"To explain why it took so long to finish the design, maybe TIE could explain it much better than me, because they should have had the obligation to finish it already in May 2008 and they were not able to do it.

What we encountered is from what we have priced, which was on a very preliminary design, that this design have been developed further into massive changes what have been priced, and due to the nature of the contract, we had to go through an

immense number of INTCs which were informing TIE about the changes which had to be then regulated through notified departures which took an immense time and was in very often cases not acknowledged by TIE. It had a lot of problems to get these notified departures not only for the construction element, but also for the design element, agreed.

That was one issue. The other issue was that TIE still had the responsible to obtain the third party approvals. That was with them, which were even to mediation not in place in large extent. In addition, they had the responsibility to provide the planning and technical informatives which were the basis for the design, which were lack even until mediation. They had to resolve them only afterwards.

Then we had the issue of the so-called misalignment between the Infraco proposals and the original SDS design, due to the fact that our price was based on the Infraco proposal which were different from the SDS design. We had to go through, called misalignment identification, and there were kind of development workshops which had explored and identified these misalignments, and you had to again go through the Notified Departure procedure to notify TIE about these. You had to provide a design estimate for these modifications of the design which you need to get approved in very -- in most of the cases we have not received these approvals. So that's why SDS could not really progress on the completion of the design

in that element." [**Public Hearing Transcript, 5 December 2017, page 66:12-67:24**]

370. In short, Infraco encountered three key issues with design after novation: first, TIE refused to acknowledge many of the INTCs which were raised due to the changes between the BDDI and the present state of design (including as a result of their erroneous understanding of normal design development); second, TIE had failed to secure the necessary third party approvals and consents; and third, the protracted misalignment workshop process and the need for approvals for design estimates. The conclusion to be drawn is that there were no failures on the part of Infraco, more particularly Bilfinger, in connection with the management of SDS design. There were no issues which impacted or impeded the progress and completion of design, nor any failure by Infraco to provide design information to Parsons Brinckerhoff which impacted the construction works [**TRI00000095_0029, paragraphs 92 and 93**].

371. In providing oral evidence to the Inquiry, Mr Sharp himself departed from his previously held firm view that Infraco were failing to manage the SDS design effectively. He stated:

> *"It's not clear to me whether BBS -- what BBS were doing to manage SDS's continuing delay and whether they could have done more. So I can't say whether it was SDS under-performance in the face of strong BBS management or whether*

BBS were not exercising strong management." [**Public Hearing Transcript, 5 October 2017, page 170:15-19**].

372. Mr Sharp then went on to accept the suggestion that it was perhaps not clear to him what Infraco were doing to manage the SDS contract and to mitigate design delays because TIE were no longer SDS' client post-novation and both he and TIE had less visibility over the management of the SDS contact as a result [**Public Hearing Transcript, 5 October 2017, page 170:23-171-9**].

373. A second issue in connection with Infraco's management of SDS design has arisen also from Damian Sharp's evidence. That is in connection with the apparently rapid close-out of design issues between 24 March and 5 April 2011, after the Mar Hall mediation. Reference is made in that regard to the Report on Progress since Completion of Heads of Terms to 8th April 2011 prepared jointly by Colin Smith, Martin Foerder and Alfred Brandenburger of Siemens [**CEC02083973**], and in particular to Appendix 12 of that report [**CEC02083973_0118**]. The table on page 0118 of this document shows a reduction in outstanding technical approval comments from 2,782 on 24 March 2011 to 85 by 5 April 2011.

374. Mr Sharp characterised this rapid progress in outstanding design issues as demonstrative of tactical unwillingness on the part of Infraco and SDS to progress the design prior to mediation. He said:

"And there was kind of a lengthy, no, we are not engaging with this, no, we're not engaging with this, no, we are not engaging with this, and then suddenly, shortly before the Mar Hall

mediation was coming, BSC and SDS suddenly wanted to engage with this.

What I believe had happened is essentially that they had been working on these comments. They had been resolving this design. They knew what the answer was. They knew that -- they could quickly change the design where that was appropriate to resolve comments, and they knew what they were going to do with the vast majority of them.

So at that point they were willing to come to the table and talk about it, and suddenly make progress. In reality they had made a large amount of progress over time, but because of commercial claims, they had not been willing to show that they were making progress, and they were not willing to re-issue new drawings, because they were claiming more money for doing that." [**Public Hearing Transcript, 5 October 2017, page 176:16-177-10**]

375. Mr Sharp suggests in this extract of his oral evidence that Infraco were holding back design information from CEC in order to augment their commercial position and secure a more lucrative settlement at mediation. This is a serious allegation; however this is only Mr Sharp's belief. He offers no hard evidence to support his speculative opinion, and he acknowledges this [**Public Hearing Transcript, 5 October 2017, page 177:24-178-1**]. By contrast, Tony Glazebrook offers a very different view. He stated:

"…I know there was a lot of CEC activity around that time, which was very encouraging and was the right thing to do. It was a shame it hadn't happened a lot earlier, but at least it happened then." [**Public Hearing Transcript, 5 October 2017, page 29:20-24**]

376. Steve Reynolds shared Mr Glazebrook's view that the catalyst for change and swift progress in closing out design issues after mediation was the change in attitude of CEC, not any tactical move by Infraco [**Public Hearing Transcript, 12 October 2017, page 125:3-19**]. Although Steve Reynolds was not involved in the detail of the design work at this time, Alan Dolan, who was part of Parsons Brinckerhoff's Project Management team, was at the forefront of this design work after mediation. His views align completely with those of Mr Glazebrook, Mr Reynolds and Mr Chandler. Mr Dolan explained the collaborative working on design after the mediation which improved the resolution of outstanding design issues drastically:

"…I was party to the workload of what was done here, and it was, as far as I'm concerned, it was a brilliant effort between four parties: CEC's technical guys, SDS, Bilfinger Berger, their input, and one guy that I have not seen any letters from, Damian Sharp. Damian was giving TIE assistance in trying to close this out, and what we did, we got the design team from SDS, the technical team from Andy Conway. We stuck ourselves in Bilfinger Berger's site office, and we just worked through it and ground it.

We worked very, very, very collaboratively eventually with CEC to reduce this, and it looks a lot to start with, open technical approval comments, but if I can help you by saying a lot of good work was done, but the numbers may be a little bit misleading.

If you have a technical comment on a tramstop, and it says this has the wrong dimension from here, it has it the number of times that you have the number of tramstops.

So there might be 2,782, but the minute you sit down with CEC and understand that this 500 dimension should be 520, the number of tramstops you've got, you change one drawing. You configuration manage this 20-odd times, you take away not one comment. You take 27 at a time.

But Damian, Andy Conway's boys, my design team, and to some degree Bilfinger Berger where they had input to help, we just crashed it at the site and through a very short period -- I don't know what period of time that is, but a lot of good work was done, and that was probably the best work that CEC and the SDS did together." [**Public Hearing Transcript, 12 October 2017, page 209:7-210:13**]

377. Mr Dolan commends the diligent, collaborative working method which was adopted by CEC, Parsons Brinckerhoff, Bilfinger and also by Damian Sharp on behalf of TIE, which approach turned around the outstanding design issues very quickly. Such an approach had been lacking before, he says, because TIE had kept Parsons Brinckerhoff at

arms length from CEC's planning team [**Public Hearing Transcript, 12 October 2017, page 210:16-17**]. Jason Chandler also spoke of the effective collaboration with CEC as the trigger for change after mediation [**Public Hearing Transcript, 13 October 2017, page 110:9-110:5**]. He too strongly denied Mr Sharp's accusation about Infraco making a tactical decision in relation to design [**Public Hearing Transcript, 13 October 2017, page 111:18-113:12**].

378. Further, Mr Dolan explains helpfully in the extract of his evidence quoted above that the speedy resolution of a substantial number of outstanding design issues was due also to duplication: one design issue might reoccur in multiple locations, therefore solving one issue might also resolve 20 more simultaneously.

379. Mr Sharp's recollection of the facts differs quite significantly from Mr Dolan's account. Mr Dolan describes Mr Sharp as being an active player in the collaboration post-mediation, assisting with the workload on TIE's part (see the excerpt quoted above at paragraph 3776 and also **Public Hearing Transcript, 12 October 2017, page 210:21-22**). Mr Dolan appeared earnest in his evidence that SDS simply "*wanted rid*" of the outstanding comments [**Public Hearing Transcript, 12 October 2017, page 211:9**] and in his disbelief that there was any tactical decision by the Consortium to block design progress before mediation.

380. TIE and Mr Sharp appear to stand alone in their conviction that Infraco, and in particular Bilfinger, was deliberately blocking design progress

until after a mediated settlement had been agreed. Having been part of the team that resolved this issue, it is unfortunate that Mr Sharp has chosen to make such harsh criticism of Bilfinger, which when viewed in the round, appears to be complete speculation on his part and in sharp contrast to other witnesses who were heavily involved in the design process. It is however indicative of the approach which Mr Sharp took overall in his Witness Statement. Bilfinger would invite the Inquiry to disregard the evidence from Mr Sharp on this topic. It is submitted that there is no evidence that Bilfinger mis-managed SDS after the novation. The development of the design was a large and complex process, not least as a result of the need to deal with the misalignments between the SDS design, Infraco Proposals and the Employer's Requirements; and as a result of the need for approval by CEC and Third Parties of the finalised design. Bilfinger would refer the Inquiry to the detailed analysis of the issues influencing design delays as set out in Section 10 of Martin Foerder's Voluntary Witness Statement [**TRI00000118_0050-0062**]. It appears to be accepted by all witnesses who gave evidence on this point that post mediation and with committed input from CEC, the problems which had delayed the progression of finalising the design to that point, were satisfactorily resolved.

381. **The Minute of Agreement between Bilfinger and Parsons Brinckerhoff**

382. The Inquiry has heard that Bilfinger and Parsons Brinckerhoff entered into a Minute of Agreement dated 25 February 2010 [**TRI00000011**] in connection with the acceleration of SDS design ("the MOA"). The

purpose of the MOA was described by Martin Foerder in his Witness Statement to the Inquiry dated 12 July 2017 [**TRI00000095_0052-0053**, **paragraph 163**], as follows:

> *"Its purpose was to unlock the design change issue which was held up by TIE…The agreement incentivised PB to speed up the completion of the design, and reduced the risk of having a claim against us. In normal circumstances, we should have received the design Change Orders prior to progressing. They money should have passed through us to SDS to accommodate all the changes. TIE, however, did not pay and so we had to find a mechanism to get SDS working. It was only natural that they did not want to work free of charge. This was referred to as incentivisation – finishing off design without TIE's knowledge."* (See also the Witness Statement of Richard Walker [**TRI00000072_0065**, **paragraph 115**]).

