

Witness Name: Axel Eickhorn

Statement No: third

Dated: 18 March 2018

## THE EDINBURGH TRAM INQUIRY

---

### The Second Supplemental Witness Statement of Axel Eickhorn

---

I, Axel Eickhorn, will say as follows:

#### Introduction

1. I refer to my witness statements dated 4 October 2017 and 20 November 2017, both of which have been submitted to the Edinburgh Tram Inquiry (the "Inquiry").
2. During my oral evidence to the Inquiry, there were several matters upon which I was questioned by the Inquiry which needed further investigation in order to provide a helpful and meaningful response. Accordingly, the purpose of this second supplemental witness statement is to provide the Inquiry with further information on:
  - 2.1 the development of and rationale behind the pricing proposed by Siemens Plc ("Siemens") for the completion of its works from the Construction Works Price (as defined in the Infraco Contract **(CEC00036952)** in Schedule Part 4 **(USB0000032)**) through the Project Carlisle 1 **(CEC00183919)**, Project Carlisle 2 **(TIE00667410)** and Project Phoenix **(BFB00053258)** settlement proposals to the heads of terms agreed on or around 10 March 2011 **(CEC02084685)** between Siemens, Bilfinger Berger UK Limited ("Bilfinger") and tie Limited ("tie") at the Mar Hall mediation and subsequently, the settlement agreement dated 15 September 2011 **(CEC02085585)** (the "Settlement Agreement").
  - 2.2 the vesting of materials and equipment to the City of Edinburgh Council ("CEC").
  - 2.3 Siemens' mobilisation of its workforce following execution of the Infraco Contract in May 2008.

Confidential

TRI00000276\_0001

## Siemens' price proposals

### The Construction Works Price

3. The development of Siemens' share of the price to complete the works for the Edinburgh Tram project is summarised in **Table 1** below. This table shows both the movement in the Siemens' price (column 3) and of the Service Commencement Date (Section D) (column 4).
4. The "Service Commencement Date" (Section D) is the first day that the Edinburgh Tram line would be operational and available for use by the public. Between the civil works being completed, and the Service Commencement Date, Siemens role was to carry out system testing to ensure the tram was safe to use. Any delays to the Service Commencement Date meant that Siemens had to maintain its site presence for longer in order to complete these testing works and accordingly, such delays would increase Siemens costs.
5. The slippage of the Service Commencement Date therefore had a material impact on the price proposals submitted by Siemens, as did, to a lesser extent, the revisions to Siemens' scope of works.

**Table 1**

Date of document	Stage	Siemens' price for the completion of its works	Service Commencement Date	Completion of Airport to Haymarket Key Date	Completion Airport to York Place Key Date
14/05/2008	Original Contract	£101,679,003	16/07/2011	09/11/2010	N/a
29/07/2010	Project Carlisle 1	£126,901,621	19/11/2012	22/05/2012	N/a
11/09/2010	Project Carlisle 2	£118,601,221	18/12/2012	21/06/2012	N/a
24/02/2011	Project Phoenix	£136,881,719	22/09/2013	11/03/2013	N/a
15/09/2011	Settlement Agreement	£125,881,719	08/07/2014	21/08/2013	09/01/2014 (on-street works priced separately)

Project Carlisle 1

6. The Project Carlisle 1 settlement proposal was submitted to tie on 29 July 2010. This proposal was based upon a more limited scope of works than envisaged in the Infraco Contract and allowed for the Edinburgh Tram line from the Edinburgh Airport to a Terminus Point (to be defined) at the east end of Princes Street.
7. The key dates from the Project Carlisle 1 programme are reproduced below in **Table 2**.

**Table 2**

Activity ID	Activity Name	Original Duration	Start	Finish	Total Float
<b>Project Carlisle Programme</b>		588d	12-Jul-10	19-Nov-12	0d
<b>KEY DATES</b>		426d	10-Mar-11	19-Nov-12	0d
1000	Deliver/ handover of all Siemens material to tie	0d		10-Mar-11*	0d
313	Section Completion A	0d		24-May-11	375d
314	Section Completion B	0d		15-Sep-11	296d
281	Construction Completion Phase 1a Edinburgh Airport to Haymarket	0d		22-May-12	1d
315	Section Completion C	0d		20-Aug-12	65d
310	Commencement of Revenue Service Phase 1a Edinburgh Airport to Haymarket	0d		19-Nov-12	0d
325	Section Completion D	0d		19-Nov-12	0d
<b>COMMISSIONING PHASE EDINBURGH AIRPORT TO HAYMARKET</b>		129d	22-May-12	18-Nov-12	0d

8. The Section Completion C date is the date on which Siemens was to commence its systems testing and commissioning works, which works had to be completed by the Service Commencement Date (the Section Completion D date). As is clear from the table above, the proposed Service Commencement Date in Project Carlisle 1 was 19 November 2012, almost 16 months later than the original Service Commencement Date envisaged in the Infraco Contract of 16 July 2011.
9. Accordingly, Siemens' prolongation costs would be further increased under Project Carlisle 1 than they would under the Infraco Contract as Siemens would be required to employ staff and lease accommodation and materials (and other similar costs) for the additional time required to complete the construction works and the testing and commissioning phase. This was therefore accounted for as part of the price proposed by Siemens for the purposes of Project Carlisle 1.
10. Siemens proposed share of the Guaranteed Maximum Price for Project Carlisle 1 was £126,901,621. The breakdown of this price is contained at Appendix 1.2 of the Project Carlisle 1 proposal, which is reproduced in **Table 3** below.

Confidential

**ETN - Edinburgh Tram Network  
Project Carlisle - Pricing**

**date: 29-07-2010**

**Overall Summary**

Original Contract Value - Original CPA Split	£96.917.006,78
Deductions Project Carlisle - Airport to Terminal Point	-£3.704.441,04
Additional Costs Project Carlisle - Airport to Terminal Point <sup>1</sup>	£26.005.861,69
CPA Project Carlisle - Airport to Terminal Point	£119.218.427,43
Change Orders	£5.308.309,69
Additional GMP Carlisle components	£2.374.883,46
Total GMP Project Carlisle <sup>2</sup>	£126.901.620,58

**Table 3**

11. I should explain that Siemens' share of the original Construction Works Price is £101,679,003 in the Infraco Contract (as can be seen in **Table 1**). This sum however included estimated amounts in respect of Value Engineering works and Provisional Sums (which were subject to amendment by way of the change mechanism contained in Schedule Part 4 of the Infraco Contract).
12. Siemens' share of the original contract price, when excluding Value Engineering and Provisional Sums, was £96,917,007 (please see Appendix A of Schedule Part 4 of the Infraco Contract). The breakdown of this figure can be seen at document **CEC00555849**.
13. When preparing pricing proposals for settlement offers, including Project Carlisle 1, Siemens did not include estimated amounts in respect of Value Engineering and Provisional Sums as one of the main purposes of the proposals was to try to give tie cost certainty as far as possible.
14. Accordingly, the base price used for Siemens calculations of its settlement proposals was the £96,917,007. Siemens then added on the costs which it was proposing to fix for the Provisional Sums and Value Engineering to demonstrate clearly the fixed cost proposed for these works.
  - 14.1 An example of this can be seen from the "Additional GMP Carlisle Components" line item of £2,374,883. This line item includes the sum of £2,087,086 for Urban Traffic Control measures. However, the Urban Traffic Control measures previously formed part of the "Provisional Sums" listed in Schedule Part 4, for which an estimated figure was included as part of the Siemens' share of the original Construction Works Price of £101,679,003.

