

## CONSORTIUM AGREEMENT

This Consortium Agreement is made and entered into between the companies

(1) **Bilfinger Berger AG** registered in Germany with company number HRB 4444 , whose registered office is at Gustav-Nachtigal-Strasse 3, 65189 Wiesbaden , Federal Republic of Germany hereinafter referred to as "**BB**"

and

(2) **Siemens plc** registered in England and Wales with company number 727817, whose registered office is at Siemens House, Oldbury, Bracknell, Berkshire RG12 8FZ, hereinafter referred to as "**Siemens**".

The above companies sometimes being referred to, individually or collectively, as a "**Party**" or the "**Parties**".

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## Recitals

Whereas

- a) **tie** Limited (hereinafter referred to as the "**Employer**") has invited companies to participate through international tender in the submission of bids with respect to the **Edinburgh Tram Network "Infraco" Project** (hereinafter referred to as the "**Project**");
- b) by signature of this Consortium Agreement the Parties agree to submit under the leadership of BB their joint bid and in case of award of the contract upon such bid (hereinafter referred to as the "**Contract**") to be jointly and severally liable for the performance of same in accordance with the terms of this Consortium Agreement.

**Now the Parties hereby agree as follows:**

### **1. Object of the Consortium Agreement, Formation of the Consortium**

- 1.1 The Parties hereto agree to form a Consortium for the purpose of preparing and submitting a joint bid (the "**Tender**") and, after Contract award, performing jointly (in accordance with their Share of the Works) all supplies, services and works required for the completion of the Project (hereinafter referred to as the "**Works**") in accordance with the Contract.
- 1.2 The provisions of this Consortium Agreement, including its Recitals, shall apply to govern the internal relations between the Parties and to govern their representation towards both the Employer and third parties. Each Annex of this Consortium Agreement shall be an integral part of it.
- 1.3 The Consortium shall only extend to the object of the Consortium as described in Art. 1.1 hereof and additionally to any works not covered by the Contract but which the Consortium undertakes to perform for the Employer after both Parties have agreed thereon. The Parties expressly agree that this Consortium Agreement shall in no way constitute or be deemed to constitute a partnership or any other form of company between the Parties under applicable law.
- 1.4 The Parties acknowledge that:
  - (a) the Employer has, or intends to, award separate contracts for the supply of trams for operation on the Edinburgh tram network ("**Tram Supply Agreement**"), maintenance of those trams ("**Tram Maintenance Agreement**") and design of the Edinburgh tram network ("**SDS Agreement**");
  - (b) it will be a condition of the Contract that the Tram Supply Agreement, Tram Maintenance Agreement and SDS Agreement will be novated to the Consortium upon Contract award; and

(c) the Contract requires the infrastructure maintenance to be sub-contracted to an infrastructure maintainer ("**Infrastructure Maintenance Agreement**").

1.5 The Tram Supply Agreement, Tram Maintenance Agreement, Infrastructure Maintenance Agreement and SDS Agreement are hereinafter referred to as the "**Key Subcontracts**" and the subcontractors under the Key Subcontracts are hereinafter referred to as the "**Key Subcontractors**".

**2. Name and Address of the Consortium**

2.1 The Consortium shall bear the name "Bilfinger Berger Siemens Consortium", abbreviated as follows: BBS

2.2 For the purpose of correspondence the Consortium shall use a letterhead bearing the name of the Consortium and the company names of the Parties.

2.3 The address of the Consortium shall be  
 c/o  
 Bilfinger Berger UK Limited  
 3000 Manchester Business Park  
 Aviator Way  
 Manchester  
 M22 5GT

**3. Division of the Work and Risks**

3.1 The Parties shall be jointly and severally liable towards the Employer for the performance of the Contract. In their internal relations such liability of the Parties shall be shared and allocated in proportion to their respective participation.

3.2 For the purpose of the realization of the Project the Works shall internally be allocated as follows:

Siemens	Systems and Track Works
BB	Civil and Building Works

3.3 The detailed scope and value of each Party's Share of the Works shall be as set forth in Annex 1 to this Consortium Agreement (the "**Share of the Works**"). According to Annex 1 the participation within the Consortium is anticipated to be as follows:

Siemens :	[40] %	(in words: forty percent)
BB :	[60]%	(in words: sixty percent)

Provided that the final Share of the Works shall be in proportion to the values of their respective scopes of work fixed at the date of submission of the Tender. In the event of changes in the scope of the work in the awarded Contract or during the performance of the Contract, the Parties' Share of the Works shall be adjusted accordingly.

- 3.4 Where this Consortium Agreement provides for any calculation of entitlements or liabilities to be respectively based on the Parties' Shares of the Works, such calculation shall be based on the Parties' Shares of the Works as at the date when such calculation is made.
- 3.5 In the internal relationship of the Parties each Party shall be under the obligation, without prejudice to the provisions of this Consortium Agreement, to produce its Share of the Works at its own expense and risk as if it had directly concluded its own contract for its Share of the Works with the Employer. Each Party shall bear all risks associated with its Share of the Works, including but not limited to technical, economical, financial, legal and tax risks and in particular the risk of a delay in payment or any shortfall in payment, save where such delay or shortfall is attributable to the acts or omissions of the other Party.
- 3.6 Each Party hereby indemnifies the other Party against such liability which has been incurred by the other Party in excess of such other Party's share of liability.

#### **4. Completeness and Changes**

- 4.1 Supplies, services and works which are necessary for the proper completion of the Project but which are not mentioned in detail in Annex 1 and therefore cannot expressly be attributed to a Party shall be provided by the Party, at its expense, to whose Share of the Works they reasonably relate. If, in a case of incompleteness, an attribution to one of the Parties is not possible, the Consortium Board shall decide who has to take over the share; in this case the costs shall jointly be borne by both the Parties.
- 4.2 Art. 4.1 shall apply mutatis mutandis if the Employer requires changes or additional works pursuant to Art. 1.1 and if the Consortium undertakes to perform works not covered by the Contract in accordance with Art. 1.3. In this case Annex 1 shall be adapted by an addendum.

#### **5. Principles of Cooperation**

- 5.1 The Parties undertake to engage themselves exclusively in this Consortium for the Project and for all works connected with the Project for which tenders will be called and/or which will be performed for the development or utilization of the Project unless otherwise agreed by the Consortium Board. In particular, no Party by itself or through affiliated and/or subsidiary companies shall compete for the Project. For the purposes of this Consortium Agreement affiliated companies shall be defined as a company which controls or is controlled by a Party to this Consortium Agreement.

- 5.2 Each Party shall prepare the technical part of the Tender related to its Share of the Works. The Leading Company shall draw up a proposal for the commercial conditions of the Tender. The final technical and commercial conditions of the Tender shall be adopted by unanimous decision of both Parties.
- 5.3 Each Party shall bear the costs incurred by it in the preparation and submission of the Tender for its Share of the Works provided that costs and expenses incurred by a Party prior to Contract award, that are costs related to external professional services shall be borne by the Parties in proportion to the participation as per Art 3.3, provided that such costs have been agreed by both Parties beforehand.
- 5.4 After preparation and submission of the Tender, the Parties shall be bound by its provisions and neither of them shall vary or seek to vary the same without the previous written consent of the other Party which shall not be unreasonably withheld.
- 5.5 If the Tender (including any negotiated revisions thereto which are acceptable to the Parties) shall be accepted by the Employer before the expiry of the Tender validity date or such later date as may be agreed by the Parties, such acceptance shall be binding on the Parties who will then each enter into the Contract with and be jointly and severally liable to the Employer and faithfully perform and observe all the terms and conditions of the Contract and this Consortium Agreement.
- 5.6 Each Party shall be responsible for the performance of its Share of the Works, including all necessary or useful arrangements such as, but not limited to registrations, financing and customs arrangements, and shall bear all costs connected therewith. The Parties shall comply with tax regulations concerning their Shares of the Works at their own risk and expense and for their own account.
- 5.7 The Parties shall correctly, completely and in time place at the disposal of each other all documents and information about the respective Share of the Works as far as it is necessary for the proper performance of the Works of the other Party and for the solution of interface problems. The Parties are to be informed immediately of subsequent alterations of obtained documents and information.
- 5.8 Each Party shall perform its respective Share of the Works in accordance with an internal time schedule which shall be based on the contractual schedule and which has to be settled and attached to this Consortium Agreement as Annex 2 (the "**Time Schedule**") not later than two weeks after acceptance of the Tender by the Employer. The Time Schedule shall be amended from time to time if and as far as the contractual schedule has been changed.