383. Despite the worthy intention behind the MOA, certain TIE witnesses have generated much scepticism and suspicion around the Memorandum of Understanding with SDS. Steven Bell said in his written evidence to the Inquiry that the agreement, "*seemed to encourage both SDS and Infraco to seek to identify or amend things and argue they were TIE liabilities*" [**TRI00000109_0076, (answer to question 59(1)**]. Mr Bell offered no explanation for this conclusion. Similarly, Richard Jeffrey speculated in his Witness Statement dated 25 May 2017 that, "*the effect of this agreement was for BB or BSC to pay SDS for changes provided that those changes could be attributed to the*

client." [**TRI00000097_0015, paragraph 82**] Mr Jeffrey admits that he has never seen the MOA [**TRI00000097_0015, paragraph 82**]. His bold accusation is pure speculation and is entirely without proof or justification.

384. This is reinforced in Richard Jeffrey's oral evidence to the Inquiry. Mr Jeffrey was probed about his understanding of the practical effect of this so-called "side agreement". He responded:

> *"…My concern was that if it was an entirely legitimate and above board thing, then there was no reason it shouldn't be disclosed. And nor was there any reason why such changes could not be effected under the existing Infraco contract.*
>
> *So the fact that they denied that it existed and then they refused to give it to us, and even the fact that they needed a side agreement, made me suspicious. But I never saw the agreement and I don't know what the practical effect of it was."* [**Public Hearing Transcript, 8 November 2017, page 70:11-20**]

385. By this testimony, Mr Jeffrey asks the Inquiry to believe that there was some nefarious purpose to the MOA because Mr Jeffrey was suspicious that Bilfinger would not disclose the agreement to TIE. Bilfinger were entitled to take such reasonable measures to progress the design work as far as possible in the face of TIE's refusal to co-operate in the provision of TIE Change Orders. Mr Jeffrey's skewed opinion is rooted

in his antagonistic approach to Infraco and Bilfinger in particular, and has no basis.

386. It would appear that a suggestion was made to Steven Reynolds in the preparation of his Witness Statement that by this "side agreement" between Parsons Brinckerhoff and Bilfinger, there was some sort of collusion between the two parties to manipulate the terms of Schedule Part 4 [**USB00000032**] to their advantage, to extract further payments from TIE [**TRI00000096_0167, paragraph 443**]. This was firmly denied by Mr Reynolds in his Witness Statement [**TRI00000096_0167, paragraph 443**]. In his oral evidence, Mr Reynolds described the purpose of the MOA as an "*agreement for* [Parsons Brinckerhoff] *to provide additional design services direct to BSC, to deliver scope that was outwith what* [Parsons Brinckerhoff had] *been contracted to deliver under the SDS agreement*" [**Public Hearing Transcript, 12 October 2017, page 123:14-17**]. The context of that design work was, said Mr Reynolds, systems engineering design which had been removed from the SDS agreement.

387. Richard Walker was asked about the "side agreement" with Parsons Brinckerhoff in his oral evidence on 15 November 2017. The email from Balthazar Ochoa of Bilfinger dated 9 December 2009, accidentally copying in a TIE employee [**CEC00328711**], and forwarding legal advice on the draft MOA from Pinsent Masons, was put to Mr Walker, although the draft of what became the MOA (then titled "Memorandum of Understanding [**CEC00328712**]), which was attached to that email, was not. The final signed MOA [**TRI00000011**] was not put to Mr

Walker either. Nevertheless, Mr Walker was asked to explain the purpose of what became the MOA and he replied:

> *"To incentivise the designer to have adequate resource immediately available at our beck and call."* [**Public Hearing Transcript, 15 November 2017, page 147:6-7**]

388. To understand this response, it is necessary to consider Mr Walker's response to an earlier question which sought clarification of a phrase in the email [**CEC00328711**] stating that there was a need to keep SDS "*on side*" to assist with future claims for Notified Departures. Mr Walker responded:

> "*…[W]hen we put in an Infraco notice of TIE change, we have 18 days to provide an estimate. If that requires some redesign or some rework of the design, we need that to be done pretty snappily. And we needed the full co-operation of SDS to have the resources available. So if we said: you need to redesign this bit because we have a claim against TIE and we do not wish to default on the date that we submit it, so you need to allocate resources immediately to do that*." [**Public Hearing Transcript, 15 November 2017, page 146:17-25**]

389. Mr Foerder reaffirmed in his oral evidence the purpose of the MOA, which he explained in his Witness Statement dated 12 July 2017 (see paragraph 383 above and [**TRI00000095_0052-0053**, **paragraph 163**]). Mr Foerder explained that the need for the MOA arose because TIE

refused to issue design approvals. In providing oral evidence he explained:

> *"…[T]his was a MOU which…we made with SDS to progress the design, because out of outstanding approvals from TIE side, so we attempted SDS to progress the works, take the commercial risk away from them, and guarantee payments through our pocket, basically, which put ourselves under commercial risk, that enabled them to progress and complete the design. That could be this MOU, I think we have done such an agreement with them to unlock the situation because TIE was refusing to accept the design changes.*
>
> *…Because we couldn't get approvals on the notified departures from TIE, and we have seen that nothing could progress. SDS was not willing to put more commercial risk to themselves. So we decided that we take that burden, to enable them to progress the design, and get cost reimbursement through the consortium."* [**Public Hearing Transcript, 5 December 2017, page 82:18-83:12**]

390. The reason why TIE refused to provide the necessary approvals to allow the design to progress was because of the ongoing dispute between TIE and Bilfinger in relation to design. This was confirmed by Martin Foerder in his oral evidence [**Public Hearing Transcript, 5 December 2017, page 83:13-17**].

391. Taking together the evidence of Steve Reynolds, Richard Walker and Martin Foerder, the aims of the MOA are quite clear. Bilfinger took a commercial risk in agreeing to pay Parsons Brinckerhoff for the design work standing TIE's refusal to make any further payments and pending resolution of the ongoing disputes between TIE and Infraco. The only objective was to progress the design in the interim and avoid potential delays in the future associated with design. TIE may not have been aware that the design was progressing in the background, but as Martin Foerder explained [**Public Hearing Transcript, 5 December 2017, page 97:6-20**], that was an assumption on their part, given that they were no longer paying for the design. There was no deliberate strategy or tactic to undermine TIE or obtain commercial advantage [evidence of Martin Foerder, **Public Hearing Transcript, 5 December 2017, page 99:7-24**]. Rather, quite the opposite with Bilfinger taking a commercial risk, paying Parsons Brinckerhoff to continue to produce designs when ultimately Infraco might have been unsuccessful in reclaiming these sums from TIE as Notified Departures. The accusatory comments made by Steven Bell and Richard Jeffrey (see paragraphs 384 and 385 above), are plainly conjecture, made without any knowledge of the terms or actual purpose of the MOA and in the same spirit of hostility towards Bilfinger which existed during the dispute phase of the project. Respectfully, the Inquiry ought to discredit the testimony of Mr Jeffrey in this regard.

391A The Selected Ex-TIE Employees in their closing submissions repeat the assertions made by Steven Bell and Richard Jeffrey in relation to the

MOA. Reference is made to the email dated 9 December 2009 from Suzanne Moir of Pinsent Masons to Balthazar Ochoa of Bilfinger [**CEC00328711**]. As is clear from the terms of the email dated 14 December 2009 at 08:24 from Robert Bell to Steven Bell and others, which forms part of the chain of correspondence in document **CEC00328711**,the email from Suzanne Moir was sent in error to Colin Neil of TIE and circulated within TIE following confirmation that the email had been deleted. The Selected Ex-TIE Employees rely upon this email from Suzanne Moir in making the contention that, "*SDS were accordingly incentivised to assist Bilfinger in substantiating claimed changes for which Bilfinger sought additional costs.*" The Selected Ex-TIE Employees rely upon this evidence to the exclusion of the written and oral evidence of Stephen Reynolds, Richard Walker and Martin Foerder which is discussed above. Those individuals were involved in agreeing the MOA, and their evidence should be preferred over that of Richard Jeffrey and Steven Bell who had no sight of the terms of the agreement and whose evidence amounts therefore to conjecture.

392. **Infraco's Operation of the Contract Change Mechanism**

393. The Infraco Contract contains a mechanism for managing TIE Changes in clause 80 [**CEC00036952**]. Infraco, particularly Bilfinger, has been criticised for insisting on compliance with the clause 80 change mechanism ("the change mechanism") during the construction phase of the project and it has been suggested that its operation of the change mechanism resulted in delay (see, for example, the evidence of Donald

McGougan [**Public Hearing Transcript, 30 November 2011, page 78:24-79:6**]).

394. The origin of the change mechanism was TIE. DLA initially drafted clause 80 and TIE had, "*very strong views about the type of change provisions* [they] *wanted*" [Witness Statement of Andrew Fitchie, **TRI00000102_0229**, **paragraph 7.519**]. From the beginning, TIE wanted to control the change process [Witness Statement of Andrew Fitchie, **TRI00000102_0229**, **paragraph 7.521**]. However, it was clear to both TIE and to Infraco in late 2007 that changes were inevitable because the design was so substantially incomplete and the MUDFA works were seriously delayed [see Richard Walker's Witness Statement, **TRI00000072_0016**, **paragraph 25**].