Confidential

**TRI00000276\_0004**

15. The works comprising the line items in **Table 3** are detailed on pages 30 to 33 of the Project Carlisle 1 submission but in summary:
- 15.1 the “*Deductions Project Carlisle – Airport to Terminal Point*” figure represents the amount that Siemens deducted from its initial proposed price as a consequence of the reduced scope for the works proposed under Project Carlisle 1; and
- 15.2 the “*Additional Costs Project Carlisle – Airport to Terminal Point*” mostly relate to the additional costs incurred by Siemens as a consequence of the prolongation of the works, and consequential extended site presence (as described above).

Project Carlisle 2 pricing proposal

16. The revised Project Carlisle 1 proposal, known as the Project Carlisle 2 proposal, was submitted to tie on 11 September 2010. This proposal was based upon a further revised scope for the Edinburgh Tram line which started at Edinburgh Airport but which unlike Project Carlisle 1 excluded works east of Haymarket.
17. The key dates from the Project Carlisle 2 programme are reproduced below in **Table 4**.

**Table 4**

Activity ID	Activity Name	Original Duration	Start	Finish	Total Floet
<b>Project Carlisle Programme _short to HAY (100912)</b>		571d	03-Sep-10	18-Dec-12	0d
<b>KEY DATES</b>		447d	10-Mar-11	18-Dec-12	0d
1000	Deliver/ handover of all Siemens material to tie	0d		10-Mar-11*	0d
313	Section Completion A	0d		09-Jun-11	381d
314	Section Completion B	0d		20-Dec-11	245d
281	Construction Completion Phase 1a Edinburgh Airport to Hayma...	0d		21-Jun-12	0d
315	Section Completion C	0d		19-Sep-12	0d
310	Commencement of Revenue Service Phase 1a Edinburgh Airpo...	0d		18-Dec-12	0d
325	Section Completion D	0d		18-Dec-12	0d
<b>COMMISSIONING PHASE EDINBURGH AIRPORT TO HAYMARKET</b>		128d	21-Jun-12	18-Dec-12	0d

18. The proposed Service Commencement Date (the Section Completion D date) in Project Carlisle 2 was 18 December 2012, which is some 17 months later than the original Service Commencement Date in the Infraco Contract of 16 July 2011. Accordingly, this would result in Siemens incurring prolongation costs for an additional 17 months in order to complete the Edinburgh tram project.
19. At **Exhibit AE1**, I have appended an expanded version of a table which featured in the Project Carlisle 2 proposal submitted to tie, which clearly indicates that the additional costs Siemens would incur were mainly down to this prolongation of Siemens’ site presence. In particular, please refer to the “EOT” column for the “Additional Cost Project Carlisle – Airport to Haymarket” which shows that an additional £20,612,906 would be incurred by Siemens as a result of the slippage of the Service Commencement Date.

Confidential

20. The Siemens' share of the Guaranteed Maximum Price for Project Carlisle 2 was proposed as £118,601,221. The breakdown of this price is contained at page 29 and Appendix 1.2 of the Project Carlisle 2, which is reproduced in **Table 5** below.

**Table 5**

		Carlisle
Siemens UK	UK Project Management	13,324,667
Siemens UK	UK System Engineering	3,001,626
Siemens UK and BAM	Trackwork	43,471,285
Siemens UK	UK Depot Workshop	2,028,342
Siemens UK	UK Electrification	6,003,202
Siemens UK	Infrastructure	3,165,035
Siemens UK	Insurance, Bonds and Financial Guarantees	1,712,358
Siemens UK	Control & Information	5,111,939
Siemens UK	Communications	5,009,483
Siemens AG	Electrification, Automation and Depot Equipment	29,688,648
	Change Orders	5,123,140
	Additional Carlisle Components	941,496
Overall Project	Total	118,601,221

21. Counsel for the Inquiry commented during my oral evidence that it is difficult to compare Siemens' breakdown of price for Project Carlisle 2 with the breakdown that Siemens provided for Project Carlisle 1.
22. To assist the Inquiry, I reproduce below in **Table 6** a summary of the internal calculation that was used by Siemens at the time to prepare the revised price proposal for Project Carlisle 2. At **Exhibit AE2**, I have appended the document from which Table 6 has been extracted, dated 10 September 2011.

**Table 6**

**ETN - Edinburgh Tram Network  
Project Carlisle - revised Pricing**

**date: 11-Sep-2010**

**Overall Summary**

Original Contract Value - Original CPA Split	£96,917,006.78
Deductions Project Carlisle - Airport to Haymarket	-£4,993,320.56
Additional Costs Project Carlisle - Airport to Haymarket <sup>1</sup>	£20,612,906.46
CPA Project Carlisle - Airport to Haymarket	£112,536,592.68
Change Orders	£5,123,140.01
Additional GMP Carlisle components	£941,495.76
Total GMP Project Carlisle <sup>2</sup>	£118,601,228.45

Confidential

23. As can be seen in **Table 6**, the price proposed by Siemens for Project Carlisle 2 was prepared using the same methodology for its calculations as in Project Carlisle 1. Project Carlisle 2 however proposed a reduced price on the basis that the works included in the proposal did not extend beyond Haymarket.
24. The "Additional GMP Carlisle components" line item in **Table 6** includes costs for Urban Traffic Control measures as it did in the Project Carlisle 1 proposal. However, the costs of the Urban Traffic Control measures for Project Carlisle 2 were much less than in Project Carlisle 1 as the scope of the proposal only covered Off-Street Works and not On-Street Works (which was where much of the Urban Traffic Control measure cost would be incurred given the number and complexity of junctions in the On-Street section of the track).
25. Further, as the Project Carlisle 2 proposal did not include the On-Street Works, Siemens was able to fix its costs with more certainty (as these works were impacted by a much lesser degree by the delayed MUDFA works which mostly affected the On-Street Works) and so less risk needed to be factored in to the cost proposed. This allowed Siemens to reduce its price for Project Carlisle 2.
26. Counsel to the Inquiry questioned me on the amount Siemens included in its settlement proposals in respect of system-wide costs. To explain, the system-wide costs mostly related to design and project management costs. At the point in time that Siemens was preparing its price for Project Carlisle 1 and Project Carlisle 2, much of these system-wide costs had already been committed or incurred, and the design works had mostly been completed. Consequently, the total value of the system-wide costs does not directly correlate to the scope of the works to be completed under the settlement proposals, and a reduction in scope would certainly not necessitate a proportionate reduction in the value of the system-wide costs. This can be seen from the table at **Exhibit AE3** which shows the allocation of system-wide costs in respect of the 'Original CPA Split' and the two Project Carlisle proposals.