- 5.7 It is up to each Party to remedy defects and to repair all damage incurred to its Share of the Works during the period of performance and warranty of the Contract. The costs arising shall be borne by that Party which is responsible for the defect or damage.
- 5.8 If the Consortium has to bear costs which cannot be attributed to one Party, or cannot be directly apportioned to the parties both Parties shall have to bear them pro rata to their Share of the Works.
- 5.9 Costs for equipment and services jointly used shall be borne by the Parties pro rata to the use at the rates fixed in Annex 3 (the "**Partner Rates**"). In this connection the Project Management shall settle monthly accounts which shall become immediately due and which shall be charged by the Project Management against payments to the Parties.]
- 5.10 Each of the Parties shall act in utmost good faith and shall assist one another to the best of their abilities and protect each other's interests as though they were their own. The Parties shall refrain from any actions contrary to attainment of the objectives stated in Art. 1.1.
- 5.11 Each Party shall immediately inform the other Party of any matters of which it learns and which may materially affect the performance of the Contract or the other Party's Share of the Work including, without limitation, delays in the time schedule for performing its Share of the Work. Each Party shall also immediately inform the other of any matters of which it learns and which may materially affect the performance of the Joint Scope.
- 6. Subcontracts**
- 6.1 Subject to approval by the Employer, if required, each Party shall have the right to conclude subcontracts in its own name, at its own risk and on its own account concerning its Share of the Works.
- 6.2 At the request of the other Party to this Consortium Agreement any such subcontracts regarding the Project shall be concluded with the other Party instead of a third party, if such Party is prepared and able to perform the relevant works at appropriate conditions and price corresponding to those of equivalent competitors provided the approval of the Consortium Board has been given. The Shares of the Works of the Parties concluding a subcontract remain unchanged hereby.
- 6.3 Art. 6.2 shall not apply if the third party is a company associated with the Party which intends to conclude a subcontract.
- 6.4 Each Party shall be responsible for the acts, defaults and neglects of any subcontractor, supplier, or their agents, servants or workmen engaged on their Share of the Works. Such responsibility shall be applied as fully as if

they were the acts, defaults or neglects of the Party, his agents, servants or workmen.

6.5 The Parties responsibilities for the Key Subcontracts shall be as set forth in Annex 1 to this Consortium Agreement (the "**Share of the Works**").

## 7. Management and Administration

7.1 The executive bodies of the Consortium shall be:

- The Consortium Board ("CB")
- The Leading Company ("LC")
- The Project Management ("PM")

7.2 The Parties shall do their utmost to give the CB, the LC and the PM their advice and support in the execution of their functions. They shall in particular provide it in time and completely with all necessary documents and information.

## 8. Consortium Board

8.1 The Parties shall establish a Consortium Board. It shall be the supreme authority of the Consortium and shall enjoy any and all powers for this purpose. It shall be authorised to take any decisions relating to the Consortium and to bind thereby the Parties.

8.2 The CB shall decide all issues of fundamental importance and issues submitted by itself for its decision, or submitted to it by a Party for this purpose. The decisions shall be binding upon the Leading Company, the Project Management and the other Party.

8.3 Each Party shall appoint two members to the CB and two alternates who shall be entitled to exercise all the rights of the full member in his absence. Such duly authorised members or their designated alternates shall be obliged to attend the Consortium Board meetings.

8.4 Any Party may at any time replace a member or alternate appointed by it. Such replacement shall be in writing and shall be communicated to the other Party.

8.5 The Consortium Board shall appoint one of the representatives nominated under Art. 7.3 to act as Chairman for a period of six months and then alternatively on a six monthly basis between the Parties represented commencing from the date hereof until expiration of this Agreement. These periods may be reduced or extended by the agreement of the Consortium Board. For the avoidance of doubt in the event of deadlock the Chairman shall not have a casting vote;

- 8.6 Each Party shall have one vote in the Consortium Board. The decisions of the Consortium Board shall be unanimously taken insofar as nothing to the contrary is stipulated in this Consortium Agreement.
- 8.7 The Consortium Board shall have a quorum when all its members (or their designated alternates) participate in the meeting.
- 8.8 Meetings of the Consortium shall take place if necessary or at the written request of either Party. The Leading Company shall convene the Consortium Board and shall nominate its agenda and the place of meeting. In case of a meeting being requested, this shall take place in principle within a period of 10 days after having been requested.
- 8.9 If a decision has not been taken unanimously by the Consortium Board, insofar as it is provided by this Consortium Agreement:
- (a) because the quorum has not been reached, then a second meeting of the Consortium Board having the same agenda shall be convened no later than seven calendar days after closure of the previous meeting. At this meeting the Consortium Board shall have a quorum provided that there is at least one representative of each Party present; or
  - (b) because the members of the Consortium Board have not come to a unanimous opinion, then the Managing Directors of the Parties shall be granted the opportunity to achieve a unanimous decision within the seven calendar days after closure of the meeting, or other finite period to be mutually agreed by the Managing Directors, having due regard to the urgency of the situation. Failing such decision either Party may require the matter to be referred to be resolved under the procedure in Annex 4. In the event of a tie in the votes in decisions in which a failure to act would place the Consortium in material breach of its obligations pending resolution of the disputed matter it shall be dealt with in accordance with the instructions of the Leading Company (acting in the best overall interests of the Consortium), without prejudice to the rights of the Parties in relation thereto.
- 8.10 Notwithstanding Art. 8.9 above decisions with regard to:
- (a) amendment and/or alterations of the Contract,
  - (b) stoppage of the Works and/or termination of the Contract,
  - (c) initiation of arbitration against the Employer, entering into major litigation or arbitration against third parties (excluding subcontractors appointed in accordance with Art 6.1),
  - (d) [decisions with regard to cash contributions by the Parties; and]

(e) any alterations and/or amendments of this Consortium Agreement shall in any event require unanimity of the Parties.

8.11 The Leading Company shall prepare minutes of any meeting of the Consortium Board and shall communicate them to the Parties no later than seven calendar days after closure of the meeting. The minutes shall be considered approved if no written objections are raised against them within a period of fourteen calendar days after issue.

8.12 Decisions may also be taken by written correspondence between the Parties. Articles 8.6 to 8.9 shall apply mutatis mutandis.

## **9. The Leading Company (LC)**

9.1 BB shall act as the LC of the Consortium and shall provide a spokesman for the Project as representative of the Consortium.

9.2 The LC shall co-ordinate the preparation of the Tender. The LC shall represent the Consortium towards the Employer, his vicarious agents, public authorities and other third parties in consent with the Parties. Negotiations shall be led jointly with the Parties concerned. The LC shall immediately inform the other Party about any result of negotiations.

9.3 Neither the LC nor the other Party shall be entitled to make legally binding statements on behalf of the Consortium or a single Party nor to enter into obligations for them without the prior written consent of the other Party.

9.4 The LC shall be bound by the powers granted by and the decisions of the CB.

9.5 Each Party shall reimburse the LC for any expenses it incurs on behalf of the Consortium if approved in advance by the CB.

## **10. The Project Management (PM)**

10.1 The PM will be responsible for the due and proper performance of the Works in accordance with the terms and conditions of the Contract and this Consortium Agreement. The PM will coordinate the activities on site.

The PM will consist of

- (a) a Project Director (PD)
- (b) a Commercial Director (CD)

10.2 The PM will be bound by the powers granted by the CB and the decisions of the CB.

- 10.3 The CB will appoint the PD and CM not later than two weeks after acceptance of the Tender by the Employer. The PD shall be nominated by BB. The CD shall be nominated by Siemens.
- 10.4 Having been appointed the PD in consent with the Parties shall represent the Consortium towards the Employer, his agents, public authorities and other third parties. Negotiations shall be led by the PD with the prior consent of the other Parties and on their joint behalf and in the presence of representatives of the other Parties.
- 10.5 The PM shall do its utmost to enable the CB to supervise the PM.
- 10.6 Any exchange of letters related to the performance of the Contract shall be settled by the PM. A copy of any correspondence concerning the Share of the Works of the other Party is immediately to be forwarded to the other Party by the PM. Any letter affecting the interests of the other Party shall be coordinated with the other Party before being sent off.
- 10.7 The PM shall control the adherence to the Consortium Agreement and to the decisions of the Consortium Board. For this purpose it shall particularly assume the coordination of the performance of the Contract and the control of dates related to this.
- 10.8 The PM shall coordinate the administrative and commercial activities of the Consortium.
- 10.9 The LC shall open a bank account for the Consortium and in its name at the HSBC Bank.
- The bank account will be operated under the joint signature of the Parties.
- 10.10 All monies received by the Consortium whether under the Contract or otherwise shall be paid immediately into Consortium bank account. The Consortium's currency of payment and account shall for all purposes be these currencies in which monies are received under the Contract.
- 10.11 Any accrued interest credited to the Consortium bank account shall be shared by the Parties in proportion to the Share of the Works of each Party.
- 10.12 The Parties shall do their utmost to give the PM their advice and support in the execution of its functions. They shall in particular provide it in time and completely with all necessary documents and information.
- 10.13 Costs of the PM shall be borne by the Parties pro rata to the use at the rates fixed in Annex 3 (the "Partner Rates"). In this connection the Project Management shall settle monthly accounts which shall become immediately due and which shall be charged by the PM against payments to the Parties.