395. Pinsent Masons sent to DLA a draft of Clause 80 on 4 December 2007 [**CEC01493840** and **CEC01493841**] which provided, at clause 80.12: "*Subject to clause 80.10.1, for the avoidance of doubt, the Infraco shall not commence work until instructed through receipt of a TIE change order*." TIE adamantly maintained that they should have full control over the impact of changes and fully supported this drafting whereby Infraco were not permitted to work without agreement on the Estimate and receipt of a TIE Change Order. Andrew Fitchie in his Witness Statement expressed his frustration that the change mechanism should operate in this way, and Mr Fitchie appears to have cautioned TIE against this approach [**TRI00000102_0229-0230**, **paragraphs 7.522-7.524**]. Nevertheless, TIE insisted. Mr Fitchie gives his account of Geoff Gilbert's position on clause 80 as follows:

"…he wanted TIE to have complete control on the change mechanism. I advised Geoff specifically what his changes to Clause 80 meant. I advised him that the way the Clause was drafted could result in BBS abusing it, because there could be a situation in which they simply submitted their estimates and were not obliged to continue working until TIE agreed their estimates or opened a DRP. That is not how Clause 80 was originally drafted. Geoff was very clear that he and TIE were extremely concerned about having BBS do work with no agreed pricing. In other words: BBS wanted to submit a claim for time and cost and not continue with the works until it was clear what the works were and what the estimate was. He and TIE were concerned about committing to what might be a somewhat open-ended position...but TIE did not want that. They wanted a position where they could say "give us your estimate and we will tell you when we want you to move on with an agreed cost." That is the reason why the contract can be read that BBS is not obliged to work pending a formal priced TIE Change Order..." [**TRI00000102_0230, paragraph 7.524**].

396. This principle therefore served to protect both TIE and Infraco's interests, shielding them from exposure to potentially huge financial liabilities without certainty of scope, time and cost. There can be no doubt that TIE was fully aware of the impact of the change mechanism and indeed it is clear from Mr Fitchie's evidence that TIE insisted upon it. Although Mr Fitchie says that clause 80 was not originally drafted in

this way, the form of wording which prohibited Infraco from working without agreement on their Estimate had existed from at least December 2007 (as per the draft of clause 80.12 [**CEC01493841**]). This wording remained entirely unchanged until contract close in May 2008, with the exception that the number of the clause changed from 80.12 to 80.13 (see Richard Walker's Witness Statement [**TRI00000072_0016-0017, paragraph 25**]).

397. Despite TIE's earlier insistence that Infraco should not be permitted to commence work on TIE Changes without a TIE Change Order, when disputes later arose after contract close when the pricing assumptions in Schedule Part 4 fell [**USB00000032**], TIE refused to acknowledge the proper application of the change mechanism [Witness Statement of Martin Foerder **TRI00000118_0027, paragraph 7.7**]. TIE tried to compel Infraco to commence work on changes which had been the subject of Infraco Notifications of TIE Change by relying on clause 34.1 of the Infraco Contract (Infraco's obligation to comply with TIE's instructions). However, in doing so, TIE were completely disregarding the change mechanism in the Infraco Contract, perhaps when latterly, the impact of the advice which Mr Fitchie claims to have given, became clear.

398. This issue came to a head in relation to an instruction which was given by TIE connected with a new structure at Murrayfield, the Murrayfield Underpass. By letter dated 19 March 2010 [**CEC00405690**], TIE instructed the following:

"You are instructed to commence, carry out and complete the following works with due expedition. In the event that any item of the said works is, becomes or is alleged to be the subject of a TIE Notice of Change, and Infraco Notice of TIE Change, a TIE Change Order or a Mandatory TIE Change Order, at any time, this instruction shall be deemed to have been given and shall operate for such works pursuant to Clause 80.13.

We remind you that pursuant to Clause 106, this Agreement constitutes an entire Agreement and in particular refer you to the terms of Clause 34.1 regarding your compliance with instructions from TIE's Representative."

399. Infraco, refused to comply with this instruction on the basis that it was a TIE Change (being a Mandatory TIE Change under Clause 3.5 of Schedule Part 4 [**USB0000032**]), such that Infraco were prohibited from proceeding with the work 'until instructed through receipt of a TIE Change Order' (Clause 80.13). Infraco referred the matter to dispute, with Lord Dervaird being appointed as the adjudicator. Lord Dervaird, in his decision dated 7 August 2010 [**BFB00053642**] found in favour of Infraco, as discussed at paragraphs 293 to 295 above.

400. Lord Dervaird decided that Infraco was not under any obligation to comply with TIE's instruction to commence the works. Infraco were right and justified therefore to insist on compliance with the change mechanism. TIE, however, refused to accept Lord Dervaird's decision as correct (see the oral evidence of Richard Jeffrey [**Public Hearing**

Transcript, 9 November 2017, page 38:3-9]). This was another example of TIE doggedly maintaining its position in the face of defeat. Such an attitude made it impossible to work collaboratively on the project.

401. The second aspect to the criticism that is made against Infraco in relation to the operation of the Change Mechanism in Clause 80, is the evidence of some witnesses that Infraco (mainly Bilfinger) abused the process by failing to submit Estimates, or when Estimates were submitted, they were late, lacking in specification or were excessive. For example, Steven Bell's evidence was:

> "*When Infraco produced estimates and there was some delay in doing so, generally for the items that were agreed as a change, and we had an agreed value and signed change order, it was finally agreed at a number, on average, of circa 52 per cent of the original application from the contractor, and this felt that this was excessive and wrong.*
>
> *"This is an average over a number of, I think, probably a couple of hundred change orders at this particular point, or at that point in time, when we undertook this analysis."* [**Public Hearing Transcript, 25 October 2017, page 29:5-15**]

402. As regards the criticisms of the delay in producing Estimates, Mr Bell takes a very narrow view which ignores the huge number of changes which emerged after contract close. Martin Foerder has explained how dealing with such a large number of Notified Departures presented a

significant administrative burden on Infraco in following the change mechanism. Each Notified Departure had to be processed through the change mechanism separately, and so producing an Estimate within 18 days was, understandably, a challenging task (see Martin Foerder's Witness Statement [**TRI00000118_0065, paragraph 11.7**]). Mr Foerder stated:

> *"Each INTC required an extensive amount of work to produce an Estimate. Once this is submitted it may still require correspondence back and forth before agreement is reached. The high number of Estimates we had to provide in response to the INTCs may have given the impression that we were the cause of the delays. In reality, to deal with such a large number of INTCs requires a lot of resources to prepare them and provide the Estimate. It was impossible to deal with all the requests within the required timeframes. At a later stage we tried to encompass a number of the INTCs in one overarching submission where all the issues were covered. We were permitted under the Infraco Contract to ask for extra time for submitting Estimates but TIE would generally never accept any delay."* [**TRI00000095_0010**, **paragraph 35**]

403. It is clear from the evidence that TIE were inflexible and that little consideration was given to the difficulties Infraco faced in producing fully particularised Estimates on time. TIE would not consent to Infraco's request to extend the deadline for submission of Estimates, yet complained that Estimates were lacking in specification and were

excessive in value. Although Infraco were trying their best to comply with the contractual change mechanism, which TIE had insisted upon, TIE's inflexibility and intransigence in response to change Estimates unnecessarily hampered progress on the project. TIE was uncooperative and tried to subvert the process which it had agreed to under the Infraco Contract. Michael Flynn's evidence supports this [**TRI00000151_0017, paragraph 71**].

404. TIE also attempted to challenge the Estimates that Infraco submitted as being 'incompetent' by virtue of lacking in specification and detail, at adjudication. Specifically, this became an issue in the adjudications before Alan Wilson (Russell Road Retaining Wall) [**CEC00034842**] and Incomplete MUDFA Works (Robert Howie QC) [**CEC00407650**]. In the course of those adjudications, the points which TIE had attempted to make about the adequacy or otherwise of Infraco's submitted Estimates, was held to be unfounded. In particular, those adjudications determined:

> "*That in respect of Estimates (to be submitted following the occurrence of a Notified Departure) :*
>
> (i) *the Infraco Contract does not provide a quality standard for Estimates (Wilson: Russell Road Retaining Wall)*
>
> (ii) *it is possible (and permissible) to submit 'Part Estimates' (Wilson: Russell Road Retaining Wall)*

(iii) *compliance with all of the provisions of Clause 80 is not a condition precedent to BSC's right to obtain an extension of time (Howie: Delays Resulting from Incomplete MUDFA Works).."*

[Extracted from Infraco's mediation position statement [**BFB00053260, pages 19-21**]].

405. Dr Keysberg dealt with the allegation that Infraco's estimates were excessive in his oral evidence to the Inquiry on 16 November 2017. He explained how generally in the construction industry a contractor will submit an estimate which is then subject to negotiation between the parties and compromise [**Public Hearing Transcript, 16 November 2017, page 51:25-52:22**]. It would be naive to suggest otherwise. The attitude of the Consortium throughout this process was to administer the contract properly in order to build the tram project. As Dr Keysberg explained, in many cases it was difficult to provide an accurate Estimate for more complex aspects of the works, "*But the problem was that TIE, most of it refused in principle. We were -- would have been happy if they would have negotiated with us the changes, but in most cases they simply rejected completely, and that was the difficulty we had in the process*" [**Public Hearing Transcript, 16 November 2017, page 53:20-24**].

406. Therefore, despite Infraco's best endeavours, the habitual problem was that TIE would not engage in the process of agreeing Estimates, blocking progress on the works as a result (see, for example, Infraco

Contract Period Report No 10 & 11 to 31 January 2009, paragraph 6 of the Executive Summary [**CEC01103816_0003**] and the evidence of Jim Donaldson [**Public Hearing Transcript, 16 November 2017, page 125:22-126:16**]). It may be easy to allege that Infraco's Estimates were late, lacking in detail and excessive, but this completely ignores the substantial difficulties encountered by Infraco in processing hundreds of Notified Departures on an individual basis within extremely short timeframes and without any assistance or cooperation from TIE.

407. Accordingly, Bilfinger (and Infraco) reject the criticisms made by the former TIE witnesses insofar as they have challenged (i) Infraco's stance in not progressing with Work pending receipt of a TIE Change Order; and (ii) Infraco's approach generally to the submission and progression of Estimates.

408. **RESOLUTION – EVENTS IN LATE 2010 THROUGH TO 2011**

409. **Attempts at communication with CEC**

410. Infraco were exasperated at the tactics used by TIE throughout the course of the Project. All of the witnesses who have given evidence to the Inquiry who were formally employed by Bilfinger have given evidence to the effect that it was "impossible" to build a working relationship with TIE [Witness Statement of Mr Foerder **TRI00000118_0035, paragraph 8.5**], and that there were very difficult individuals working within TIE.

411. Throughout the Project, Bilfinger were unable to publically tell its side of the story as a result of clause 101.14 of the Infraco Contract [**CEC00036952_0231**], which provided that any press releases etc. required prior approval from TIE. Infraco, and Bilfinger in particular, were therefore not in a position to publically explain its position. There was no such reciprocal provision required for TIE to seek Infraco's approval before making press statements.