#### The Project Phoenix proposal

27. The Project Phoenix proposal was submitted to tie on 24 February 2011 (**BFB00053258**). This proposal was based upon a truncated route between Edinburgh Airport and Haymarket Viaduct.
28. The key dates from the Project Phoenix programme are reproduced below in **Table 7**.

**Table 7**

Activity ID	Activity Name	Original Duration	Start	Finish	Total Float
<b>Project Phoenix Proposal rev 2</b>		613	31-Mar-11	22-Sep-13	0
<b>KEY DATES</b>		612	31-Mar-11	22-Sep-13	0
1000	PROJECT PHOENIX - Signed Agreement	0		31-Mar-11*	0
1050	Re - mobilisation	20	31-Mar-11	29-Apr-11	14
1100	Deliver/ handover of all Siemens material to tie	0		12-Sep-11*	0
313	Section Completion A	0		16-Dec-11	412
314	Section Completion B	0		24-Sep-12	225
281	Construction Completion Phase 1a Edinburgh Airport to Haymarket	0		11-Mar-13	10
315	Section Completion C	0		24-Jun-13	0
310	Commencement of Revenue Service Phase 1a Edinburgh Airport to Haymarket	0		22-Sep-13	0
325	Section Completion D	0		22-Sep-13	0
<b>COMMISSIONING PHASE EDINBURGH AIRPORT TO HAYMARKE</b>		125	25-Mar-13	22-Sep-13	0

29. As can be seen from **Table 7**, the Service Commencement Date (Section Completion D) is 22 September 2013, which is around 26 months later than the Service Commencement Date of 16 July 2011 in the Infraco Contract. As with the previous proposals, Siemens would therefore incur prolongation costs for an additional 26 months in order to complete its works on the Edinburgh Tram line.
30. Siemens' share of the Project Phoenix price proposal was £136,881,719 and a breakdown of this sum is contained at Appendix 1.2 of the Project Phoenix Proposal which is reproduced in **Table 8** below.

**Table 8**

**Overall Summary**

Siemens Transport Solutions (UK)	£84,967,487.47	
<b>Project Management</b>		<b>£17,599,044.51</b>
Overall Project Management		£4,795,055.92
Commercial/Contract Management & Legal		£5,237,597.37
SCE/Scheduling		£2,311,844.41
PM/		£745,757.03
Site Management		£2,701,385.78
Technical Contract Management		£807,404.00
<b>Track Work</b>		<b>£48,753,566.44</b>
<b>System Engineering</b>		<b>£3,710,675.95</b>
Depot Workshop Equipment		£2,230,573.11
<b>Core HVLV</b>		<b>£1,997,897.20</b>
<b>Infrastructure</b>		<b>£3,516,934.84</b>
Storage		£1,954,240.00
Security		£320,398.00
IT Infrastructure		£585,186.64
Site offices temp		£171,284.01
Other -office costs		£485,826.19
<b>Inclusions for Insurance, Bonds, Guarantees</b>		<b>£372,666.88</b>
<b>Finance Costs</b>		<b>£3,129,591.54</b>
Risk		3656577
<b>Subcontracts:</b>		
<b>Rail Automation UK</b>	<b>£11,484,175.13</b>	
Telecomms (FTN York)		£5,059,277.30
Control & Information (Ashby ,Transmission)		£6,424,898.83
<b>Electrification UK</b>	<b>£6,130,889.31</b>	
<b>Traffic Solutions UK</b>	<b>£1,900,353.40</b>	
<b>Siemens AG (Germany)</b>	<b>£30,153,187.24</b>	
<b>Subtotal</b>	<b>£134,716,092.55</b>	
<b>Changes</b>	<b>£2,165,626.82</b>	
<b>Total</b>	<b>£136,881,719.37</b>	

Confidential



31. As it is clear from **Table 8**, a different methodology was adopted to prepare the Project Phoenix proposal than was used to prepare the previous Project Carlisle proposals (which proposals were based on a system of additions and omissions from the original contract value base figure).
32. Notwithstanding that a different methodology was used, it is my view that by comparing the proposals' prices allocated to the various elements of the Siemens scope, a meaningful comparison can be undertaken by any individual reasonably familiar with the details of the Edinburgh Tram project.
33. For the benefit of the Inquiry, I have therefore prepared and included a comparison at **Table 9** below.

**Table 9**

On-Shore/Off-Shore/System	Carlisle Price	Comparable Phoenix Price	Price movement
Siemens Transport Solutions [UK]:			
UK Project Management	13,324,667	17,599,045	4,274,378
UK System Engineering	3,001,626	3,710,676	709,050
Trackwork	43,471,285	48,753,566	5,282,281
UK Depot Workshop	2,028,342	2,230,573	202,231
UK Electrification	6,003,202	6,130,889	127,687
Infrastructure	3,185,035	3,516,935	331,900
Insurance, Bonds and Financial Guarantees	1,712,358	372,687	-1,339,671
Rail Automation:			
Control & Information	5,111,939	5,059,277	-52,662
Communications	5,009,483	6,424,898	1,415,415
Siemens AG:			
Electrification, Automation and Depot Equipment	29,688,648	30,153,187	464,539
	112,536,585	123,951,733	11,415,148
Change Orders	5,123,140	2,165,627	- 2,957,513
Additional Carlisle Components	941,496	-	- 941,496
Core HVLV		1,997,897	1,997,897
Traffic Solutions		1,980,353	1,980,353
Finance costs		3,129,592	3,129,592
Risk		3,656,517	3,656,517
<b>Overall Project Price</b>	<b>118,601,221</b>	<b>136,881,719</b>	<b>18,280,498</b>

34. It is important to highlight that in the period between submission of the Project Carlisle 2 and Project Phoenix proposals, virtually all aspects of the works for the Edinburgh Tram line were adversely affected by the ongoing disputes between the parties regarding the interpretation and implementation of the Infraco Contract.
35. During this period, there had also been a cessation of all the "goodwill works" (which mostly fell within Bilfinger's scope of works), and work on the Edinburgh Tram Project had effectively halted. Consequently, as part of the Project Phoenix Proposal there was an express recognition of the need to remobilise site

resources and an acknowledgement of a consequential impact of the delays that had been experienced on the programme.