## 11. Invoices and Payments

- 11.1 Each Party shall draw up applications for payment relating to Contract milestones applicable to its Share of the Works in accordance with the Contract. It shall enclose the documents necessary to audit such applications. The PM shall draw up the applications for payment for the Consortium out of the accounting documents of the Parties and shall present them to the Employer in such good time that the Employer can comply with the payment provisions in the Contract. The PM shall confirm to each Party when such applications have been made.
- 11.2 The PM shall be responsible for managing applications for payment under the Key Subcontracts and for submitting such applications to the Employer.
- 11.3 Any payment to the Consortium shall be made to the bank account the LC opened in the name of the Consortium. Each Party shall bear the bank charges for handling the payments for its Share of the Works.
- 11.4 The PM is obliged, after having subtracted from each incoming payment:
- (a) the percentage, in relation to the final Contract price, added to the Partner Rates in the Tender to cover the costs of the Consortium; and]
  - (b) the share of the remuneration for the duties of the LC provided for in Art. 9.;
- to immediately forward incoming payments from the Consortium account to the Parties pro rata to their respective Shares of the Works certified for and paid by such incoming payment, but subject to any reductions and retentions made by the Employer which apply to each Share of the Works.
- If any payment by the Employer cannot be assigned to determined Shares of the Works it shall be shared pro rata to the matured claims of the Parties.]
- 11.5 In respect of payments relating to the Key SubContractors, the PM is obliged to forward such payments to the appropriate Key Subcontractor to whom those payments relate, subject to any reductions and retentions made by the Employer which apply to that Key Subcontractor.
- 11.6 If the Employer is in breach of the terms of the Contract in relation to the payment of any amount due to the Consortium, the Chairman of the Consortium Board, acting with all due expedition and care, will seek and if possible engage in discussions with the Employer to resolve the matter. If such discussions fail to result in the remedy of the breach of Contract, an emergency meeting of the Consortium Board shall be convened to consider

the exercise of the Consortium's rights under the Contract in relation to such breach.

- 11.7 If, pursuant to Article 11.6, the Consortium Board does not resolve to take action against the Employer, the Party to whom the payment is due may assert a claim for payment against the Employer in the Consortium's name but at its own expense and risk. The other Party will give it their support in this matter and will not unreasonably refuse or delay their consent where this is necessary for the institution of legal proceedings against the Employer.
- 11.8 If either Party wishes to assert a claim for additional costs or an extension of time, it shall notify the other Party. The PM shall manage the submission of all such claims to the Employer in accordance with the terms of the Contract, but in consultation with the Party to whom each claim relates. Any compensation paid by the Employer for additional costs (e.g. costs arising from an extension of time for completion of the Works, from an acceleration of the Works or from damages) shall be paid to the Parties in accordance with the Share of the Works to which they relate unless such compensation relates to the Key Subcontractors, when it shall be paid to the appropriate Key Subcontractor to whom the compensation relates.
- 11.9 Where any compensation is paid to the Consortium by reason of termination for the Employer's default, or termination by the Employer of the Contract for convenience, such compensation shall be shared between the Parties and, if applicable, the Key Subcontractors, according to the criteria against which that compensation was paid, as set out in the Contract.
- 11.10 If the Employer's payments to the Consortium are delayed, including, without limitation, due to delay by the PM in submission of applications for payment under the Contract, the Party who is responsible for causing the Employer's delayed payment shall compensate the Party affected by the delay in payment at a rate of [TBC]% per annum for the resulting loss of interest with respect to the amount of the delayed payment and for the duration of the delay.

## **12. Securities**

- 12.1 Bank guarantees, bonds and/or other sureties required in connection with the Invitation to Negotiate or the performance of the Contract shall, if accepted by the Employer, be procured severally by each Party, and otherwise jointly by the Consortium. In the latter case the details shall be agreed by the Parties before the submission of the bid, always provided that the Parties contribute to the securities in accordance with their respective participation. If the Consortium has to provide joint securities to the Employer, unless agreed otherwise, the LC shall arrange for the joint security and each Party shall provide counter-guarantees or counter-indemnities as required therefore on a pro rata basis in proportion to each Party's respective

participation in the Consortium arranged by the LC on behalf of the Consortium.

- 12.2 Each Party shall incur individually the liability arising under any Bank guarantee, bond and/or other sureties and for any counter-security for its participation in the Consortium.
- 12.3 The cost for Bank guarantees, bonds, other sureties and if applicable for any counter guarantee or security shall be borne by the Consortium at rates to be decided by the CB.

### **13. Intellectual Property Rights**

- 13.1 All intellectual property (which shall include but not be limited to patents, copyright in designs, drawings and documents, design rights, design registration, know how, Confidential Information and goodwill) which has been or is in the future acquired or created by either Party for the purposes of the Works shall belong to such Party, subject always to the requirements of the Contract.
- 13.2 The Consortium shall use all reasonable endeavours to ensure that the execution of the Works (including any design undertaken by either Party) does not infringe the Intellectual Property rights of any third party. Claims for compensation due to infringed intellectual property rights shall be solely satisfied by that Party who has infringed the intellectual property right and that Party shall indemnify the other Party from any costs, claims or expenses which that other Party suffers or incurs as a result of any such claim.

### **14. Liability**

- 14.1 Each Party shall be liable towards the Consortium and the other Party for the proper and timely performance of the obligations assumed for its Share of the Works according to the regulations of the Contract concerning the execution of the Project. This shall apply mutatis mutandis for other claims being asserted by the Employer or any third party caused by a Party.
- 14.2 The following compensatory regulations shall internally apply for the handling of claims submitted by the Employer:
- (a) If and as far as a claim is brought against the Consortium or a Party because of any negligent act or omission of one of the Parties or due to breach of the Contract as a result of the failure of one of the Parties to perform its Share of the Works, that Party whose negligent acts or omissions or failure to perform is the cause of the claim shall be informed immediately by the Party which receives the claim. The Party receiving the claim shall not make any admission or

acknowledgement of the claim without the consent of the responsible Party. The responsible Party shall immediately take action to rectify, to the extent possible, its negligent act or omission or failure to perform and shall indemnify the other Party from and against any liability which the other Party may incur as a result of such claim.

- (b) Any defect and damage resulting from such defect shall immediately be corrected by the Party in whose Share of the Work it is located or occurs. The costs shall be borne by that Party who caused the defect. These costs shall also include expenses for establishing the defect, for additional measures necessitated as a result of the defect, for changes in the share of the Work of another Party necessitated by correction of such defect, and for repeat inspections or acceptance tests. If performance warranties specified in the Contract are not met, the liability shall rest solely with the responsible Party.
- (c) Penalties or liquidated damages for failure to perform according to the terms of the Contract payable to the Employer shall be borne by that Party which is responsible for the failure. Where both Parties are responsible for the failure, they shall bear the penalty or liquidated damages pro rata to their respective responsibility or, if this cannot be determined, pro rata to their Shares of the Works. Where the penalties or liquidated damages are attributable to the actions of a Key Subcontractor, the PM shall enforce all available remedies under the applicable Key Subcontract and shall pay any monies recovered in satisfaction of such penalties or liquidated damages. In the event of any delay in recovering amounts due from a Key Subcontractor prior to the date upon which payment is required to be made to the Employer, the Parties shall contribute to the amount payable in accordance with their Shares of the Works and shall be reimbursed upon receipt of payment by the Key Subcontractor. Any shortfall in the amount paid to the Employer and the amount recovered from the Key Subcontractor shall be borne by the Parties in proportion to their Shares of the Works.
- (d) Without prejudice to the indemnity in Article 12.2(a), defences against claims or measures taken by the Employer shall be conducted by the Consortium, but at the expense of the Party whose acts or omissions or failure to perform have resulted in the claim being brought.
- (e) In case of dispute among the Parties about who has to bear costs or payments or deficits in payment, the Parties shall provisionally bear them pro rata to the value of their Shares of the Works. The Parties having reached an understanding or the dispute having been settled in accordance with Annex 4, a respective reimbursement shall immediately take place among the Parties. [Any payment of the Consortium to the Parties according to Art. 9 shall be retained by the

Consortium, respectively paid subject to an absolute guarantee for repayment payable at first request being furnished by a major international bank, to the amount of the sum in dispute until an understanding has been reached or the dispute has been settled in accordance with Annex 4.]

- (f) [If any claim is asserted by the Employer or any third party against the Consortium, for which neither of the Parties is responsible according to the Contract and the distribution of the functions and the responsibility among the Parties, both the Parties shall undertake the fulfilment on a pro rata basis according to Art. 3.3 or as changed in accordance with Art. 4.]
- (g) If the Employer has or can reasonably be expected to become entitled to a claim for non-compliance with the Contract and the Party responsible for this claim (hereinafter referred to as "**Responsible Party**") is unable or unwilling to avoid or resolve it and if the claim can be avoided or resolved by measures of the other Party not responsible for the claim (hereinafter referred to as "**Non-Responsible Party**"), then the Non-Responsible Party may make every reasonable effort to avoid or resolve the claim, to the extent that the claim is likely to affect adversely and materially the Consortium or Non-Responsible Party. The Non-Responsible Party may exercise the right under this Article to avoid or resolve the claim only after appropriately notifying the Responsible Party, where reasonably possible. The Responsible Party shall reimburse Non-Responsible Party in respect of all necessary costs incurred (including e.g. additional personnel, overtime and the like).