412. Given that Infraco did not consider that TIE were appropriately administering the Infraco Contract, and that it was becoming clear that there was a deadlock between the parties, Infraco sought to resolve that deadlock in a number of ways.

413. Mr Foerder of Bilfinger sent a letter to TIE on 1 March 2010 [**CEC00578329**] to express the frustrations felt by Infraco through the

lack of acknowledgement by TIE of its contractual obligations. This letter included the following:

> "*We are disappointed that your approach continues to divert attention and resources from the real matter at issue which is preventing progress on this project, that being TIE's continued refusal to acknowledge that Notified Departures have occurred, in relation to which we have an entitlement to be reimbursed. This is the case even in the decisions in the recent adjudications, decided very clearly in our favour.*
>
> *…*
>
> *It would appear…that there has been a deliberate decision by TIE to focus on areas where it is alleged that Infraco is failing in its contractual obligations. The continued focus on Estimates is one such area. We are, of course, acutely aware of our obligations to assist you with audits and to assist you in complying with your own statutory duties, and will continue to oblige in this regard. However, if this project is to move forward in any meaningful way, there must be a corresponding acknowledge by TIE of its contractual obligations...*"

414. As Mr Foerder has said in his Witness Statement [**TRI00000118_0077, paragraph 13.5**], there was no such "*corresponding acknowledgement*" from TIE. To this day, TIE witnesses still refuse to acknowledge Infraco's contractual entitlement and where the balance of success in the adjudication decisions lay.

415. A few days after Mr Foerder's letter, on 8 March 2010, Richard Walker sent a letter on behalf of Infraco to Mr Tom Aitchison, Mr Donald McGougan, Mr David Anderson and Councillor Gordon Mackenzie [**CEC00548728**]. The reason that this letter was sent was that it was an attempt to make those responsible for TIE, and in positions of authority for TIE, aware of Infraco's position. As at the outset of the Project, Infraco was concerned about what was being reported by TIE to CEC. In sending this letter on 8 March 2010, Infraco was attempting to advise CEC of its position in an attempt to unlock the deadlock with TIE.

416. Instead of unlocking the dispute, Mr Walker received a response from Mr Aitchison of CEC on 24 March 2010 which stated that TIE had been keeping CEC informed, and that Mr Jeffrey of TIE would respond directly to Mr Walker [**CEC00356309**]. Mr Walker wrote again to Mr Aitchison of CEC on 1 April 2010 in which he stated that CEC would ultimately be held responsible for the delivery of the Project, and that Mr Walker considered that CEC ought to respond directly to the concerns raised by Infraco [**CEC00234781**]. In response to this, Mr Walker received a letter from DLA Piper (dated 19 April 2010) acting on behalf of its client stating that Infraco was in breach of the Infraco Contract and threatening to take legal action for defamation against Infraco members and its authorised representatives personally [**CEC00242190**]. This letter caused Infraco a great deal of concern not only because of the threat of legal proceedings, but because of CEC's refusal to intervene in a project which was so obviously in difficulty.

417. Following this exchange of correspondence, Mr Walker's evidence was that he "*set about systematically trying to talk to anybody who would listen to me*" [**Public Hearing Transcript, 15 November 2017, page 152:7-152:8**]. Mr Walker's evidence was that it was only following a meeting with Ainslie McLaughlin (following a meeting with Mr John Swinney), that he was "summoned" to a meeting with Alistair Maclean and Donald McGougan of CEC which was the start of discussions which ultimately led to mediation [**Public Hearing Transcript, 15 November 2017, page 153:18-153:24 and document CEC02084346**].

418. As the Inquiry is aware, almost exactly 1 year after Mr Walker first wrote to CEC, the parties, including and led by CEC, entered into a mediation which resulted in a resolution of the disputes between Infraco and TIE.

419. **Project Carlisle 1, Project Carlisle 2 and Project Phoenix**

420. Richard Walker's letter to CEC on 8 March 2010 [**CEC00548728**] expressed a willingness on the part of the consortium to explore alternative solutions for delivery the Project, and sought reassurance from CEC as to its commitment to delivering the trams to Edinburgh. The Inquiry has heard evidence of those alternative solutions, which were Project Carlisle 1, Project Carlisle 2 and Project Phoenix. All of these "projects" were attempts by the parties to resolve the disputed matters and find a way forward for the Project.

421. It is important to note that Infraco spent a considerable amount of resource in formulating these proposals and engaging in detailed discussions in relation to how they would operate. The proposals

contained a number of options including reducing the length of the tram line and amending the change mechanism and the pricing assumptions.

422. Project Carlisle 1 was Infraco's first proposal. The parties had entered into discussions in May 2010 with a view to agreeing an alternative solution involving a reduced scope, a new programme, risk re-allocation and a new price [Witness Statement of Martin Foerder, **TRI00000118_0091, paragraph 17.4**]. The Project Carlisle 1 proposal was sent by Infraco to TIE on 29 July 2010 [**CEC00183919**]. As to the detailed content of this proposal, reference is made to the Witness Statements of Martin Foerder [**TRI00000118_0091, paragraphs 17.4-17.5**], and Richard Walker [**TRI00000072_0074, paragraph 131**]. Infraco had removed the majority of the Pricing Assumptions in this proposal, including those relating to design change, and retained only certain Pricing Assumptions, principally those relating to MUDFA and ground conditions [Witness Statement of Martin Foerder, **TRI00000118_0091, paragraph 17.5**].

423. However, TIE rejected the Project Carlisle 1 proposal on 24 August 2010 [**CEC00221164**], and insisted on a "Guaranteed Maximum Price" with all Pricing Assumptions removed [Witness Statement of Martin Foerder, **TRI00000118_0092, paragraph 17.6**]. Martin Foerder explains in his Witness Statement that TIE's counter-proposal was unrealistic:

> "*Rather than looking at an achievable programme, TIE went back to asserting that Infraco had not proved an extension of*

time but that TIE would allow the time already allowed by Robert Howie QC and a 9 month extension of time which TIE had 'offered' previously etc. TIE's proposal would have meant that Infraco took all remaining risk for utilities which might still be present. Schedule Part 4 would effectively be deleted. It was an entirely unrealistic proposal and one that could not be accepted by Infraco." [**TRI00000118_0092, paragraph 17.6**]

424. In his written evidence Mr John Swinney commented on the Project Phoenix 1 proposal, and accepted that, *"in retrospect, obviously, that would have been a good deal"* [**TRI00000149_0103**]. However, TIE's response to Project Carlisle 1 is a further demonstration of TIE's ongoing intransigence. TIE's attitude at this time is perhaps not surprising given that the Project Carlisle 1 negotiations were taking place in the midst of what Richard Walker has described as TIE's "*war of attrition*" against the consortium [**TRI00000072_0074, paragraph 130**] and which Martin Foerder describes as a 'campaign' (and which, in reality, was Project Pitchfork).

425. Following the lack of success of Project Carlisle 1, and further discussions between the parties in August and September 2010, Infraco submitted the Project Carlisle 2 proposal on 11 September 2010 [**CEC00183919**]. Project Carlisle 2 was an attempt to incorporate some of TIE's requirements but, as before, Infraco simply was not able to concede to all of TIE's demands. Martin Foerder stated:

"*There were remaining risks which, again, we could not take ownership of…TIE's 'Counter Proposal' would not be considered by us further as we considered it to be 'wholly and totally unrealistic both in terms of it's pricing structure and level of risk transfer back to Infraco'. Our new proposal was to stop work at Haymarket. We took the transfer of risk in relation to matters which we considered were quantifiable, but again, could not take other risks as we still believed that these could potentially increase our costs substantially.*" [**TRI00000118_0092, paragraph 17.7**]

426. Again, TIE rejected the proposal [**CEC00129943**]. TIE continued to seek a fixed price for the works with all of the pricing assumptions being removed from the Infraco Contract. Essentially, TIE sought to achieve an impossible objective: they wanted maximum project scope, without any ownership of risk, and for the lowest price possible. This was an unacceptable position which Infraco could not accept given the uncertainty which continued to exist about certain issues, including when MUDFA would complete. No sensible contractor could agree to the conditions being imposed by TIE in light of the facts and circumstances known to all working on the Project. The commercial consequences would have been disastrous for Infraco.

427. TIE's ongoing campaign against Infraco was underway at this time, and Martin Foerder notes in his Witness Statement that Infraco received, "*yet another Remediable Termination Notice*" on the same day as receiving a further letter from TIE (dated 12 October 2010)

[**CEC00079851**] containing proposals in relation to Project Carlisle 2 [**TRI00000118_0093, paragraph 17.9**]. Richard Walker made the following observation in his Witness Statement:

> "*Essentially we put this forward* [the Project Carlisle 2 proposal] *because it was becoming apparent that there was only a certain budget that TIE had. We put forward a price and scope of works that we thought would salvage something from any of the discussions that had gone before it with reasonable compensation for the works undertaken, and TIE rejected it. Tie did not like the figures and the fact that for the tram to go from the airport just to Haymarket did not fit in with the transport strategy.*" [**TRI00000072_0076, paragraph 134**]

428. Despite the complete breakdown in relationships by the end of 2010, Infraco continued to discuss ways to break the deadlock and continue the Project. Infraco submitted the Project Phoenix Proposal on 24 February 2011 [**BFB00053258**]. The title was generated by Richard Walker, symbolising the Project "*rising up out of the ashes*" [**TRI00000072_0082, paragraph 148**]. Project Phoenix was a development of the previous Projects Carlisle 1 and 2, and proposed a truncated scope, delivering the Project within a budget which was acceptable to TIE, and seeking to find a way forward through the matters dividing the parties, in particular Notified Departure Estimates and TIE Change Orders [Witness Statement of Martin Foerder, **TRI00000118_0094, paragraph 17.12**; and Witness Statement of Richard Walker, **TRI00000072_0082, paragraph 149**]. Richard Walker

explains the detail of the proposal in paragraph 150 of his Witness Statement [**TRI00000072_0082**].

429. The Project Phoenix proposal ultimately formed the basis for discussion at the Mar Hall mediation in March 2011.

430. **MEDIATION**

431. As explained in detail above, BCUK had made repeated attempts to speak directly to CEC throughout the Project with the aim of breaking the deadlock between Infraco and TIE.