36. Therefore, whilst there was only a five-month gap between submission of the Carlisle 2 and the Project Phoenix proposals, the revised programme underpinning Project Phoenix was much more extensive than in Project Carlisle 2 and required Siemens to be on site for a further nine months. Therefore, the time interval alone between Project Carlisle 2 and Project Phoenix proposals is not the dominant reason for the increase in price between these two proposals.
37. The comparison shown in **Table 9** illustrates how these prolongation costs increased the Siemens' price for each of its relevant business units. The table also shows an increase in the trackwork price, which increase was also predominantly a consequence of the extended project duration which necessitated a longer site presence for Siemens' sub-contractor, BAM Rail BV.
38. In addition to Siemens prolongation costs, Siemens also had to factor in the following into its pricing submission for Project Phoenix:
  39. the number of Pricing Assumptions were significantly reduced in Project Phoenix to provide more price certainty for tie. This inevitably meant more risk had to be factored into the price proposed by Siemens to take account the risk that Siemens' itself was exposed to in incurring higher costs than envisaged; and
  40. there were significant increases in the provisions for finance and risk costs. The increase for finance costs reflected the extent of ongoing under-payment from tie to Infracore, which meant Siemens had to finance its cash flow deficit. Siemens had paid out for materials. Further, Siemens was exposed to adverse currency fluctuations until payment was received from tie. Siemens had to pay to hedge against this risk, which arrangement needed to be extended given the extension of time proposed for the project.

#### The Mar Hall mediation and the Settlement Agreement price

41. At the Mar Hall mediation, Siemens and Bilfinger agreed an Off-Street Works price of £362,500,000. This sum was based on completion of a similar scope and programme of works as detailed in the Project Phoenix Proposal, which did not include the On-Street Works. This price did however include the Prioritised Works (including the Princes Street Remedial Works) and the Secondary Phase 1a design (which did not form part of Project Phoenix).
42. No specific programme for the works was agreed at Mar Hall, albeit that the parties undertook to agree an optimum programme and that the Prioritised Works would commence on or before 1 May 2011.

43. Subsequently as part of the Settlement Agreement, a programme of works was agreed between the parties namely Programme Rev 3a.
44. The key dates in Programme 3a are reproduced in **Table 10** below.

**Table 10**

Activity ID	Activity Name	Original Duration	Start	Finish	Total Float
Programme following Mediation 8-12 March 2011 rev 3a 110628		778	31-Mar-11	20-May-14	0
<b>KEY DATES</b>		766	15-Apr-11	20-May-14	0
1060	Sign MOV for carrying out the Prioritised Works	0		15-Apr-11*	0
1070	Re - mobilisation - Prioritised Works	10	15-Apr-11	03-May-11	99
1000	Sign MOV in Respect of Off Street Works (Other than Prioritised Works) and the On Street Works	0		01-Jul-11*	0
1050	Re - mobilisation	44	01-Jul-11	02-Sep-11	0
313	Section Completion A	0		16-Dec-11*	0
1100	Deliver/ handover of all remaining Siemens material to tie	0		10-Jan-12*	0
314	Section Completion B	0		07-Feb-13*	0
281	Construction Completion Phase 1a Edinburgh Airport to Haymarket	0		29-Jul-13	103
291	Construction Completion Edinburgh Airport to York Place	0		21-Nov-13	0
345	Section Completion C	0		19-Feb-14	0
310	Commencement of Revenue Service Phase 1a Edinburgh Airport to York Place	0		20-May-14	0
335	Section Completion D	0		20-May-14	0
<b>COMMISSIONING PHASE AIRPORT TO YORK PLACE</b>		118	22-Nov-13	20-May-14	0

45. I should point out that it took a further six / seven months to formalise the agreement reached at Mar Hall on the Off-Street Works Price and the revised programme based on programme rev 3a into the Settlement Agreement. The cost of this delay was absorbed by Siemens for the Off-Street works and Siemens did not seek to renegotiate the Off-Street Works price when concluding the Settlement Agreement. The impact of the change in the Section D completion date for the full line to Picardy Place (which now included the On-Street works) was reflected in the price for the On-Street sections. In this regard I would like to emphasize that the critical path of the programme was driven by the On-Street works. Hence, the addition of the on-street works inevitably pushed out the overall Section D completion date and consequently whilst the cost of the physical construction works was not significantly affected, the overall cost of the project was impacted by this programme change, due to the arising prolongation costs.
46. Further, as the Inquiry may note, the Service Commencement Date for the Settlement Agreement is shown in **Table 1** as 8 July 2014 and not 20 May 2014 as shown in **Table 10** above. This is because shortly before the Settlement Agreement was concluded, a further change in the programme was agreed. Instead of delaying the conclusion of the Settlement Agreement to take into account this change, the parties agreed that a change order under Schedule Part 4 would be raised to formalise the change in timetable after the Settlement Agreement had been concluded.

47. Siemens' share of this Off-Street Works Price agreed at Mar Hall and finalised in the Settlement Agreement was £125,881,719. This represented a commercial discount of £11,000,000 given that Siemens' Project Phoenix price for a comparable scope of works amounted to £136,881,719. Siemens made significant concessions at the Mar Hall mediation, which in my view, resulted in Siemens offering a better price for the Off-Street Works than originally offered in the Project Carlisle 2 proposal, despite Siemens being required to attend site for a longer period of time and agreeing to carry out additional works such as the Princes Street Remedial Works and the Secondary Phase 1a design.
48. For completeness, the Settlement Agreement also included a Target Price for the On-Street Works based on agreed rates. I will not explain the basis of Siemens' pricing for this Target Cost for the On-Street Works, as I have already gone into detail on this subject in my witness statement dated 4 October 2017.

#### **Vesting of Materials and Equipment to CEC**

49. As part of Minute of Variation 4 dated 20 May 2011 (**CEC01731817**), Siemens agreed to hand over and transfer title of certain material and equipment to the CEC.
50. One of the reasons that Minute of Variation 4 was entered into was that the material in question had been paid for by Siemens and already used in the construction of the tram line or was held in storage. However, Siemens had not been paid for this material by tie as payment depended on completion of milestones which were continually delayed given the issues affecting the project and the disputes that arose. Accordingly, Minute of Variation 4 was entered into to accelerate payment to allow Siemens to recover the costs it had incurred. The parties' negotiations in this regard commenced almost a year earlier with a request from Siemens (**CEC01927619**).
51. Accordingly and as explained during my oral evidence to the Inquiry, that the bulk of the materials that were transferred to the CEC as part of Minute of Variation 4 had already been used in what is known as Initial Phase 1a.
52. I was asked to indicate by the Inquiry what proportion, roughly, had already been used in construction and what was left in storage. Having had time to reflect and investigate, I estimate that around 90% of the materials handed over and transferred to CEC had already been used in the construction of the Edinburgh Tram line. Additionally, it should be noted that after conclusion of the Settlement Agreement, Siemens worked with the CEC to reduce costs in respect of materials e.g. by agreeing beneficial terms for the cancellation of further orders which were no longer required given the agreed revised scope. I append at **Exhibit AE4** a table which shows the savings that had been achieved from Siemens actions on behalf of CEC.