14.3 The following shall apply for claims asserted by the Parties inter se other than those settled in Art. 14.2 :

- (a) Each Party shall be liable towards the other Party for damages it has caused by negligent, bad or non-performance of its obligations, insufficient information or which it or its vicarious agents have negligently caused in another way in the performance of its Share of the Works or resulting from a Party's product liability.
- (b) Claims asserted by the Parties inter se according to Art. 12.3(a) shall not include compensations for any loss of profit, loss of interest, loss of use, loss of business, loss of goodwill, loss of revenues, anticipated savings or arising from loss of data and all other like consequential or like indirect loss nor for any damage which is covered by insurance .

14.4 Among each other, the Parties shall have no claims for damages and cost reimbursement other than set forth in this agreement for the extent consistent with mandatory law.

14.5 Liability arising from third party claims. In the case of third party claim, the party responsible for the event causing the claim shall be solely liable.

## 15. Insurance

15.1 The Parties shall decide on any joint insurance to be taken out and on its extent. Otherwise, each Party shall be responsible itself for the insurance of its Share of the Works inclusive of a construction work insurance and export insurance and it shall be obliged to bear the costs and pay the premiums. Such individual insurance policies shall contain provisions precluding the right of recourse against the other Party and its employees, agents and subcontractors.

15.2 The excess in case of any damage shall be borne by that Party in whose sphere of responsibility the damage has occurred.

15.3 Each Party shall be obliged to furnish proof of a project-related liability insurance and of a product liability insurance with an insured sum of Euro ..... (amount in words: ..... Euro) for personal injury and damage to property.

15.4 The Parties covenant in favour of each other that they will at all times observe the terms of all insurance policies taken out pursuant to this Consortium Agreement and in accordance with the Contract.

## 16 Default of a Party

16.1 The following shall constitute events of default pursuant to this Article 16:-

- (a) a Party becoming insolvent or going into liquidation (unless the liquidation shall be for the purpose of a solvent scheme of reconstruction or amalgamation) which shall include but not be limited to having an administrator or a receiver and/or a manager appointed over the whole or any part of its undertaking and/or assets or any equivalent under the laws of the country in which a Party is constituted; or
- (b) a Party committing a breach of any material provision of this Consortium Agreement or the Contract and in the case of a breach capable of remedy, failing to remedy the same within 30 days of receiving notice from the other Party requiring it to do so.
- (c) a Party contrary to Art. 19.1 hereof shall assign the whole or part of its rights or sublet its engagement to a third party;

(d) a Party suspends the performance of its Share of the Works without justification.

16.2 If an event of default shall occur then the rights and remedies the Party not in default (the "**Continuing Party**") against the Party in default (the "**Defaulting Party**") shall include (but shall not be limited to) the following: -

(a) to exclude the Defaulting Party from further participation in the Consortium and take over its interest under this Consortium Agreement, including at the option of the Continuing Party by the inclusion of a replacement company as a member of the Consortium in place of the Defaulting Party;

(b) to operate the Consortium bank account to the exclusion of the Defaulting Party;

(c) to retain for the completion of the Works all plant, equipment, materials and temporary works provided by the Defaulting Party at the time of exclusion until the completion and handing over of the Works; and

(d) to have granted an irrevocable royalty-free licence to the Continuing Party to use and reproduce any intellectual property of the Defaulting Party, but only to the extent necessary in order to complete the Works

and, where the Defaulting Party is BB, BB shall be replaced by Siemens as the LC for the remainder of the term of this Consortium Agreement.

16.3 The Defaulting Party shall execute and do all deeds, documents and things necessary or expedient to facilitate the exercise of such rights and the completion of the Contract by the Continuing Party.

16.4 The exercise by the Continuing Party of its rights under Article 16.2 shall not release the Defaulting Party from its obligations hereunder and the Defaulting Party shall indemnify the other Party against all costs incurred by it in the exercise of its rights and in the completion of the Works. The Continuing Party shall use all reasonable endeavours to mitigate the cost of completing the work of the Defaulting Party.

## 17. Confidentiality

17.1 Each Party undertakes to keep confidential any information, know-how and experience acquired from or divulged by the other Party ("**Confidential Information**") and not to use the same other than for the purposes of the Consortium without the prior written consent of the other Party unless such Confidential Information:-

(a) is in the public domain at the time it is acquired or divulged;

- (b) becomes part of the public domain after it is acquired other than by a breach by the recipient of this Article;
  - (c) is already in the possession of the recipient without limitation or restriction against subsequent use or disclosure;
  - (d) is independently received from a third party having the full right to disclose.
- 17.2 Each Party undertakes to ensure that its employees and agents are under like obligations to those contained in Article 17.1.
- 17.3 Disclosure by either Party of any such Confidential Information to any subsidiary, associated or parent company, or any consultant, sub-contractor or supplier shall be permitted provided that any such recipient agrees in writing to be bound by the terms of this Article 15 as if it was a party hereto.
- 17.4 The undertakings contained in this Article 15 shall survive the termination of this Consortium Agreement for a period of 5 years from the date of disclosure or such earlier date as may be agreed by the Party who disclosed the Confidential Information.

## **18. Publicity**

Any advertisement, statement or announcement to the media or the public concerning the Project requires the written consent of both the Parties. The consent may be refused only for good reason. The Consortium Board may lay down principles for publications. Each Party shall use reasonable endeavour to make sure that its subcontractors comply with the principles of this Article.

## **19. Assignments**

- 19.1 Neither of the Parties shall be entitled to sell, assign or in any manner encumber or transfer any claim under this Consortium Agreement or its share or any part thereof in the Consortium and/or to be substituted in the performance of the Works by (a) third party(ies) without obtaining the prior written consent of the other Party.
- 19.2 However a Party shall be entitled to avail itself of its right under the Contract in the event of delay in payment or non-payment by the Employer to assign its respective claims against the Employer to its relevant export credit insurance with or without the written consent of the other Party if such an assignment is required by its relevant export credit insurance.
- 19.3 Notwithstanding Art 19.1 it is acknowledged that subject to the Employers consent (if required) BB may assign this Consortium Agreement to Bilfinger Berger UK Limited. Should such assignment take place, Siemens reserve the

right to request a Parent Company Guarantee from Bilfinger Berger UK Limited.

## **20. Duration of the Consortium Agreement**

20.1 This Consortium Agreement shall enter into force with effect from the date of its signature by both of the Parties.

20.2 The Consortium Agreement shall terminate automatically, prior to Contract award in the following circumstances:

- (a) upon award of the Contract to a third party;
- (b) the Parties fail to agree upon the terms and conditions of the Tender;
- (c) the project is cancelled by the Employer prior to or after Tender submission;
- (d) following submission of the Tender to the Employer, the Parties are unable to agree upon any amendments to the Tender, it being acknowledged that the agreement of any Party to any amendment may be subject to that Party(s) obtaining any corporate approval;
- (e) upon expiry of the validity of the Tender unless the Parties agree in writing to extend the validity beforehand;
- (f) on 4 October 2008 unless the Parties prior to that date agree in writing to extend that time limit.

20.3 Upon award of the Contract, this Consortium Agreement shall remain in force beyond the performance of the Project until the later of:

- (a) completion of the Works and the satisfaction of all of the Consortium's obligations and liabilities both under the Contract and this Consortium Agreement;
- (b) expiry of the contractual warranty period;
- (c) expiry of any applicable limitation periods for causes of action arising out of or in connection with the Contract;
- (d) the return of the securities or the income and distribution of the Employer's final payment and the settlement of all differences in opinion and legal disputes with the Employer and/or among the Parties.

20.4 In the event of termination pursuant to Article 18.2 each Party shall be separately and solely liable for all costs and expenses it may have expended or incurred in connection with the preparation and submission of the Tender

or otherwise agreed relating to the subject matter of this Consortium Agreement, provided always that the provisions of this Consortium Agreement shall remain in force until any other commitments which have been agreed by the Consortium with third parties (if any) have been resolved and settled.

## **21. Amendments, Effectiveness**

- 21.1 No amendment or addition of this Consortium Agreement shall be effective unless in writing. This shall apply mutatis mutandis for a stipulation revoking the requirement of writing.
- 21.2 In case any provision of this Consortium Agreement should be or become inadmissible, invalid, unlawful, unenforceable or ineffective, the effectiveness of the other provisions shall not be thereby affected. The inadmissible, invalid, unlawful, unenforceable or ineffective provision shall be replaced by an admissible, valid, lawful, enforceable and effective one which economically comes closest to the intention of the Parties in drafting the ineffective provision.

## **22. Language**

- 22.1 This Consortium Agreement is executed in the English language. Any and all notices, and other communications whatsoever under this Consortium Agreement shall be in the English language.