432. In his oral evidence, Dr Keysberg described the events leading up to mediation [**Public Hearing Transcript, 16 November 2017, page 58:1-63:20**]. He stated that at the end of November 2010, Bilfinger, "*desperately tried to find another party to whom we could talk to, because the handling of the project became more and more desperate on the TIE side..."* [**Public Hearing Transcript, 16 November 2017, page 59:1 to 59:4**]. Dr Keysberg's evidence was that the first stage of unlocking the deadlock and a step towards mediation was a meeting between him, a representative from Siemens, Mr John Swinney and Mr Ainslie McLaughlin on 8 November 2010. Dr Keysberg said:

> "*So our strategy in the meeting was not to go out with an agreement on something that would have been completely unreasonable, but to tell our side of the story, and ask them to look deeper from their side into it.*
>
> *So I don't recollect that there was any action agreed when we left. So what we did, I think we told the story of the project, which certainly started at the beginning and I'm pretty sure that we talked about the outcomes of other adjudications, which were seen differently from us as they had been communicated to the public from TIE, and brought, I think, certainly as well*

some evidence with us. I don't remember that Mr Swinney or Mr McLaughlin gave us a positive response or not. I think they tried to appear relatively neutral in this very first meeting, and just being in a listening mode and then do internally their actions.

So there was no agreement. Nevertheless, for us it was extremely important because we were always convinced if somebody like Ainslie McLaughlin knows the details of it, he will immediately understand that something is going wrong in there." [**Public Hearing Transcript, 16 November 2017, page 60:10-61:5**]

433. Dr Keysberg makes the assumption that Mr Swinney spoke to CEC after that meeting because Infraco were then invited to a meeting with CEC on 13 December 2011 with Ms Jenny Dawe and Ms Sue Bruce [**Public Hearing Transcript, 16 November 2017, page 61:21-62:4**] with an agreement to proceed to mediation being reached. This led to a further meeting between Infraco and CEC on 15 February 2011 in advance of the mediation scheduled for March [evidence of Dr Keysberg, **Public Hearing Transcript, 16 November 2017, page 63:5 to 63:20**].

434. Both CEC and Infraco's positions at the mediation are set out in the mediation statements of both parties [**BFB00053300** and **BFB00053260**].

435. Dr Keysberg explained in oral evidence that the mediation was led by CEC, and Sue Bruce, rather than any of the TIE personnel [**Public Hearing Transcript, 16 November 2017, page 64:25 to 65:3**]. Dr Keysberg also explained that the solution proposed by Infraco in Project Phoenix was the basis for the negotiations [**Public Hearing Transcript, 16 November 2017, page 70:4 to 70:8**]. This was also the evidence of Martin Foerder [**TRI00000118_0094, paragraph 17.12**], and Richard Walker [**TRI00000072_0082, paragraph 148**]. The sum offered in the Project Phoenix proposal was a derivation of, or an amendment to the previous Project Carlisle 1 and Project Carlisle 2. Martin Foerder describes this in his Witness Statement [**TRI00000118_0094, paragraph 17.12**], and in his oral evidence, he said:

> "*We couldn't find really an agreement on these* [Project Carlisle 1 and Project Carlisle 2]*, and we have used that Project Carlisle 1 document to develop the so-called Project Phoenix project which included works from the airport to Haymarket, which we believed would be fundable to the Council, with more or less pretty confirmed price; with some pricing assumption quite reduced from what we had before on the contract, and even further reduced from what we had forwarded in Carlisle submissions, to create a document which may can identify a way forward*." [**Public Hearing Transcript, 5 December 2017, page 138:11-138:21**]

436. Using Project Phoenix as the basis, Dr Keysberg described the "*commercial discussion*" which took place at the mediation in order to

arrive at the final deal [**Public Hearing Transcript, 16 November 2017, page 69:23 to 70:8**]. The Inquiry has heard from several witnesses that the mediation in March 2011 was a "*horse trade*". In his Witness Statement, Alistair MacLean said, "*The objective* [of CEC's mediation preparations] *seemed to be more about collating information for a horse-trade rather than a full mediation on the merits*." [**TRI00000055_0035, paragraph 89**]. Mr MacLean elaborated on this in his oral evidence, explaining that the CEC sought to achieve a "*commercial deal*" [**Public Hearing Transcript, 20 September 2017, page 130:19**], which was the result of "*a high level commercial negotiation*" [**Public Hearing Transcript, 20 September 2017, page 115:11-115:12**]. To the extent that the Inquiry may draw any negative inferences from the phrase "*horse trade*", this simply reflects the commercial nature of the agreement that was struck. The Project at this time was at a complete standstill. Relations between TIE and Infraco had irreversibly broken down and the outcome of the adjudications had confirmed that Infraco was correct on its interpretation of the Infraco Contract. A commercial deal was the only viable option for CEC, and Infraco prepared for mediation with a view to securing such a deal, as Martin Foerder explained:

> "*We recognised that TIE and CEC had budgetary constraints. If they could not afford to build the entire Network at this time, we came up with a proposal of what could be built for the budget that we believed was available. This was Project Phoenix...If TIE could not agree to this or some form of amended deal, then*

we wished to discuss how we could best extricate ourselves from the Contract..." [**TRI00000118_0103, paragraph 20.3**]

437. TIE remained adversarial in the run up to the mediation, and obstinately repeated their familiar (and incorrect) contractual arguments rehearsed in the adjudications [Witness Statement of Martin Foerder, **TRI00000118_0104, paragraph 20.4**]. However, the mediation would never have been successful had Infraco and CEC taken firm, contractual, adversarial stances. The parties had to agree a commercial compromise if the Project was to be delivered at all, and that is what happened. Vic Emery recounted this in his oral evidence, confirming that from the CEC side, the agreement was a collective decision:

"*A. It was the judgement of the whole team, top team that was negotiating this.*

Q. Just to be clear there, who was involved in that?

A. From memory, it was Ainslie McLaughlin, Colin Smith, myself, Sue Bruce, and Alastair Maclean. I think -- I think it was those five.

Q. Insofar as the price that was agreed at mediation exceeded what TIE thought was an appropriate price, do we attribute all of that increase to the collective judgement of that group of people you've just described?

A. Yes, it was. It was the collective group that made that judgement, on the basis that that was the only way that we could get a deal to continue with this project." [**Public Hearing Transcript, 13 March 2018, page 60:18-62:17**]

438. Dr Keysberg's evidence was that the agreed sum in relation to mediation was, in his view, a "*fair compromise. Still having risks on both sides, and the risk was that the governance wouldn't work afterwards…so vital element of - - of the mediation, of the outcome of the mediation was as well regaining trust and regaining and different project management and governance on the project itself.*" [**Public Hearing Transcript, 16 November 2017, page 71:24 to 72:8**]. This evidence shows that the outcome of the Mar Hall mediation was perceived by both Bilfinger and CEC as a commercial compromise, a fair deal to enable both sides to work together amicably to deliver the Project. TIE witness, including Richard Jeffrey [**Public Hearing Transcript, 9 November 2017, page 72:6-72:12**] and Steven Bell [**Public Hearing Transcript, 25 October 2017, page 53:10-53:25**], have expressed their dissatisfaction with the settlement which was reached. However, Bilfinger would suggest that TIE's adversarial behaviour to that point in time and their refusal to acknowledge the outcome of the adjudications, undermines the credibility of TIE witnesses' views on the settlement deal. The commercial approach which Infraco and CEC adopted, and the willingness to negotiate a fair compromise were precisely what the Project required at that point in time to breach the impasse.

439. From Infraco's perspective, there was a significant risk that post mediation, TIE would revert to their previous positions and parties would again become entrenched and remain in deadlock. Dr Keysberg expressed this in his oral evidence, where he said: "*That was as important as the numbers, because the best contract doesn't protect you as we have seen in the two years before, if it's not properly managed*." [**Public Hearing Transcript, 16 November 2017, page 72:9-72:11**] This was acknowledged by both Infraco and CEC. Sue Bruce in her written evidence said:

> "*I do not think the management model worked particularly well…Another problem was the poor relationships that existed between the lead parties. There was no visible direct relationship between TIE (Transport Initiatives Edinburgh) and Infraco (Infrastructure Consortium), between CEC and TIE or between CEC and Infraco, which was crucial in such a project.*" [**TRI00000084_0002, paragraph 5**]

440. As a result, both sides agreed to bring new personnel to the Project and remove certain historic personnel. Again, Sue Bruce expressed this in her written evidence:

> "*...there was a collective view on the Council side that TIE was not working and needed to go. It had not effectively fulfilled its role in delivering the overall tram project up to the end of 2010. It was costing money to run and was not effective. I also think that within TIE there were some individuals who had been badly*

affected by the challenge of embracing future plans. I understand it was their livelihood and their work and that seeing other people coming in to sort it out could be professionally humiliating as well. However it was deemed necessary to bring in project management capacity and Turner & Townsend were contracted to do that." [**TRI00000084_0034, paragraph 107**]

441. This was acknowledged also by John Swinney in his oral evidence to the Inquiry. He commented that, "*it had become apparent that the role of TIE had become so difficult in relation to contractual relationships that there had to be essentially new input into the -- into that relationship*." [**Public Hearing Transcript, 23 January 2018, page 140:12-140:16**] Therefore, the view was held generally, not solely by Infraco, that TIE – or at least certain individuals within TIE – were regarded as antagonists on the Project, and there was no hope of delivering the Project successfully if TIE remained principally involved.