## Mobilisation

53. Finally, as explained in my first witness statement dated 4 October 2017, following execution of the Infraco Contract, Siemens did not delay in mobilising its workforce, and instructed its sub-contractor BAM Rail BV to commence the sub-contracted works almost immediately thereafter on 22 May 2008.
54. Since providing my witness statement dated 4 October 2017, I have since obtained a copy of the Instruction to Commence issued by Siemens Transportation Systems to BAM Rail BV, dated 22 May 2008, and enclose a copy of the this document at **Exhibit AE5** to assist the Inquiry.

## STATEMENT OF TRUTH

I believe that the facts in this second supplementary witness statement are true.

Signed:

Axel Eickhorn

Date:

Tehran, 18-Mar-2018

Witness Name: Axel Eickhorn  
Statement No: third  
Dated: 18 March 2018

**THE EDINBURGH TRAM INQUIRY**

---

**Exhibit AE1**

---

Confidential

TRI00000276\_0014

		CPA	Spread risk	Install	EOT	Carlisle
<b>Siemens UK</b>	Total Personnel Costs	6,558,856	500,000		5,648,479	12,707,335
	Total Services Plan	151,326				151,326
	Total Material Plan	466,005				466,005
	<b>UK Project Management</b>	7,176,187	500,000	0	5,648,479	13,324,667
<b>Siemens UK</b>	<b>UK System Engineering</b>	2,278,266		0	723,360	3,001,626
<b>Siemens UK and BAM</b>	<b>Trackwork</b>	34,137,072	1,500,000	-1,755,765	9,589,978	43,471,285
<b>Siemens UK</b>	<b>UK Depot Workshop</b>	1,771,081		0	257,261	2,028,342
<b>Siemens UK</b>	<b>UK Electrification</b>	5,543,941	459,261	0	0	6,003,202
<b>Siemens UK</b>	<b>Infrastructure</b>	588,362	1,000,000		1,596,673	3,185,035
<b>Siemens UK</b>	<b>Insurance, Bonds and Financial Guarantees</b>	4,854,804	-3,459,261		316,815	1,712,358
<b>Siemens UK</b>	<b>Control &amp; Information</b>	5,268,070		-156,131	0	5,111,939
<b>Siemens UK</b>	<b>Communications</b>	5,051,809		-422,483	380,157	5,009,483
<b>Siemens AG</b>	<b>Electrification, Automation and Depot Equipment</b>	30,247,407		-2,658,942	2,100,183	29,688,648
	<b>Change Orders</b>	<b>33,453,189</b>		<b>1,755,765</b>	<b>6,444,868</b>	<b>5,123,140</b>
	<b>Additional Carlisle Components</b>	<b>29,333,420</b>		<b>295,169</b>	<b>3,318,408</b>	<b>941,496</b>
<b>Overall Project</b>	<b>Total</b>	<b>96,916,999</b>	<b>-</b>	<b>- 4,993,321</b>	<b>20,612,906</b>	<b>118,601,221</b>

Confidential

Witness Name: Axel Eickhorn  
Statement No: third  
Dated: 18 March 2018

**THE EDINBURGH TRAM INQUIRY**

---

**Exhibit AE2**

---

Confidential

TRI00000276\_0016





## ETN - Edinburgh Tram Network Project Carlisle - revised Pricing

date: 11-Sep-2010

### Overall Summary

Original Contract Value - Original CPA Split	£96,917,006.78
Deductions Project Carlisle - Airport to Haymarket	-£4,993,320.56
Additional Costs Project Carlisle - Airport to Haymarket <sup>1</sup>	£20,612,906.46
CPA Project Carlisle - Airport to Haymarket	£112,536,592.68
Change Orders	£5,123,140.01
Additional GMP Carlisle components	£941,495.76
Total GMP Project Carlisle <sup>2</sup>	£118,601,228.45

<sup>1</sup>) Total amount of the Offshore Euro price is: € 3'822.327,56.  
Offshore Euro rates are converted to GBP at the rate: 0,83333 (GBP/EUR).  
We reserve the right to adjust the exchange rate (Euro to GBP) on the issue date of the Change Order

<sup>2</sup>) We reserve the right to adjust the total GMP Project Carlisle should the payment schedule to be agreed between the parties result in additional / unanticipated capital financing costs and / or charges.



ETN - Edinburgh Tram Network date: 11-Sep-2010

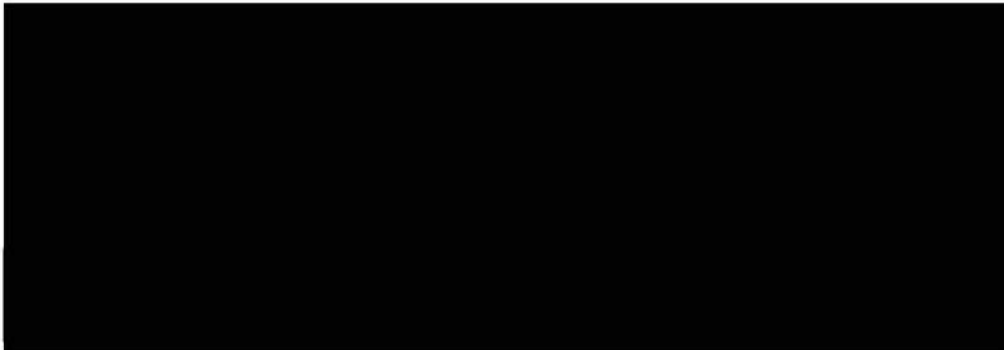
Project Carlisle - revised Pricing

Original contract value - Original CPA Split		STS York Telecons GBP	Transmission GBP	STS NAMT Train Control GBP	STC Traffic Signals GBP	SL TPE & OHLE GBP	Services TRW GBP	STS TR Depot GBP	STS DL PM & Periles GBP	BAM TRW GBP	
<b>System Wide</b>											
Amount of:-											
Professional											
Design											
Accommodation Works											
Train Supply											
Testing & Commissioning											
Supervisory Control & Comms Systems											
Spares											
Third Party Works											
<b>Amount of System Wide</b>											
<b>Section A - Airport to Haymarket</b>											
Amount of:-											
Professional											
Design											
Track and Formation											
Timetables & Equipment											
Depot											
Highways											
Buildings											
Interchanges											
Structures											
Supervisory Control & Comms Systems											
Timetable Equipment											
OHL & Sub-stations											
Spares											
Risk											
<b>Amount of Section A - Airport to Haymarket</b>											
<b>Section B - Haymarket to Newhaven</b>											
Amount of:-											
Professional											
Design											
Track and Formation											
Timetables & Equipment											
Highways											
Buildings											
Interchanges											
Structures											
Supervisory Control & Comms Systems											
Timetable Equipment											
OHL & Sub-stations											
Spares											
Risk											
<b>Amount of Section B - Haymarket to Newhaven</b>											
<b>Original contract value - Original CPA Split</b>											