## **23. Governing Law and Dispute Resolution**

- 23.1 This Consortium Agreement shall be governed by and construed in accordance with English law.
- 23.2 Any and all Disputes arising out of or in connection with the subject matter of this Consortium Agreement shall be dealt with in the manner set out in Annex 4.
- 23.3 Subject to Article 21.2, the English Courts have exclusive jurisdiction to hear or otherwise decide any Dispute and, for these purposes, each Party irrevocably submits to the jurisdiction of the English courts.
- 23.4 Each Party irrevocably (i) waives any objection which it might at any time have to the English courts being nominated as the forum to hear or otherwise decide any proceedings, and (ii) agrees not to claim that the English courts are not the convenient or appropriate forum for the Dispute.
- 23.5 Each Party irrevocably agrees that a judgment or order of any English Court in connection with this Consortium Agreement is conclusive and binding on it and may be enforced against it in the courts of any other jurisdiction.

**24. General**

- 24.1 In this Consortium Agreement, unless otherwise stated, references to Articles and Annexes shall be to articles of and annexes to this Consortium Agreement.
- 24.2 Headings of Articles are for convenience only and do not affect the interpretation of this Consortium Agreement.
- 24.3 Any waiver on the part of either Party hereto of any right or interest shall not imply the waiver of any other right or interest, nor any subsequent waiver. All waivers must be in writing and signed by the Party waiving its rights.
- 24.4 This Consortium Agreement represents the entire agreement between the Parties and supersedes any other document or communication relating to all matters dealt with by this Consortium Agreement. No variation of this Consortium Agreement shall be valid unless it is in writing signed by duly authorised persons on behalf of each Party. This Consortium Agreement supersedes any previous agreement or arrangement among the Parties, and each of them.
- 24.5 None of the Parties intend to confer any benefit or right under this Consortium Agreement upon a party who is not a party to it, or do not intend that any person who is not a party to this Consortium Agreement should have the right under the contracts (Rights of Third Parties) Act 1999 to enforce any terms of this Consortium Agreement.

**25. Notices**

- 25.1 Any notice or communication required or desired to be given in connection with this Consortium Agreement shall be made in writing and delivered by hand or sent by prepaid first class post (as applicable), facsimile to the respective addresses, facsimile numbers or addresses set out below, or such other address, facsimile number either Party may from time to time notify to the other in accordance herewith:-

BB: c/o Bilfinger Berger UK Ltd, Manchester Business Park, 3000 Aviator Way, Manchester M22 5TG  
Facsimile Number: +44 ( [REDACTED]

Siemens: c/o Siemens Transportation Systems, Ashby Park, Ashby de la Zouch, Leicestershire, LE65 1JD  
Facsimile Number: +44 [REDACTED]

- 25.2 Any such notice or communication shall be deemed to have been served:-
- (a) if delivered by hand, at the time of delivery; or

- (b) if posted by airmail or first class post, at the expiration of two or seven days respectively after the envelope containing the same shall have been put into the post; or
- (c) if sent by facsimile, upon the facsimile transmission having been effected and subject to a hard copy being sent on the same day by first class post or delivered by hand.

- Annex 1: Share of the Works
- Annex 2: Time Schedule
- Annex 3: Partner Rates
- Annex 4: Dispute Resolution Procedure

  
.....  
for and on behalf of Siemens plc  
Date *8<sup>th</sup> May 2007*

  
.....  
*8<sup>th</sup> May 2007*

  
.....  
for and on behalf of Bilfinger Berger AG  
Date *8<sup>th</sup> May 2007*

  
*8 MAY 2007*

**ANNEX 2 TO THE CONSORTIUM AGREEMENT DATED .....**

**TIME SCHEDULE**

TBA

**ANNEX 3 TO THE CONSORTIUM AGREEMENT DATED .....**

**PARTNER RATES**

TBA

**ANNEX 4 TO THE CONSORTIUM AGREEMENT DATED .....**

**DISPUTE RESOLUTION PROCEDURE**

**1. Dispute Resolution**

In this Annex 4, "Dispute" means any difference, controversy, claim or dispute of whatever nature between the Parties arising under, out of or in connection with this Consortium Agreement or the Contract or any related agreement (including, without limitation, any question of breach, interpretation, validity, effect, performance or termination of this Consortium Agreement or any related agreement).

**2. Initial negotiations and escalation procedure**

2.1 Subject to paragraph 7 below, neither of the Parties shall commence any legal proceedings in connection with any Dispute until the procedures set out in paragraphs 2.2, 3 and 4 have been completed, unless it is necessary for that Party to do so in order to protect or preserve any cause of action it may have against the other Party, and in the event it becomes necessary for a Party to do so, the proceedings shall be served on such other Party and stayed by consent until such time as the Parties have completed the procedures set out in paragraphs 2.2, 3 and 4.

2.2 The Parties shall attempt, in good faith, to resolve any Dispute promptly by negotiation which shall be conducted as follows:

- (a) any Dispute shall, in the first instance, be referred by notice in writing (the "Notice of Dispute") from the referring Party to the other Party and within fourteen days of the date the Notice of Dispute is received (as determined in accordance with Article 23) the Party receiving the Notice of Dispute shall deliver to the other Party a written response to the Notice of Dispute (the "Response"). Both the Notice of Dispute and Response shall include a statement of the position of the Party preparing the Notice of Dispute or Response and shall annex any documents relied upon by that Party;
- (b) within seven days of receiving a Response to a Notice of Dispute, or if no Response is delivered, within seven days of the date upon which the time for delivery of a Response expired, the Consortium Board shall meet to discuss and try to reach agreement to resolve the Dispute; and
- (c) if the Consortium Board are unable to, or fail to, reach agreement to resolve the Dispute within fourteen days of commencing their discussions pursuant to 0 above, then within seven days the managing directors (or their nominees) of the Parties (collectively the "Directors") shall meet at mutually acceptable times and places to discuss and try to reach agreement to resolve the Dispute within fourteen days after the Dispute is referred to them.

- 2.3 All negotiations and discussions pursuant to paragraph 2.2 are confidential and shall be treated as compromise and settlement negotiations for the purpose of any applicable rules of evidence.

### **3. Mediation**

- 3.1 If the Directors are unable to, or fail to, resolve the Dispute pursuant to paragraph 2.2(c) within fourteen days after the Dispute is referred to them, the Parties shall attempt to resolve the Dispute by mediation in accordance with the Centre for Dispute Resolution (CEDR) Model Mediation Procedure 5th Edition (or if amended the current version at the time of the Dispute (the "CEDR Model Mediation Procedure")).
- 3.2 To initiate a mediation pursuant to paragraph 3.1 the claiming Party must give notice in writing (the "ADR Notice") to the other Party addressed to its Director and to the Chief Executive of CEDR requesting a mediation in accordance with paragraph 3.1 and such notice must be given within ten days after the date upon which the time for the Directors to resolve the Dispute pursuant to paragraph 2.2(c) expired (or such longer period as is reasonable in all of the circumstances).
- 3.3 The Parties concerned will sign a mediation agreement in accordance with CEDR's Model Mediation Agreement (or in such other terms as may be agreed by the Parties in writing (the "Mediation Agreement")). The Mediation Agreement will be signed not less than seven days prior to the date fixed for mediation of the Dispute.
- 3.4 The mediation shall take place in London and the language of the mediation will be English. The Mediation Agreement referred to in the CEDR Model Mediation Procedure shall be governed by and construed and take effect in accordance with English law.
- 3.5 If the Parties are unable to reach settlement at the mediation, neither Party shall call the mediator(s) as witnesses in any arbitration or court proceedings involving or relating to the Dispute.

### **4. Arbitration**

- 4.1 If the Parties concerned have not settled the Dispute by mediation pursuant to paragraph 3, such Parties shall endeavour to agree, within fourteen days after the date of conclusion of the mediation, to resolve the Dispute by arbitration to be conducted in accordance with rules of arbitration to be agreed by the Parties concerned.
- 4.2 The relevant Parties shall not refer the Dispute to arbitration unless they have both agreed in writing that the decision of the arbitral tribunal shall be final and binding.

### **5. Court proceedings**

If the Dispute is not settled by negotiation in accordance with paragraph 2 or by mediation in accordance with paragraph 3 and the Parties do not agree in writing, within fourteen days after the date of the conclusion of the Mediation to resolve the Dispute by arbitration in accordance with paragraph 4, either Party may initiate proceedings in respect of the Dispute in accordance with Article 21, and subject to the other provisions of this Consortium Agreement. If proceedings have already been issued and served pursuant to paragraph 2.1 either Party may apply for the stay to be lifted and shall give at least fourteen days written notice of this application to the other Party.

**6. Continued performance of obligations**

Unless this Consortium Agreement has already been terminated, the Parties shall continue to perform their obligations under this Consortium Agreement and the Contract regardless of the nature of the Dispute and notwithstanding the referral of the Dispute for resolution pursuant to this Annex 4.

**7. Interim relief**

Nothing in this Consortium Agreement shall prevent either Party seeking interim relief in any court.