442. Likewise, it was acknowledged from Bilfinger's perspective, that there also had to be a change of management personnel. Mr Walker described his position at mediation as follows:

"I almost had no involvement after the first day of mediation. I rather suspect, if I may, that somebody said, as Willie Gallagher had said earlier, they didn't want me on the job anymore." [**Public Hearing Transcript, 15 November 2017, page 158:21-23**]

443. Bilfinger agrees with the evidence given by Sue Bruce that the settlement agreement was fair [**Public Hearing Transcript, 15 March 2018, page 55:22-55:23**]. However, BCUK will address the report dated 19 August 2011 prepared by Faithful + Gould for CEC [**CEC02083979**], to which the Inquiry has repeatedly referred witnesses. The Inquiry has put parts of this report to several witnesses, in particular the comments suggesting that the Infraco costs post mediation were "grossly inflated" [**CEC02083979_0005, paragraph 2.7**]. The suggestion that the Infraco costs were "grossly inflated" is denied by Bilfinger. As explained in the oral evidence of Dr Keysberg:

> "*the Council organisation at that time was involved in all subcontractor lettings. So we would choose together the subcontractors that would - - were working in and they knew it was to a certain extent open book. So they saw exactly, and in such a transparent mode, it is relatively difficult to inflate your price"*. [**Public Hearing Transcript, 16 November 2017, page 76:4-76:10**]

444. Given the nature of the Infraco Contract post mediation, and the way work was paid for, it was not possible for the price to be "grossly inflated". CEC were aware of Infraco's costs for these works and it as "*relatively close with our transparency to a cost plus fee here*." [**Public Hearing Transcript, 16 November 2017, page 77:17-77:18**]. Dr Keysberg's evidence was that in a cost plus contract it is not possible to inflate prices and build in substantial other costs [**Public Hearing Transcript, 16 November 2017, page 78:21-78:24**].

445. The Faithful + Gould allegation regarding inflation is unsubstantiated, and flatly denied by all of the Bilfinger witnesses who, in contrast to Faithful + Gould, were involved in the negotiation of the Mar Hall Settlement Agreement, and were involved in the cost and payment for works following mediation. Martin Foerder explained this plainly in his oral evidence:

> "*Nonsense. Completely nonsense. First of all, there was always a possibility to change subcontractors. We had after Mar Hall and also reaching the Settlement Agreement an approach of partnership and open collaboration. We have rebuilt trust between the parties. We had an open book policy with the Council on all our subcontracts. So we had insights because, as I reported earlier, we had demobilised all of our subcontractors and had to get them back on board, and mainly for the on-street, because this was on an open book transparent approach, the Council had full insight and was even present in the negotiations with the subcontractor to arrive at their prices. So I think the statement is completely wrong*." [**Public Hearing Transcript 5 December 2017, page 157:8 to 157:21**]

446. It is submitted that the evidence of those witnesses is more reliable than the unsubstantiated conclusions drawn by Faithful + Gould. Moreover, in making this bald accusation, Faithful + Gould completely ignore the fact that this was an extremely difficult project with challenging road conditions, and the colossal difficulties presented by MUDFA. The

Project proceeded in a much smoother fashion post mediation, with the removal of TIE, but not with difficulty and issues were raised which had to be addressed [see the Witness Statement of Martin Foerder, **TRI00000095_0101, paragraphs 292-295**]. As such, Infraco were obliged to take account of the risks in negotiating a settlement deal at Mar Hall. Infraco was entirely commercially justified in doing so and, as Martin Foerder and Dr Keysberg have stated in evidence, Infraco were transparent with CEC regarding their costs post mediation.

446A Bilfinger has now had the opportunity to consider the closing submissions of the other Core Participants in relation to the deal which was reached at mediation. Given that the nature of the deal, and that Bilfinger clearly were not party to the internal CEC or TIE discussions which took place prior to the mediation, it does not seek to comment in detail on the settlement figures which were proposed by TIE, nor those considered by CEC. In addition, these figures were not put to any of the former employees of Bilfinger in any substantial detail.

446B Bilfinger entirely agrees with CEC's submission at paragraph 20.28 of its closing submissions when it states that TIE's contemporaneous analysis of the settlement sums or ranges contained a number of *"fatal flaws"*. TIE's analysis, *"did not take into account any contractual entitlement that Infraco had for delay, including MUDFA related delay, or disputed design changes for work that had already been undertaken. TIE's forecast for the costs of a new contractor assumed that a new contractor would be able to take up where Infraco left off without any risk allowance of "bad project" premium being allowed for in the new contractor's price...did not*

contain any indexation...did not allow for any significant risks for the on-street section and it did not allow for any extension to the programme as a result of having to re-procure".

446C Bilfinger agrees with this analysis. TIE's closing submission contains a substantial amount of narrative in relation to its assessment of what would have been a reasonable settlement figure at Mar Hall. What TIE's analysis fails to appreciate is that at all times, Infraco and TIE had a fundamental dispute about the extent and value of the changes. In addition, TIE often uses as a starting point the price as set out in the Infraco Contract. Martin Foerder explained in his oral evidence why this is an inappropriate starting point:

> *"I think what you need to consider here is that what we have priced on the original Infraco contract was not close to what needs to be constructed, because that was the nature of the contract. It was Schedule Part 4 and all the Pricing Assumptions. Our price was, I think, maximum to 50, 60 per cent the right price when we were pricing."* [**Public Hearing Transcript, 5 December 2017, page 152:8-13**]

446D It is very important to note that the deal which was agreed at Mar Hall was not without risk. Bilfinger were very concerned that the deal which was reached would not finally resolve all matters in relation to the project, and there was a significant risk that post mediation the deal would break down and parties would be in deadlock once again. The evidence of Dr Keysberg and Mr Foerder confirmed this as set out in these submissions:

"Still having risks on both sides, and the risk was that the governance wouldn't work afterwards…so vital element of - - of the mediation, of the outcome of the mediation was as well regaining trust and regaining and different project management and governance on the project itself." [**Public Hearing Transcript, 16 November 2017, page 71:24 to 72:8**]

446E Bilfinger also agrees with CEC's submissions that TIE's analysis proceeded on the basis that Infraco would agree to termination, or would not challenge any attempt at termination by TIE (paragraph 20.29 of CEC's closing submissions). To the contrary, had TIE sought to terminate the Infraco Contract, Mr Foerder's evidence was that:

"It could have been very costly indeed, but either way, would have lead to a huge and complicated dispute. We did not accept the basis for any of the Remediable Termination Notices served on us and we would have disputed tie's entitlement to terminate had it subsequently gone on to do so." [**TRI00000118_0097, paragraph 18.7**]

Given the advice which Bilfinger is now aware that TIE received regarding the effectiveness, strength and validity of the Remediable Termination Notices which TIE served on Infraco, the cost of a wrongful termination would have been significant, and was a real risk which TIE ought to have taken into consideration.

446F In summary, Bilfinger considers that the settlement deal reached at Mar Hall was for both parties a fair reflection of a compromise of claims,

disputes, delays and sums due which had been incurred up to and including the mediation, and also factored in the significant risk that post mediation, the project would suffer from the same or similar problems as it had done in the years before Mar Hall in 2011. Bilfinger would also like to make clear that none of the former Bilfinger witnesses who gave evidence at the oral hearing, were asked in any detail about the figures presented in Project Phoenix which was used as the basis for the subsequent discussions at Mar Hall. In addition, they were not asked or given an opportunity to explain the Bilfinger position in relation to pricing as subsequently included in MoV 4 and MoV5 which formed the basis of the renegotiated Contract. The Inquiry has heard no evidence in this regard.

447. **MOV4 AND MOV 5 – DOCUMENTATION OF THE SETTLEMENT**

448. **MOV4**

449. The Inquiry has heard evidence in relation to the post mediation agreements which were reached in relation to the Project known as MoV 4 and MoV 5.

450. MoV 4 related to the prioritised works which were agreed to be carried out by Infraco immediately following mediation, subject to certain payments being made and approvals issued which were required to allow the Prioritised Works to progress [**CEC01731817**]. The purpose of MoV 4 was to allow parties to implement the heads of terms which were agreed at mediation.

451. MoV 4 provided for five payments to be made to Infraco between 17 May 2011 and 24 August 2011 (clauses 6, 7 and 8, MoV 4 [**CEC01731817**]). In return for these payments, Siemens were obliged to transfer ownership of certain materials to CEC, and Infraco were obliged to commence and carry out the Prioritised Works (clause 3, MoV 4). The Prioritised Works are defined in MoV 4 as comprising the "*Depot...Depot Access Bridge and Depot Access Road, mini test track, Haymarket Yards, A8 Underpass, Princes Street Remedial Works, the Auxiliary Works*...".

452. In the course of the oral evidence, Counsel to the Inquiry has referred to a number of documents where the question appears to have been whether MoV 4 represented value for money for CEC. Particular

reference has been made to the email of Richard Jeffrey [**TIE00687649**] in which he states that the payment included "*payments for preliminaries unconnected with progress and without substantiation required…is unnecessarily complicated…removes many of the controls, checks and balances*" and states that "*the TIE team believe a more reasonable and supportable, but still generous number is £19m*," rather than the £49million included in MoV4.

453. Counsel to the Inquiry has referred to this issue with a number of witnesses, but perhaps most notably with Sue Bruce when she was asked in oral evidence *"what work was done to close that GBP30 million gap*?" [**Public Hearing Transcript, 15 March 2018, page 107:24**]. Sue Bruce's answer was that the CEC team would have been working on these costs.

454. What Mr Jeffrey's email [**TIE00687649**] highlighting a £30 million "gap" between TIE's valuation and MoV 4's payment provisions fails to acknowledge, is that MoV 4 was part of a settlement deal which was done between CEC and Infraco, and any allegations of a "gap", relate to payments as part of that deal. This was accepted and explained by witnesses from Infraco and CEC. Mr Eickhorn of Siemens and Mr Foerder of Bilfinger explain the "gap" eloquently in the evidence which they have provided to the Inquiry:

> Mr Eickhorn:
>
> *"Such a payment was necessary from Siemens perspective because it had procured materials and paid sub-contractors,*

and its cumulative expenditure exceeded its cumulative income at that time. This arrangement was needed to normalise the position, including handing over the materials so that ownership would vest in the client" [**TRI00000171, paragraph 183**]

"*in light of the accrued underpayment and the extent of materials procured to that date, the payment was fair and proportionate*" [**TRI00000171, paragraph 184**]

Mr Foerder:

"There appears to have been a misunderstanding as to what the payment of £49 million related to. This was not really a remobilisation payment, even if it was quoted as such. This was actually a payment of the settlement sum which was agreed at mediation to bring us back to a so-called cash-neutral position. We had not received any monies from TIE for a considerable time. This meant that we were completely cash-negative as a result of having to send the payments to SDS and to the contractors. The £49 million was a fixed amount to bring us back to a point where were not cash-negative. The payment also covered the agreed amount for the off-street and prioritised works. These had to commence from early May 2011. In addition, the payment covered the first certificate of the settlement sum as described in Clause 6 of the Prioritised Works Agreement (known as 'MoV4'). It included the payment of some sums agreed at mediation in relation to all extensions

of time, other claims and in respect of Siemens materials. This was why the payment to them was so much more than the payment to Bilfinger – Siemens had incurred considerable costs.