ETN - Edinburgh Tram Network date: 11-Sep-2010

Deductions installation project Carlisle - Airport to Haymarket		STS Yarn Telecoms GBP	Telecoms GBP	STS RA MT Tram Control GBP	STC Traffic Signals GBP	EL TPS & D/L GBP	Siemens TRW GBP	STS TK Depot GBP	STS DE PM & Prelims GBP	BAN TRW GBP
<b>System Wide</b>										
Amount of:-										
	Preliminaries									
	Design									
	Accommodation Works									
	Tram Supply									
	Testing & Commissioning									
	Supervisory Control & Commo Systems									
	Spare									
	Third Party Works									
	<b>Amount of System Wide</b>									
<b>Section A - Airport to Haymarket</b>										
Amount of:-										
	Preliminaries									
	Design									
	Track and Formation									
	Tramstop & Equipment									
	Depot									
	Highways									
	Buildings									
	Interchanges									
	Structures									
	Supervisory Control & Commo Systems									
	Tramstop Equipment									
	OH & Sub-stations									
	Spare									
	Risk									
	<b>Amount of Section A - Airport to Haymarket</b>									
<b>Section B - Haymarket to Newhaven</b>										
Amount of:-										
	Preliminaries									
	Design									
	Track and Formation									
	Tramstop & Equipment									
	Highways									
	Buildings									
	Interchanges									
	Structures									
	Supervisory Control & Commo Systems									
	Tramstop Equipment									
	OH & Sub-stations									
	Spare									
	Risk									
	<b>Amount of Section B - Haymarket to Newhaven</b>									
Deductions installation project Carlisle - Airport to Haymarket										



date: 11-Sep-2010

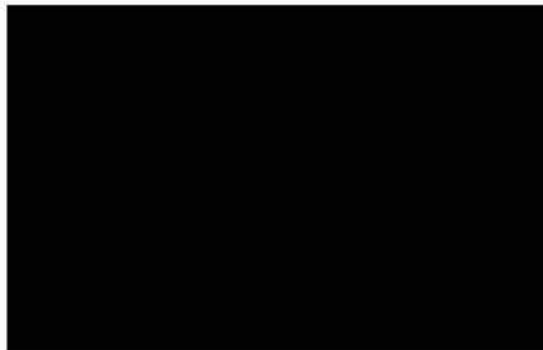
**Deductions material & equipment project Carlisle - Airport to Haymarket**

System Wide	
Amount of:-	
Preliminaries	
Design	
Accommodation Works	
Train Supply	
Testing & Commissioning	
Supervisory Control & Comms Systems	
Spare	
Third Party Works	
<b>Amount of System Wide</b>	

Section A - Airport to Haymarket	
Amount of:-	
Preliminaries	
Design	
Track and Formation	
Tramstop & Equipment	
Depot	
Highways	
Buildings	
Interchanges	
Structures	
Supervisory Control & Comms Systems	
Tramstop Equipment	
OH & Sub-stations	
Spare	
Risk	
<b>Amount of Section A - Airport to Haymarket</b>	

Section B - Haymarket to Newhaven	
Amount of:-	
Preliminaries	
Design	
Track and Formation	
Tramstop & Equipment	
Highways	
Buildings	
Interchanges	
Structures	
Supervisory Control & Comms Systems	
Tramstop Equipment	
OH & Sub-stations	
Spare	
Risk	
<b>Amount of Section B - Haymarket to Newhaven</b>	

**Deductions material & equipment project Carlisle - Airport to Haymarket**





ETN - Edinburgh Tram Network date: 11-Sep-2010

**Project Carlisle - Pricing**

**Additional Costs project Carlisle - Airport to Haymarket**

STS York Telecoms GBP	Transmitters GBP	STSRAMT Tram Control GBP	STC Traffic Signals GBP	EL TPS & CHLE GBP	Siemens TRW GBP	STS TK Depot GBP	STS DE PM & Prelims GBP	BAM TRW GBP
-----------------------	------------------	--------------------------	-------------------------	-------------------	-----------------	------------------	-------------------------	-------------

System Wide	
Amount of:	
Preliminaries	
Design	
Accommodation Works	
Tram Supply	
Testing & Commissioning	
Supervisory Control & Comm Systems	
Spares	
Third Party Works	
<b>Amount of System Wide</b>	

--	--	--	--	--	--	--	--	--

Section A - Airport to Haymarket	
Amount of:	
Preliminaries	
Design	
Track and Formation	
Tramstop & Equipment	
Depot	
Highways	
Buildings	
Interchanges	
Structures	
Supervisory Control & Comm Systems	
Tramstop Equipment	
CHL & Sub-stations	
Spares	
Risk	
<b>Amount of Section A - Airport to Haymarket</b>	

--	--	--	--	--	--	--	--	--

Section B - Haymarket to Newhaven	
Amount of:	
Preliminaries	
Design	
Track and Formation	
Tramstop & Equipment	
Highways	
Buildings	
Interchanges	
Structures	
Supervisory Control & Comm Systems	
Tramstop Equipment	
CHL & Sub-stations	
Spares	
Risk	
<b>Amount of Section B - Haymarket to Newhaven</b>	

--	--	--	--	--	--	--	--	--

**Additional Costs project Carlisle - Airport to Haymarket**

--	--	--	--	--	--	--	--	--



REF:

Additional Prelims 14 => 15 months (revised programme)  
14 months 1 month



SYS on  
SYS off  
SPM  
Storage  
Office kit  
FX-hedg.





ETN - Edinburgh Tram Network date: 11-Sep-2010

AIR - HAY

TRW Sec. B

Price Project Carlisle excluding financing costs, EoT#1 and already approved Changes - Airport to Haymarket

STC York Telecons GBP	Transmission GBP	STC RA MT Team Control GBP	STC Traffic Signals GBP	EL TFS & ONLS GBP	Siemens TRW GBP	STC TK Dept GBP	STC DE FM & Proless GBP	BAM TRW GBP
--------------------------	------------------	-------------------------------	----------------------------	----------------------	--------------------	-----------------	----------------------------	----------------

System Wide	
Amount of:	
Provision	
Design	
Accommodation Works	
Tram Supply	
Testing & Commissioning	
Supervisory Control & Comms Systems	
Spines	
Third Party Works	
Amount of System Wide	

Section A - Airport to Haymarket	
Amount of:	
Provision	
Design	
Track and Formation	
Timetables & Equipment	
Depot	
Highways	
Buildings	
Interchanges	
Structures	
Supervisory Control & Comms Systems	
Timetable Equipment	
OH & Sub-stations	
Spines	
Risk	
Amount of Section A - Airport to Haymarket	