Project Name Edinburgh Tram Network  
List of Responsibilities

BBS CONSORTIUM

DESCRIPTION	Tender phase	RESPONSIBLE PARTNER				
		Mgmt. & Co-ordination	Design	Delivery/Proc.	Installation	Commission
<b>1 COMMERCIAL</b>						
<b>1.1 Administration (project offices)</b>						
Provision of Central Project office space	BB	BB				
Common furniture (inventory)	BB	BB				
Cars & other vehicles	Each	Each				
Communication system	BB	BB				
Insurances for BB	BB	BB				
Insurances for Siemens	Siemens	Siemens				
Work permits for BB	BB	Each				
Work permits for Siemens	Siemens	Siemens				
Project Office and Infrastructure for Client	BB	BB				
<b>1.2 Contract management</b>						
General Contract monitoring and advice	BB	Consortium				
Overall Risk management (incl. Overall Risk Contingency)	BB	Consortium				
Claim management incl. change-order management	Each	Each				
Legal support BB	BB	BB				
Legal support Siemens	Siemens	Siemens				
Technical Risk management (incl. technical Risk Contingency)	Each	Each				
Close out reports (Abschlussbericht)	Each	Each				
Co-ordination of subcontractors	Each	Each				
<b>1.3 Procurement</b>						
Procurement (purchasing / subcontracts)	Each	Each				
<b>1.4 Finance management</b>						
Bonds, Guarantees (BB)	BB	BB				
Bonds, Guarantees (Siemens)	Siemens	Siemens				
Exchange risks, Hedging (Wahrungssicherung) (BB)	BB	BB				
Exchange risks, Hedging (Wahrungssicherung) (Siemens)	Siemens	Siemens				
Taxes, duties, penalties (BB)	BB	BB				
Taxes, duties, penalties (Siemens)	Siemens	Siemens				
Landfill tax, Aggregate Tax	BB	BB				
Taxes / duties for Employees (like Personensteuern, Sozialabgaben)	BB	Each				
Invoicing to customer	BB	Consortium				
Liabilities	Each	Each				
<b>1.5 Logistics</b>	Each	Each				
On-shore storage (central store)	BB	Each				
<b>1.6 Asset Management</b>						
Asset Management for BB	BB	BB				
Asset Management Plan for Siemens	Siemens	Siemens				
<b>1.7 Project Controlling</b>						
Planning / forecast, reporting towards client	BB	Consortium				
Planning / forecast, reporting (internally)	Each	Each				
Cost control (internally)	Each	Each				
Project calculation	Each	Each				
<b>2 OVERALL PROJECT MANAGEMENT</b>						
<b>2.1 - General Project Management for the Overall Contract</b>	Consortium	Consortium				
Overall System Acceptance Plan	SDS	SDS				
Trial run concept for Consortium incl. STS scope before operational acceptance	SDS	SDS				
Provision of energy for Trial Run	TIE	TIE				
Running costs beginning with occupation by tie	TIE	TIE				
Operation Procedure Manual for trains	Tramco	Tramco				
Site Security outside Work bases after handover	TIE	TIE				
Site Security inside Work bases after handover	TIE	TIE				
Provision of class rooms & infrastructure for class room training purposes (e.g. overhead projector, flip chart, beamer/ projector ...) for common use	BB	Each				
<b>2.2 - Project Management for Siemens</b>	Siemens	Siemens				
<b>2.3 - System Engineering</b>	SDS	SDS				
Outline programs if requested	Siemens	Siemens				
<b>2.4 - Site Management</b>	Consortium	Consortium				
<b>2.5 - Site Safety &amp; Security Management</b>	BB	Consortium				
Utility Diversion (MUDFA contract)	TIE	TIE				
Utility Diversion of unrecovered utilities (not recovered by MUDFA)	BB	BB				
<b>3 DESIGN FOR CIVIL AND E&amp;M</b>	SDS	SDS	SDS			
<b>4 CIVIL WORKS</b>	BB		BB	BB	BB	BB
<b>4.1 - General</b>						
Construction	BB		BB	BB	BB	BB
Building Fixations	Siemens		Siemens	Siemens	Siemens	Siemens
Signage Depot	Each		Each	Each	Each	Each
Signage Substations	Siemens		Siemens	Siemens	Siemens	Siemens
Temporary Signage	BB		BB	BB	BB	BB
<b>5 Track and Formation</b>						
Track Sub-Structure	BB		BB	BB	BB	BB
Track Super-Structure			Siemens	Siemens	Siemens	Siemens
Infill works as concrete, asphalt, pavements, grass etc.	BB	Siemens	BB	BB	BB	BB

8/5/04

**Project Name** Edinburgh Tram Network  
**List of Responsibilities**

BBS CONSORTIUM

DESCRIPTION	Tender phase	RESPONSIBLE PARTNER				
		Signs & Roadworks	Design	Delivery Proc.	Installation	Commissioning
Turnout motors	Siemens		Siemens	Siemens	Siemens	Siemens
Switches & Crossings	Siemens		Siemens	Siemens	Siemens	Siemens
Buffers	Siemens		Siemens	Siemens	Siemens	Siemens
Fencing & Track Barriers	BB		BB	BB	BB	BB
Track Reinstatement (e.g. road finish)	BB		BB	BB	BB	BB
<b>6 Tramstops &amp; Equipment (Building and Civil works incl. shelters)</b>	BB		BB	BB	BB	BB
REC Supplies	Siemens		Siemens	Siemens	Siemens	Siemens
Equipment Interfaces for Tramstop Equipment (OTN)	Siemens		Siemens	Siemens	Siemens	Siemens
Passenger Information System	Siemens		Siemens	Siemens	Siemens	Siemens
Help Points	Siemens		Siemens	Siemens	Siemens	Siemens
TVM, Validators	tbd		tbd	tbd	tbd	tbd
PA	Siemens		Siemens	Siemens	Siemens	Siemens
CCTV	Siemens		Siemens	Siemens	Siemens	Siemens
LV infeed and connection to Scottish power LV supply, incl. Station M	Siemens		Siemens	Siemens	Siemens	Siemens
<b>7 Depot</b>						
Operational Control Room (Building and Civil Works)	BB		BB	BB	BB	BB
Displays	Siemens		Siemens	Siemens	Siemens	Siemens
Personal Computers	Siemens		Siemens	Siemens	Siemens	Siemens
Printers	Siemens		Each	Each	Each	Each
Mimic Panel (TPDS)	Siemens		Siemens	Siemens	Siemens	Siemens
Furniture & Workstations (desks)	BB		BB	BB	BB	BB
Equipment Room (Building and Civil Works)	BB		BB	BB	BB	BB
UPS & power supply back-up	Siemens		Siemens	Siemens	Siemens	Siemens
Equipment Housings	Siemens		Siemens	Siemens	Siemens	Siemens
Master clock	Siemens		Siemens	Siemens	Siemens	Siemens
Environmental Control Equipment (HVAC)	BB		BB	BB	BB	BB
Maintenance Stations for E&M	Siemens		Siemens	Siemens	Siemens	Siemens
Maintenance Stations for CIV	BB		BB	BB	BB	BB
Printers & media printers	Siemens		Siemens	Siemens	Siemens	Siemens
Furniture & fittings	BB		BB	BB	BB	BB
Performance Monitoring system	Siemens		Siemens	Siemens	Siemens	Siemens
Specialist Equipment & facilities	Siemens		Siemens	Siemens	Siemens	Siemens
Gantry (2 tracks, both sides) (Roof working platforms)	BB		BB	BB	BB	BB
Underfloor pits including power, lighting, drainage and stairs	BB		BB	BB	BB	BB
Crane Rail Girder	BB		BB	BB	BB	BB
Aircon repair	Tramco		Tramco	Tramco	Tramco	Tramco
RST special tools	Tramco		Tramco	Tramco	Tramco	Tramco
Depot Building works	BB		BB	BB	BB	BB
Building services	BB		BB	BB	BB	BB
Access control and security system - personnel	BB		BB	BB	BB	BB
Telephone & PA system	Siemens		Siemens	Siemens	Siemens	Siemens
CCTV system	Siemens		Siemens	Siemens	Siemens	Siemens
Depot and workshop OCL interlocking with cranes and platforms	Siemens		Siemens	Siemens	Siemens	Siemens
Depot Power Building	BB		BB	BB	BB	BB
Traction Power ("depot substation")	Siemens		Siemens	Siemens	Siemens	Siemens
Traction Power distribution	Siemens		Siemens	Siemens	Siemens	Siemens
OLE system in depot	Siemens		Siemens	Siemens	Siemens	Siemens
Aux Power transformer	Siemens		Siemens	Siemens	Siemens	Siemens
Aux Power distribution	BB		BB	BB	BB	BB
Depot External Works / Landscaping	BB		BB	BB	BB	BB
CCTV masts	BB		BB	BB	BB	BB
Waste Water Treatment plant	BB		BB	BB	BB	BB
External Lighting	BB		BB	BB	BB	BB
<b>8 Highways</b>	BB	BB	BB	BB	BB	BB
Junction Signals (traffic signals)	BB		BB	BB	BB	BB
Civils works for Junction Signals (traffic signals)	BB		BB	BB	BB	BB
<b>9 Substations</b>		BB				
Haymarket Terrace Substation	Siemens		Siemens	Siemens	Siemens	Siemens
Bankhead Drive Substation	Siemens		Siemens	Siemens	Siemens	Siemens
Jenners's Depository Substation	Siemens		Siemens	Siemens	Siemens	Siemens
Gogar Depot Substation	Siemens		Siemens	Siemens	Siemens	Siemens
Ingliston Park & Ride Substation	Siemens		Siemens	Siemens	Siemens	Siemens
Leith Sands Substation	Siemens		Siemens	Siemens	Siemens	Siemens
Leith Walk SubStation	Siemens		Siemens	Siemens	Siemens	Siemens
Cathedral SubStation	Siemens		Siemens	Siemens	Siemens	Siemens
Craighall	Siemens		Siemens	Siemens	Siemens	Siemens
Granton Mains East	Siemens		Siemens	Siemens	Siemens	Siemens
Granton Road	Siemens		Siemens	Siemens	Siemens	Siemens
Access control and security system	Siemens	Siemens	Siemens	Siemens	Siemens	Siemens
Cable Ducts and Sealings and Foundations	BB		BB	BB	BB	BB
<b>10 Interchanges</b>						
Provide inter modal transport interchange		tbd w/ tie				
Commission into service inter modal transport interchange		tbd w/ tie				
<b>11 Structures</b>		BB				
All Bridges and Viaducts	BB		BB	BB	BB	BB
Culverts	BB		BB	BB	BB	BB
A8 Underpass	BB		BB	BB	BB	BB
Retaining Walls	BB		BB	BB	BB	BB
Cable ducts and drawpits	BB		BB	BB	BB	BB