The payment made after mediation was a standalone payment, and not connected with any other payments. The payment of £45m, paid after Contract Close in 2008, was completely separate. There was not a double-payment made for mobilisation. When the contract started in 2008, the contract arrangements were such that we received a mobilisation payment to commence work. That was completely separate to the payment of £49m which was part of the total settlement sum." [**TRI00000095, paragraphs 272 and 273**].

455. The Inquiry has also heard evidence from witnesses outside Infraco in relation to the purpose of the payments which formed part of MoV 4 such as Donald McGougan. He said: *"these payments were payments that had been withheld by TIE in the run-up to the mediation and during the dispute process, because as part of their levers for contract enforcement, there had been work done that should have been payable under the contract*" [**Public Hearing Transcript, 30 November 2017, page 97:10-15**].

456. Therefore while individuals within TIE may have considered that the sum paid as part of MoV 4 was not "reasonable" as stated in Mr Jeffrey's email [**TIE00687649**], it is of critical importance to

acknowledge that MoV 4 included payments of settlement sums in respect of sums which had not been paid to Infraco by TIE prior to mediation (and which were contractually due in any case). In referring to 'preliminaries related to progress' (as he did and as described at paragraph 452 above), Richard Jeffrey appears to be oblivious that this was an argument which TIE had run at the second of the two adjudications before Lord Dervaird [**BFB00053489**] and had lost. He determined that the preliminaries were due as a matter of the passage of time, and were unconnected with progress. This misunderstanding by Mr Jeffrey might explain almost all of his perceived £30 million gap (on which he was wrong). The TIE analysis of what a fair sum would have been is therefore very much from their perspective, which by this time, had already been proven to be wrong. What is clear, despite some of the wording in MoV4, is that it was not simply a payment for mobilisation following mediation.

457. **MOV 5**

458. The evidence which has been heard by the ETI has focussed on the development and interpretation of the Infraco Contract. Little evidence has been heard in relation to the settlement agreement which was extensively negotiated between Infraco and CEC following mediation. The terms of the settlement agreement were contained in a document known as MoV 5 which is dated 15 September 2011 [**BFB00005464**].

459. The Heads of Terms which were agreed at mediation [**CEC02084685**] determined that the tram line would run from Edinburgh Airport to St

Andrew Square. In the months which followed the Mar Hall mediation, CEC entered into internal discussions as to whether the tram line should terminate at Haymarket, St Andrew Square or York Place. In her Witness Statement to the Inquiry, Dame Sue Bruce stated that she was "surprised" that CEC voted to terminate the tram line at Haymarket [**TRI00000084, paragraph 180**]. Dame Sue Bruce also confirmed that the Scottish Ministers had said that they expected the funding to be "repaid" if their expectation of a tram line running from Edinburgh Airport to St Andrew Square was not delivered [**TRI00000084, paragraph 182**]. Following the decision of CEC to terminate the tram line at Haymarket, the Scottish Ministers confirmed that they would not release any further funds. This lead to a further vote, with CEC subsequently confirming that the tram line would terminate at York Place. The uncertainty created by CEC's uncertainty and changing decision led to delays in signing MoV 5. As Dame Sue Bruce describes *"Infraco were on the phone because this was only three weeks before we were due to sign the post-Mar Hall deal*" [**TRI00000084, paragraph 185**]. Infraco were clearly concerned to ensure that MoV 5 was a true reflection of what CEC had decided should be delivered.

460. MOV 5 operated to amend the Infraco Contract to the extent necessary to reflect the agreements reached between Infraco and CEC. The changes to note are (as described in Mr Foerder's Witness Statement [**TRI00000095_0095-0096**]:

"*Schedule Part 2: the Employer's Requirements were amended to deal with the truncated scope of what would now be delivered by Infraco.*

Schedule Part 4: this now contained an Off Street Works Price which was a fixed price (of circa £362.5 million), and the On-Street Works Price (circa 47 million) which was dealt with by a new Schedule to the Contract – Schedule 45 (On Street Works). A Schedule of Rates was inserted for arriving at the value of TIE Changes (other than those that related to the On-Street Works), and a process was detailed for agreeing the value of those Changes.

Schedule Part 45: this was the mechanism for dealing with the Pricing for the On-Street Works Price. This was where some of the terminology and concepts which had previously been in the unamended Schedule Part 4, could still be found. This was to deal with remaining uncertainties in respect of the on-street works where TIE retained the risk, i.e. the fact that it was known that utilities remained to be diverted and a number of other matters required to be finalised such as third party approvals and outstanding consents. This meant that Clause 6 of Schedule Part 45 still had the concept of Pricing Assumptions but there were now far fewer of them. Although clause 80 remained in the main Infraco Contract, all changes to the price and programme for the on-street works were only to be dealt with through the Schedule Part 45 mechanism, which effectively

meant that Clause 80 was no longer relevant for changes to the on-street works. The changes were now known as Pricing Assumption Variations and not Notified Departures.

The other very important change introduced by Schedule Part 45 was that the prohibition on proceeding with On-Street Works before the value of the Change was agreed, was removed. The concept of an on-street works trigger date was introduced. This meant that if changes occurred as a result of the Pricing Assumptions (i.e. the facts and circumstances differed from the remaining Pricing Assumptions), and Infraco applied for time and money, which was then not accepted by TIE/CEC so that the gulf between what was applied for and what was certified rose to more than 21 days in time, or £750,000, then the Trigger Date occurred. What that meant was that the Joint Project Forum was to meet within 4 weeks of the Trigger Date to discuss the claim. If those differences rose to more than £1.5 million outstanding, then by clause 8.1, Infraco could suspend the On-Street Works and would only be obliged to recommence once the difference got back to £750,000 or below.

Schedule Part 45 also introduced a detailed Variation Mechanism and a Schedule of Rates and Prices for calculating what was due in respect of Pricing Assumptions Variations. It was a far more workable mechanism that the previous Schedule Part 4 and Clause 80 mechanism which had been at the centre of so many of our disputes with TIE".

461. MoV 5 is dated 15 September 2011 [**BFB00005464**].

462. **IMPLEMENTATION OF THE POST-SETTLEMENT AGREEMENT**

463. After the Settlement Agreement was signed on 15 September 2011 [**BFB00005464**], the Project moved forward with considerably more success and cooperation between the parties under the new governance structure. In contrast to the stalemates between TIE and Infraco when issues arose pre-mediation, Martin Foerder describes in his Witness Statement that issues were resolved much more efficiently post-settlement. He said:

> "*Whilst there were still a number of issues to resolve (as would be expected in a project of this size, scale and complexity), the new levels of trust built up with CEC and the new project management team as a result of the governance structure put in place by CEC, and expertly led by Colin Smith, overseen by the Council CEO meant that these issues were resolved in a timely manner and without any impact to the Programme. As the issues reduced, the number and frequency of Control meetings reduced.*" [**TRI00000118_0115, paragraph 21.3.2**]

464. One of the most significant changes implemented post-settlement was the approach to MUDFA. Martin Foerder described that, "*the new Utilities Contractor would go in just ahead of Infraco to excavate down to formation level and resolve the utility conflicts just ahead of Infraco coming on site*." [**TRI00000118_0115, paragraph 21.3.3**] The improved working relationship between Infraco and CEC allowed the parties to devise this new strategy of working, where utility diversions

were carried out essentially in parallel with the civils works. This was a more "*cost effective*" way to deliver the project [Witness Statement of Martin Foerder, **TRI00000118_0115, paragraph 21.3.3**], as Martin Foerder reinforced in his oral evidence to the Inquiry, where he said:

> "*there was a complete different approach and attitude after mediation also, most probably forced by CEC on to these public authorities, to approach the resolution of these things speedy, in an efficient and economical way, which definitely was not the case prior to mediation*." [**Public Hearing Transcript, 5 December 2017, page 172:5 to 172:10**]

465. CEC in particular was more upfront than TIE had been about the issues presented by utilities. Martin Foerder described CEC as being "*more open and honest*" in this regard, and spoke of the "*partnering*" approach which, "*led to better planning of resources and ultimately less abortive works*" [**TRI00000118_0116, paragraph 21.3.4**].

466. The introduction of Turner & Townsend had a positive impact on the utilities works post-settlement [see the Witness Statement of **Martin Foerder, TRI00000118_0116, paragraph 21.3.5**]. Turner & Townsend were aware of the difficulties associated with the utilities works and worked "*collaboratively*" with Infraco and CEC to find solutions [of Julian Weatherley, **TRI00000103_0015, answer 15**]. Julian Weatherley's evidence was that utilities works progressed in a better fashion, and for three reasons:

"*1. NcNicholas senior management commitment to the success of the project.*

2. T&T's hands on approach to the management of the utilities works.

3. A collaborative approach between the parties to work together." [**TRI00000103_0026, answer 40**]

467. Design issues were resolved with more efficiency too as a result of the greater level of cooperation between Infraco and CEC. Martin Foerder was asked about the rapid resolution of design issues after mediation, and he responded:

"…there was a complete change in governance.

And these are technical and -- the technical approval comments to be closed out which laid with CEC, basically, was -- what changed after mediation was, as I said, we had a far more open transfer and collaborated partnership approach on these issues. We had made space in our office for the CEC guys. So they were sitting together with our designer and ourselves in our offices. We had regular weekly meetings on all these issues, and so it was a joint initiative to get these all resolved. The numbers are quite dramatic, as you can see. There was still a lot outstanding when we came out of the mediation, but all these needed to be resolved to execute the works, and it has proven to work out quite well.

So I think it was far more open approach and solution-orientated approach also from the CEC guys dealing with these comments." [**Public Hearing Transcript, 5 December 2017, page 161:11 to 162:4**]

468. Martin Foerder commented also that design issues were resolved in a "*professional manner*" [**TRI00000118_0117, paragraph 21.3.9**]. The language used to describe the working relationships between the parties and the manner in which the Project was delivered is remarkably different to that pre-mediation. A recurring theme emerges from the evidence that there was trust and openness between the parties which enabled effective collaboration and project delivery. The evidence therefore demonstrates a shift in focus for the Project post-settlement which had a dramatic ameliorating effect.