Section B - Haymarket to Newhaven	
Amount of:	
Provision	
Design	
Track and Formation	
Timetables & Equipment	
Highways	
Buildings	
Interchanges	
Structures	
Supervisory Control & Comms Systems	
Timetable Equipment	
OH & Sub-stations	
Spines	
Risk	
Amount of Section B - Haymarket to Newhaven	

Price Project Carlisle excluding financing costs EoT#1 and already approved Changes - Airport to Haymarket

POC costs to date (Aug 2010)	World Mgm. Eng./Design Mat. Inst. others
	SAG Mgm. Eng./Design Mat. Inst. others
	SAG Mgm. Eng./Design Mat. Inst. others
	Splc Mgm. Eng./Design Mat. Inst. others

World Mgm. Eng./Design Mat. Inst. others
SAG Mgm. Eng./Design Mat. Inst. others
SAG Mgm. Eng./Design Mat. Inst. others
Splc Mgm. Eng./Design Mat. Inst. others

World Mgm. Eng./Design Mat. Inst. others
SAG Mgm. Eng./Design Mat. Inst. others
SAG Mgm. Eng./Design Mat. Inst. others
Splc Mgm. Eng./Design Mat. Inst. others

Project Office
Design
Accommodation Works
Highways
System Integration
Communications Systems
Control and Information Systems
Track Subcontractor
Electrification Equipment and Design
Tram Control Equipment and Design
Traffic Control
Depot
Interchanges
Structures
Supervisory Control & Comms Systems
Timetable Equipment
Design
Track and Formation
Timetables & Equipment
Highways
Buildings
Interchanges
Structures
Supervisory Control & Comms Systems
Timetable Equipment
OH & Sub-stations
Spines
Risk

ETN - Edinburgh Tram Network  
Project Carlisle - revised Pricing  
Change Orders

11-Sep-2010-Sep-2010

Topic	Correspondence / Reference	Price	revised proposal	TCO received	Status	Relevant for Airport-Haymarket	the Carlisle proposal accepted	Siemens position	comment
Various Traffic Signal requirements	INTC-0060, TCO-0022				paid	no	y	ok	
Noise & Vibration survey	INTC-0438, TCO-0083				paid	no	y	ok	
Substation Quotations Scottish Power / Core connections (Connection costs + 17% + 7.4%)	TNC-0014, TCO-0100				ordered, not paid	part wise	y	ok	excl. Leith Sands, Leith Walk & Cathedral Substation
Guided Busway (Rheda City vs. Direct Fixation)	INTC-0421, TCO-0081				partly paid	yes	y	ok	
HV/LV Works -agreed variation (Survey, LV supplies, Engineering + 17% + 7.4%)	TNC-0014, TCO-0100				partly executed, not paid	part wise	y	ok	
TS works (Urban Traffic Control) (Equipment for Jct. 32, 37, 38, 39 (Princes St. Jct.)) (value updated from 270,740 to 338,801 as TIE did not take the 17% + 7.4% markup into account)	TNC-0016, TCO-0103				paid	no	y	ok	
TS works (Urban Traffic Control) (Mobilisation, initial works, Princes Street)	TNC-0016, TCO-0103				paid	no	y	ok	
ETN1	INTC-0001				partly invoiced	yes	y	ok	
TS works - Mobilisation and Jct 41	INTC-0060, TCO-0124				paid	no	y	ok	
VE-0015: Roseburn Street Viaduct- Impact from OLE	VE-0015				open	yes	n	goes	
VE-0014: A8 Underpass (height reduction 6m -> 4.5m)	VE-0014				open	yes	n	goes	
Depot Turntable (design)	INTC-0412				open	yes	y	ok	
E&B Checking Impact on: Gogarburn-Bridge	INTC-0111				open	yes	y	ok	
E&B Checking Impact on: Edinburgh Park Station Bridge	INTC-0180				open	yes	n	stays	same topic as above
New Ingliston Limited (TRW & OLE design only)	INTC-0268				open	yes	y	ok	
BAA Dualing Proofing > abortive costs	INTC-0417				open	yes	y	ok	
E&B Checking Impact on: Baird Drive RTW	INTC-0104				open	yes	y	ok	
E&B Checking Impact on: Camicknowe Bridge	INTC-0116				open	yes	y	ok	
Airport canopy (OLE impact)	INTC-0277				open	yes	y	ok	
Sub Station Cathedral Lane: Design-Support	INTC-0281				partly executed, not paid	no	y	ok	not relevant for AIR-HAY
Crawley Tunnel (Princes St.) - Abortive costs for TRW	INTC-0305				executed, not paid	no	n	stays	'bridge' solution design
Gogar Landfill, Trackform Rheda G to Ballast (design)	INTC-0374d				open	yes	n	stays	to avoid piling, BB credit expected
Floating Slab Design	INTC-0615				executed, not paid	no	n	stays	works executed
Reinforced Rheda Track instead of BB improvement layer: (Shallow depth location) - design	INTC-0588				executed, not paid	no	n	stays	to avoid conflicts w/ utilities
OLE related planning consents	INTC-0612				in execution, not paid	part wise	n	stays	misalignment - SDS estimate was - 100k
Trackwork works disruption due to Princes Street works	SV-0112				inoured, not paid	no	n	stays	claim under PSSA
PSSA-TLC disruption costs	SV-0100a				inoured, not paid	no	n	goes	
Design Change Edinburgh Park Station / section 7A	INTC-0162				open	yes	n	stays	awaiting TCO to begin implementation
Roseburn Street Viaduct- Impact from TRW	VE-0015				open	yes	n	goes	VE does not allow design to cost
Depot Turntable (construction)	INTC-0412				open	yes	y	ok	awaiting TCO to begin implementation
HV Scottish Power Connections (Gogar-Depot Change): Maybury Road Overbreak	INTC-0647				executed, not paid	yes	n	stays	part of provisional sum HV/LV connections awaiting TCO to begin implementation
HV Scottish Power Connections: Switching Station location change at Gogar Depot	INTC-0643, TCO-176				open	yes	n	ok	TCO received 07-Sep-2010
HV Ingliston Wayleave Problems	INTC-0644				open	yes	n	stays	part of provisional sum HV/LV connections awaiting TCO to begin implementation
HV Jenners Adol Reinforcement	INTC-0645				open	yes	n	stays	part of provisional sum HV/LV connections awaiting TCO to begin implementation
<b>Total</b>									

£22,301,420.64

£0.00

original CPA  
adjustment  
Siemens' share of Lump Sum Firm and Fixed Price  
scope shift to BB  
Changes Order Income Booked to be booked  
current contract Value