8/8/07

BBS CONSORTIUM

**Project Name** Edinburgh Tram Network  
**List of Responsibilities**

DESCRIPTION	Tender phase	RESPONSIBLE PARTNER				
		Model & Coordinator	Design	Supply, Proc	Installation	Commission
<b>12</b> <b>Supervisory Control &amp; Comms Systems (SCC)</b>		Siemens				
SCADA (Depot & Park & Ride)						
Signaling Operation Control System (VICOS)	Siemens		Siemens	Siemens	Siemens	Siemens
Operational Radio	Siemens		Siemens	Siemens	Siemens	Siemens
Operational Data Network (OTN)	Siemens		Siemens	Siemens	Siemens	Siemens
Telephone Network	Siemens		Siemens	Siemens	Siemens	Siemens
CCTV	Siemens		Siemens	Siemens	Siemens	Siemens
Passenger Help Point Control system	Siemens		Siemens	Siemens	Siemens	Siemens
Public Address System	Siemens		Siemens	Siemens	Siemens	Siemens
Passenger Information System	Siemens		Siemens	Siemens	Siemens	Siemens
Tram Positioning & Detection System (mainline & depot)	Siemens		Siemens	Siemens	Siemens	Siemens
Signal mast foundations	BB		BB	BB	BB	BB
<b>13</b> <b>Overhead Line Contact System &amp; HV Supplies</b>	Siemens	Siemens	Siemens	Siemens	Siemens	Siemens
Scottish Power Compartment contents (e.g. medium voltage switchgear, MV tie)	tie	tie	tie	tie	tie	tie
Support Structure Foundations	BB		BB	BB	BB	BB
Fire Detection	BB	BB	BB	BB	BB	BB
Pole foundations	BB		BB	BB	BB	BB
<b>14</b> <b>Spares</b>						
Spares for testing (T1-T3) and trial run phase	Each		Each	Each	Each	Each
Provide Initial Spares for CIV after handover (incl. T4-T5)	BB		BB	BB	BB	BB
Provide Initial Spares for E&M after handover (incl. T4-T5)	Siemens		Siemens	Siemens	Siemens	Siemens
<b>15</b> <b>Training</b>						
Operation Training Support	Siemens		Siemens	Siemens	Siemens	Siemens
Supplier Training	Each		Each	Each	Each	Each
<b>16</b> <b>Manuals</b>						
Operating and maintenance manuals	Each		Each	Each	Each	Each
<b>17</b> <b>Maintenance</b>	Siemens/BB		Siemens/BB	Siemens/BB	Siemens/BB	Siemens/BB
<b>18</b> <b>Rolling stock</b>	Tramco		Tramco	Tramco	Tramco	Tramco
<b>19</b> <b>Onboard equipment included in BBS offer</b>	Siemens		Siemens	Siemens	Siemens	Siemens

**Project Name** Edinburgh Tram Network  
**List of Responsibilities**

DESCRIPTION	Tender phase	RESPONSIBLE PARTNER				
		BB	Siemens	TIE	Tramco	Consortium
<b>1 COMMERCIAL</b>						
<b>1.1 Administration (project offices)</b>						
Provision of Central Project office space	BB	BB				
Common furniture (inventory)	BB	BB				
Cars & other vehicles	Each	Each				
Communication system	BB	BB				
Insurances for BB	BB	BB				
Insurances for Siemens	Siemens	Siemens				
Work permits for BB	BB	Each				
Work permits for Siemens	Siemens	Siemens				
Project Office and Infrastructure for Client	BB	BB				
<b>1.2 Contract management</b>						
General Contract monitoring and advice	BB	Consortium				
Overall Risk management (incl. Overall Risk Contingency)	BB	Consortium				
Claim management incl. change-order management	Each	Each				
Legal support BB	BB	BB				
Legal support Siemens	Siemens	Siemens				
Technical Risk management (incl. technical Risk Contingency)	Each	Each				
Close out reports (Abschlußbericht)	Each	Each				
Co-ordination of subcontractors	Each	Each				
<b>1.3 Procurement</b>						
Procurement (purchasing / subcontracts)	Each	Each				
<b>1.4 Finance management</b>						
Bonds, Guarantees (BB)	BB	BB				
Bonds, Guarantees (Siemens)	Siemens	Siemens				
Exchange risks, Hedging (Währungssicherung) (BB)	BB	BB				
Exchange risks, Hedging (Währungssicherung) (Siemens)	Siemens	Siemens				
Taxes, duties, penalties (BB)	BB	BB				
Taxes, duties, penalties (Siemens)	Siemens	Siemens				
Landfill tax, Aggregate Tax	BB	BB				
Taxes / duties for Employees (like Personensteuern, Sozialabgaben)	BB	Each				
Invoicing to customer	BB	Consortium				
Liabilities	Each	Each				
<b>1.5 Logistics</b>						
On-shore storage (central store)	BB	Each				
<b>1.6 Asset Management</b>						
Asset Management for BB	BB	BB				
Asset Management Plan for Siemens	Siemens	Siemens				
<b>1.7 Project Controlling</b>						
Planning / forecast, reporting towards client	BB	Consortium				
Planning / forecast, reporting (internally)	Each	Each				
Cost control (internally)	Each	Each				
Project calculation	Each	Each				
<b>2 OVERALL PROJECT MANAGEMENT</b>						
<b>2.1 - General Project Management for the Overall Contract</b>	Consortium	Consortium				
Overall System Acceptance Plan	SDS	BB				
Trial run concept for Consortium incl. STS scope before provisional acceptance	SDS	BB				
Provision of energy for Trial Run	TIE	TIE				
Running costs beginning with occupation by tie	TIE	BB				
Operation Procedure Manual for trains	Tramco	BB				
Site Security outside Work bases after handover	TIE	TIE				
Site Security inside Work bases after handover	TIE	TIE				
Provision of class rooms & infrastructure for class room training purposes (e.g. overhead projector, flip chart, beamer/ projector ...) for common use	BB	Each				
<b>2.2 - Project Management for Siemens</b>	Siemens	Siemens				
<b>2.3 - System Engineering</b>	SDS	BB				
Outline programs if requested	Siemens	Siemens				
<b>2.4 - Site Management</b>	Consortium	Consortium				
<b>2.5 - Site Safety &amp; Security Management</b>	BB	Consortium				
Utility Diversion (MUDFA contract)	TIE	BB				
Utility Diversion of unrecovered utilities (not recovered by MUDFA)	BB	BB				
<b>3 DESIGN FOR CIVIL AND E&amp;M</b>	SDS	BB				
<b>4 CIVIL WORKS</b>	BB	BB	BB	BB	BB	
<b>4.1 - General</b>						
Construction	BB	BB	BB	BB	BB	
Building Fixations	Siemens	Siemens	Siemens	Siemens	Siemens	
Signage Depot	Each	Each	Each	Each	Each	
Signage Substations	Siemens	Siemens	Siemens	Siemens	Siemens	
Temporary Signage	BB	BB	BB	BB	BB	
<b>5 Track and Formation</b>						
Track Sub-Structure	BB	BB	BB	BB	BB	
Track Super-Structure	BB	BB	BB	BB	BB	
Infill works as concrete, asphalt, pavements, grass etc.	BB	BB	BB	BB	BB	