469. Much of this shift in focus is attributable to CEC. Infraco were always committed to delivering the Project, and the evidence of Bilfinger witnesses has demonstrated this. However, TIE's focus had always been short-sighted and they failed to acknowledge or understand the wider implications of their strategy. A clear example of this is traffic management. TIE fixated on minimising disruption to stakeholders, at the expense of allowing works to progress effectively, whereas CEC adopted a more "*robust*" approach [Witness Statement of Martin Foerder, **TRI00000118_0116, paragraph 21.3.6**], as Martin Foerder explained:

"*Under TIE, a number of traffic management proposals put forward by BCUK were rejected by a perceived disruption factor to local stakeholders. The proposals taken forward through TIE resulted in longer protracted works that impacted on the local stakeholders for longer. The approach by CEC post mediation was very much short term pain for long term gain and delivering a more cost effective works plan that ultimately reduced programme durations. A number of the traffic management proposals developed by BCUK for TIE, whilst rejected by TIE, were taken forward by CEC post Settlement Agreement.*" [**TRI00000118_0116-0117, paragraph 21.3.7**]

470. Julian Weatherley of Turner & Townsend acknowledged that there were advantages to be gained by such "*short term pain*" with traffic management. He discusses this in paragraph 24 of his Witness Statement [**TRI00000103_0019-0020**], where he comments that the greater disruption caused by traffic management (which TIE opposed) was for a shorter period, but ultimately facilitated programme savings (which he described as "time banks"), which would allow the Project to cope with the impact of delays caused by issues such as utilities. Such a holistic view was entirely missing from the client side of the Project when TIE were actively involved.

471. However, Bilfinger acknowledges that issues did arise on the Project post-settlement, which had to be addressed. In his oral evidence, Axel Eickhorn described how disputes and issues relating to the day-to-day delivery of the Project were resolved at control meetings attended by

the senior representatives of the consortium, CEC and Turner and Townsend [**Public Hearing Transcript, 7 December 2017, page 72:24-73:9**]. The purpose of these control meetings was to avoid disputes and to provide "*a forum for all parties to share and address issues and concerns*" [Witness Statement of Julian Weatherley, **TRI00000103_0044, answer 82**]. Where differences or disagreements arose, they were dealt with more collaboratively than they had been before settlement, as Axel Eickhorn describes in his Witness Statement. He said, "*in overall terms, matters were improved by the new governance arrangements put in place post Mar Hall and the spirit of trust and co-operation generated between the parties.*" [**TRI00000171_0086 to 0087, paragraph 216.4**] Julian Weatherley expressed very similar, positive sentiments about the working relationship between the parties:

> "*In general I would describe the working relationship between the parties to be a positive one, built on mutual respect and trust. This was encouraged by the meeting structures and content and by the good working relationships between the leaders of the parties. The success of the approach was evident by the sharing of challenges within the various project meetings and the resulting working together by the parties in order to move forward positively*." [**TRI00000103_0042, answer 75**]

472. There is, therefore, an undoubted consensus that after the Settlement Agreement, the parties worked together in a much better fashion, which

contributed greatly to the success of the Project from that point onwards.

473. **Conclusion on implementation post-Settlement Agreement**

474. The Inquiry has heard a significant amount of evidence that post mediation, Infraco, CEC and Turner and Townsend worked well together to deliver the project. There were no formal disputes, and any issues arising were discussed between the parties and resolved amicably. Despite the governance risks identified by Dr Keysberg in his evidence, none of these materialised, and the relationship between Turner & Townsend, CEC and Infraco was professional and the parties made good progress in line with the revised programmes post-mediation [evidence of Martin Foerder, **Public Hearing Transcript, 5 December 2017, pages 163:21 to 164:10**]. The key to the Project's success post mediation, therefore, was the removal of TIE from Project governance. The direct effect of TIE's removal was to foster a professional, collaborative and trusting relationship between the parties with a unity of purpose and willingness to deliver the Project successfully. As Martin Foerder said, "*The focus post mediation was to deliver the tram project.*" [**TRI00000118_0115, paragraph 21.2(i)**]

475. **CONCLUSION**

476. To conclude, Bilfinger submits that the reason that the project incurred delays, cost considerably more than originally budgeted for and delivered significantly less than was projected through reductions in scope, is attributable to four main things: (a) the material and unquantifiable risks which existed at the time the Contract was entered into by TIE and Infraco; (b) the contractual allocation of risk under the Contract; (c) the manifestation of critical risks for which TIE had contractual responsibility; and (d) the interpretation and maladministration of the Contract by TIE during the course of the works.

477. Looked at from a procurement strategy, the problems which the project suffered arose because the Infraco Contract was entered into at a point in time where TIE had failed to achieve its original strategy: the design was not complete at the point at which it was novated to the Infraco; the MUDFA works had not completed; and third party approvals and other matters for which TIE retained contractual risk remained outstanding.

478. As a consequence, the Contract contained many unusual provisions (not least Schedule Part 4), which dealt in detail with the allocation of risk between the Parties, and which, in short, entitled Infraco to a Notified Departure where the facts and circumstances differed in any way from the Base Case Assumptions upon which the Contract Price had been fixed.

479. The Base Case Assumptions reflected the concerns that Infraco had during the final stages of the contract negotiation. The Parties

acknowledged that the facts and circumstances upon which the Contract Price was based did not reflect the actual facts and circumstances that were known to exist, with the result that Notified Departures would occur from day one of the Contract. In the event, this is exactly what happened. From the outset of the project, critical risks for which TIE had assumed contractual responsibility manifested themselves, resulting in an increasing entitlement to additional time and money for Infraco.

480. The difficulties which occurred were also a result of a failure by TIE to accept the intended operation of the Contract, and instead to seek to challenge Infraco on almost every aspect of the administration of the Contract. The Inquiry has heard a great deal of evidence about the relationship between the parties, and how it quickly descended into a war of attrition, with TIE developing strategies to wear the Contractor down, and even openly to create divisions within the Infraco Consortium in a misconceived attempt to drive Bilfinger out of the project.

481. At the same time, key issues of principle about how the Contract should be interpreted, and how it was truly intended to operate, were being tested through the Dispute Resolution Procedure at successive adjudications. What cannot be disputed is this: Infraco was found to be successful on every key point of principle. Bilfinger invites the Inquiry to review carefully these adjudication decisions (which cannot now be challenged and so are final and binding in law). They clearly show where success lay. It was never a case – despite what was often repeated by the former tie executives – of 'mixed success', and nor was

success 'finely balanced'. TIE lost on all key points of principle which should have resulted in it changing its approach to the administration of the Contract. Regrettably, TIE did not do so.

482. Instead, TIE seemed to be driven by a belief that it was correct on every point of principle, not least in relation to its interpretation of Pricing Assumption no. 1 and what it deemed to be covered by *'normal development and completion of designs'*. By taking such an approach, TIE prevented the proper operation of the Contract which resulted in disputes, delay, disruption and growing mistrust between the parties. Indeed, throughout 2009 and 2010, there were disputes on virtually every aspect of the Contract: the Notified Departures; the Programme; the clause 80 Change mechanism; the true causes of delay; and the extent to which TIE could insist that Infraco proceed with works which were subject to change in the absence of a TIE Change Order. This was going on at the same time as the works were physically and very materially delayed by the ongoing presence of the MUDFA contractor, with the utility diversion works only completing long after mediation at Mar Hall (they completed eventually in 2013, some 5 years later than planned).

483. Faced with a virtually impossible situation, Bilfinger in conjunction with its consortium partner, took the decision to cease all on-going good will works in late September 2010. Bilfinger submits that the evidence has shown that around this time the Scottish Ministers and CEC became aware of the fundamental cause of the difficulties which the Project was suffering: TIE and its maladministration of the Contract. Greater

involvement of CEC, the arrival of Dame Sue Bruce, and the eventual removal of TIE from the Project, ultimately helped to break the impasse and allow all parties to focus on completing the design, moving the remaining utilities and building a tram system for the City of Edinburgh. It is very telling that this eventually positive outcome was achieved without TIE. Indeed, it could not realistically have been achieved had TIE remained a key player on the project. In the end, of course, TIE was disbanded.

484. Bilfinger has been subjected to criticism, both during the project and the course of the Inquiry, that it under-priced the works; adopted a litigious attitude; inflated Estimates; and badly managed the designer (amongst other things). Bilfinger submits that these criticisms are without any proper foundation. The evidence heard in this regard has been from individuals who had never read the Contract or the adjudication decisions and who did not have true and close day to day knowledge of the project. In the majority of cases, those who were closer to the details of the Contract and the project generally were much more circumspect in the evidence given to the Inquiry, accepting that, despite their initial understanding to the contrary, Infraco was ultimately found to be correct in its interpretation of the Contract, and had performed well in difficult circumstances. In relation to the criticisms made of Bilfinger, including those noted above, Bilfinger submits that the evidence before the Inquiry simply does not support such allegations.

485. Furthermore, it is submitted that the Bilfinger witnesses[1] were, to a man, amongst the most impressive witnesses heard by the Inquiry. They each demonstrated a detailed, in-depth knowledge of the workings of the project. They were plainly doing their utmost to assist the Inquiry. They were all measured in their evidence, were composed and candid throughout, and in all key respects were unshaken by cross-examination. The Bilfinger witnesses took real care in considering the questions and in giving their answers such that the Inquiry can have real confidence in the quality of their evidence. Each of the Bilfinger witnesses was entirely credible and wholly reliable, and the Inquiry should find them so.

486. Bilfinger does accept that it adopted a commercially robust approach to defending itself contractually, but it had to do so in the circumstances which it encountered: in particular, in the face of TIE's intransigence and inability to accept the reality of the situation. However, at the same time as doing so, Bilfinger continuously looked at ways of progressing the project, be that through the Princes Street Supplemental Agreement, the OSSA, Projects Carlisle and Phoenix and ultimately the mediation which took place at Mar Hall.

487. The conclusion which can be drawn from the evidence of the majority of witnesses involved in the Mar Hall mediation was that the outcome was a positive development. The parties found a way to move forward which was a compromise for all, but which allowed the trams network to be built and the deadlock broken. A very significant part of the successful

[1] Scott McFadzen, Richard Walker, Ian Laing, Dr Keysberg, Martin Foerder and Jim Donaldson

conclusion of the project after the mediation was the removal of TIE. Under CEC's leadership and with a change in governance and a more collaborative way of working, the project concluded without any further significant disputes between the parties.