Gogar Depot supply (11kv ringmain supply, excluding: depot transformer, cable ducts from boundary  
Ingliston Park and Rice Substation  
Leith Sands Substation (North Leith)  
Leith Walk Substation  
Cathedral Substation  
Haymarket terrace Substation  
Russel Road Substation #1  
Jenners Depository Substation  
Barkhead Drive Substation

lump sum  
lump sum  
lump sum  
lump sum  
lump sum  
lump sum  
lump sum  
lump sum



**ETN - Edinburgh Tram Network**

**date: 11-Sep-2010**

**Project Carlisle - revised Pricing**

**Additional GMP Carlisle components**

<b>Topic</b>	<b>Price</b>
Urban Traffic Light Control Airport to Haymarkt	£653,699.10
OLE pole finials for street lighting	£287,796.67
<b>Total additional GMP components</b>	<b>£941,495.76</b>



		Carlisle
Siemens UK	UK Project Management	13,324,667
Siemens UK	UK System Engineering	3,001,626
Siemens UK and BAM	Trackwork	43,471,285
Siemens UK	UK Depot Workshop	2,028,342
Siemens UK	UK Electrification	6,003,202
Siemens UK	Infrastructure	3,185,035
Siemens UK	Insurance, Bonds and Financial Guarantees	1,712,358
Siemens UK	Control & Information	5,111,939
Siemens UK	Communications	5,009,483
Siemens AG	Electrification, Automation and Depot Equipment	29,688,648
	Change Orders	5,123,140
	Additional Carlisle Components	941,496
Overall Project	Total	118,601,221

Witness name: Axel Eickhorn  
Statement No: third  
Dated: 18 March 2018

**THE EDINBURGH TRAM INQUIRY**

---

**Exhibit AE3**

---

Confidential

TRI00000276\_0026

Comparison of Carlisle Proposal`s with Contract Price

Submission		Price for Original Scope				Additional Time & Scope Costs			
Contract/Offer	Date	System Wide Costs	Airport to Haymarket	Haymarket to Newhaven	Sub-Total	Additional Project Carlisle Costs	Additional Project Carlisle Cost Components	Changes	Total
Original Contract	15/05/2008	£41,073,068	£38,390,377	£17,453,562	£96,917,007	N/a	£2,500,000 <sup>1</sup>	£2,261,996 <sup>2</sup>	£101,679,003
Project Carlisle	29/07/2010	£40,552,238	£38,390,377	£14,269,950	£93,212,566	£26,005,862	£2,374,883	£5,308,310	£126,901,621
Project Carlisle 2- Revised Proposal	11/09/2010	£40,428,769	£38,390,377	£13,104,540	£91,923,686	£20,612,906	£941,496	£5,123,140	£118,601,229

<sup>1</sup> Construction Work Price included Defined Provisional Sum of £2.5M for Urban Traffic Control which is the principal Project Carlisle Cost Component

<sup>2</sup> This represents value of Siemens' share of Defined & Undefined Provisional Sums for contemplated changes (less UTC and Identified Value Engineering)

Confidential

Witness name: Axel Eickhorn  
Statement No: third  
Dated: 18 March 2018

**THE EDINBURGH TRAM INQUIRY**

---

**Exhibit AE4**

---

Confidential

TRI00000276\_0028

**Post Settlement Agreement Savings in respect of Siemens Equipment and Materials**

<b>tCO Reference</b>	<b>tCO Description</b>	<b>Siemens</b>
tCO547	Cancellation of trackwork materials York Place to Newhaven;	-1,100,000.00
tCO548	OMIT Siemens work to Tower Place and Victoria Bridge;	-100,000.00
tCO562	OMIT purchase of poles for PID's North of York Place;	-23,740.00
tCO575	OMIT track welding equipment;	-14,420.00
tCO598	Cancel order for OLE poles required for Secondary Phase 1a	-41,789.00
tCO679	Sale of surplus contact wire;	-28,314.00
tCO714	Surplus material reconciliation;	-27,892.00
<b>Total Saving</b>		<b><u>-1,336,155.00</u></b>

Note: Values taken from signed Statement of Final Account dated 04/10/2014

Witness Name: Axel Eickhorn  
Statement No: third  
Dated: 18 March 2018

**THE EDINBURGH TRAM INQUIRY**

---

**Exhibit AE5**

---

Confidential

TRI00000276\_0030

# SIEMENS

## INSTRUCTION TO COMMENCE

**BAM Rail BV**,  
Stadionstraat 40,  
4815 NG Breda,  
Netherlands

Dear Sirs

**SIEMENS TRANSPORTATION SYSTEMS A DIVISION OF SIEMENS PLC**  
**BAM RAIL BV**  
**CONSTRUCTION OF THE TRACK WORK AND ASSOCIATED WORKS IN CONENCTION WITH**  
**THE DESIGN AND CONSTRUCTION OF THE EDINBURGH TRAM NETWORK ("the Sub-Contract**  
**Works")**

### WHEREAS

- a) we, **Siemens Transportation Systems a Division Of Siemens PLC**, a company established under the laws of England (registered number 00727817) having its registered office at Faraday House, Sir William Siemens Square, Frimley, Camberley, GU16 8QD, United Kingdom ("the Contractor") are a member of a consortium consisting of Bilfinger Berger AG, Germany, and the Contractor, (hereinafter collectively referred to as the "Consortium") which concluded a construction agreement, dated 14 May 2008 (hereinafter referred to as the "Infraco Agreement") with **tie Limited** (hereinafter referred to as "tie") for the design and construction of the Edinburgh Tram Network (the "Infraco Works");
- b) the Contractor has entered into a sub-contract with you, **BAM Rail BV**, a company established under the law of the Netherlands and having your registered office located at Stadionstraat 40, 4815 NG Breda, Netherlands (hereinafter referred to as the "Sub-Contractor") to execute the Sub-Contract Works forming part of the Infraco Works dated 21 May 2008 ("the Sub-Contract");
- c) in terms of clause 6 of the Sub-Contract the Contractor is to serve a notice on the Sub-Contractor requiring them to commence the Sub-Contract Works ("the ITC"), and
- d) the Contractor now wishes to serve this ITC;

NOW THEREFORE we hereby serve notice on you that the Contractor is hereby required to commence the Sub-Contract Works with effect from 22 May 2008 ("**the Commencement Date**") and carry out and complete the Sub-Contract Works in accordance with the terms of the Sub-Contract.

Yours faithfully



Andrew Lister  
Head of Procurement & Logistics, STS UK

*22 May 2008*

Siemens Transportation Systems

Ashby Park  
Ashby de la Zouch  
Leicestershire  
LE65 1JD

Tel: +44 (0)1530 258000  
Fax: +44 (0)1530 258008

A division of Siemens plc Registered No: 722817, England  
Registered Office: Faraday House, Sir William Siemens Square, Frimley, Camberley, GU16 8QD

Confidential

TRI00000276\_0031