**Project Name** Edinburgh Tram Network  
**List of Responsibilities**

BB5 CONSORTIUM

DESCRIPTION	Tender phase	RESPONSIBLE PARTNER			
		BB	Siemens	Siemens	Siemens
Turnout motors	Siemens	Siemens	Siemens	Siemens	Siemens
Switches & Crossings	Siemens	Siemens	Siemens	Siemens	Siemens
Buffers	Siemens	Siemens	Siemens	Siemens	Siemens
Fencing & Track Barriers	BB	BB	BB	BB	BB
Track Reinstatement (a.g road finish)	BB	BB	BB	BB	BB
<b>6</b> Tramstops & Equipment (Building and Civil works incl. shelters)	BB	BB	BB	BB	BB
REC Supplies	Siemens	Siemens	Siemens	Siemens	Siemens
Equipment Interfaces for Tramstop Equipment (OTN)	Siemens	Siemens	Siemens	Siemens	Siemens
Passenger Information System	Siemens	Siemens	Siemens	Siemens	Siemens
Help Points	Siemens	Siemens	Siemens	Siemens	Siemens
TVM, Validators	tbd				
PA	Siemens	Siemens	Siemens	Siemens	Siemens
CCTV	Siemens	Siemens	Siemens	Siemens	Siemens
LV infeed and connection to Scottish power LV supply, incl. Station M	Siemens	Siemens	Siemens	Siemens	Siemens
<b>7</b> Depot					
Operational Control Room (Building and Civil Works)	BB	BB	BB	BB	BB
Displays	Siemens	Siemens	Siemens	Siemens	Siemens
Personal Computers	Siemens	Siemens	Siemens	Siemens	Siemens
Printers	Siemens	Siemens	Siemens	Siemens	Siemens
Mimic Panel (TPDS)	Siemens	Siemens	Siemens	Siemens	Siemens
Furniture & Workstations (desks)	BB	BB	BB	BB	BB
Equipment Room (Building and Civil Works)	BB	BB	BB	BB	BB
UPS & power supply back-up	Siemens	Siemens	Siemens	Siemens	Siemens
Equipment Housings	Siemens	Siemens	Siemens	Siemens	Siemens
Master clock	Siemens	Siemens	Siemens	Siemens	Siemens
Environmental Control Equipment (HVAC)	BB	BB	BB	BB	BB
Maintenance Stations for E&M	Siemens	Siemens	Siemens	Siemens	Siemens
Maintenance Stations for CIV	BB	BB	BB	BB	BB
Printers & media printers	Siemens	Siemens	Siemens	Siemens	Siemens
Furniture & fittings	BB	BB	BB	BB	BB
Performance Monitoring system	Siemens	Siemens	Siemens	Siemens	Siemens
Specialist Equipment & facilities	Siemens	Siemens	Siemens	Siemens	Siemens
Gantry (2 tracks, both sides) (Roof working platforms)	BB	BB	BB	BB	BB
Undeefloor pits including power, lighting, drainage and stairs	BB	BB	BB	BB	BB
Crane Rail Girder	BB	BB	BB	BB	BB
Aircon repair	Tranco	Tranco	Tranco	Tranco	Tranco
RST special tools	Tranco	Tranco	Tranco	Tranco	Tranco
Depot Building works	BB	BB	BB	BB	BB
Building services	BB	BB	BB	BB	BB
Access control and security system - personnel	BB	BB	BB	BB	BB
Telephone & PA system	Siemens	Siemens	Siemens	Siemens	Siemens
CCTV system	Siemens	Siemens	Siemens	Siemens	Siemens
Depot and workshop OCL interlocking with cranes and platforms	Siemens	Siemens	Siemens	Siemens	Siemens
Depot Power Building	BB	BB	BB	BB	BB
Traction Power ("depot substation")	Siemens	Siemens	Siemens	Siemens	Siemens
Traction Power distribution	Siemens	Siemens	Siemens	Siemens	Siemens
OLE system in depot	Siemens	Siemens	Siemens	Siemens	Siemens
Aux Power transformer	Siemens	Siemens	Siemens	Siemens	Siemens
Aux Power distribution	BB	BB	BB	BB	BB
Depot External Works / Landscaping	BB	BB	BB	BB	BB
CCTV masts	BB	BB	BB	BB	BB
Waste Water Treatment plant	BB	BB	BB	BB	BB
External Lighting	BB	BB	BB	BB	BB
<b>8</b> Highways	BB	BB	BB	BB	BB
Junction Signals (traffic signals)	BB	BB	BB	BB	BB
Civils works for Junction Signals (traffic signals)	BB	BB	BB	BB	BB
<b>9</b> Substations					
Haymarket Terrace Substation	Siemens	Siemens	Siemens	Siemens	Siemens
Bankhead Drive Substation	Siemens	Siemens	Siemens	Siemens	Siemens
Jenners's Depository Substation	Siemens	Siemens	Siemens	Siemens	Siemens
Gogar Depot Substation	Siemens	Siemens	Siemens	Siemens	Siemens
Ingliston Park & Ride Substation	Siemens	Siemens	Siemens	Siemens	Siemens
Leith Sands Substation	Siemens	Siemens	Siemens	Siemens	Siemens
Leith Walk SubStation	Siemens	Siemens	Siemens	Siemens	Siemens
Cathedral SubStation	Siemens	Siemens	Siemens	Siemens	Siemens
Craighall	Siemens	Siemens	Siemens	Siemens	Siemens
Granton Mains East	Siemens	Siemens	Siemens	Siemens	Siemens
Granton Road	Siemens	Siemens	Siemens	Siemens	Siemens
Access control and security system	Siemens	Siemens	Siemens	Siemens	Siemens
Cable Ducts and Sealings and Foundations	BB	BB	BB	BB	BB
<b>10</b> interchanges					
Provide inter modal transport interchange					
Commission into service inter modal transport interchange					
<b>11</b> Structures					
All Bridges and Viaducts	BB	BB	BB	BB	BB
Culverts	BB	BB	BB	BB	BB
A8 Underpass	BB	BB	BB	BB	BB
Retaining Walls	BB	BB	BB	BB	BB
Cable ducts and drawpits	BB	BB	BB	BB	BB

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**Project Name** Edinburgh Tram Network  
**List of Responsibilities**

BBS CONSORTIUM

DESCRIPTION	Tender phase	RESPONSIBLE PARTNER				
		BB	Siemens	Siemens	Siemens	Siemens
<b>12</b> <b>Supervisory Control &amp; Comms Systems (SCC)</b>		Siemens				
SCADA (Depot & Park & Ride)		Siemens	Siemens	Siemens	Siemens	Siemens
Signaling Operation Control System (VICOS)	Siemens	Siemens	Siemens	Siemens	Siemens	Siemens
Operational Radio	Siemens	Siemens	Siemens	Siemens	Siemens	Siemens
Operational Data Network (OTN)	Siemens	Siemens	Siemens	Siemens	Siemens	Siemens
Telephone Network	Siemens	Siemens	Siemens	Siemens	Siemens	Siemens
CCTV	Siemens	Siemens	Siemens	Siemens	Siemens	Siemens
Passenger Help Point Control system	Siemens	Siemens	Siemens	Siemens	Siemens	Siemens
Public Address System	Siemens	Siemens	Siemens	Siemens	Siemens	Siemens
Passenger Information System	Siemens	Siemens	Siemens	Siemens	Siemens	Siemens
Tram Positioning & Detection System (mainline & depot)	Siemens	Siemens	Siemens	Siemens	Siemens	Siemens
Signal mast foundations	BB	BB	BB	BB	BB	BB
<b>13</b> <b>Overhead Line Contact System &amp; HV Supplies</b>	Siemens	Siemens	Siemens	Siemens	Siemens	Siemens
Scottish Power Compartment contents (e.g. medium voltage switchgear, MV)	tle	tle	tle	tle	tle	tle
Support Structure Foundations	BB	BB	BB	BB	BB	BB
Fire Detection	BB	BB	BB	BB	BB	BB
Pole foundations	BB	BB	BB	BB	BB	BB
<b>14</b> <b>Spares</b>						
Spares for testing (T1-T3) and trial run phase	Each	Each	Each	Each	Each	Each
Provide Initial Spares for CIV after handover (incl. T4-T5)	BB	BB	BB	BB	BB	BB
Provide Initial Spares for E&M after handover (incl. T4-T5)	Siemens	Siemens	Siemens	Siemens	Siemens	Siemens
<b>15</b> <b>Training</b>						
Operation Training Support	Siemens	Siemens	Siemens	Siemens	Siemens	Siemens
Supplier Training	Each	Each	Each	Each	Each	Each
<b>16</b> <b>Manuals</b>						
Operating and maintenance manuals	Each	Each	Each	Each	Each	Each
<b>17</b> <b>Maintenance</b>	Siemens/BB	Siemens/BB	Siemens/BB	Siemens/BB	Siemens/BB	Siemens/BB
<b>18</b> <b>Rolling stock</b>	Tramco	Tramco	Tramco	Tramco	Tramco	Tramco
<b>19</b> <b>Onboard equipment included in BBS offer</b>	Siemens	Siemens	Siemens	Siemens	Siemens	Siemens

**Project Name** Edinburgh Tram Network  
**List of Responsibilities**

DESCRIPTION	Tender phase	RESPONSIBLE PARTNER				
		Main & Construction	Design	Delivery/Proc	Installation	Commissioning
<b>1 COMMERCIAL</b>						
<b>1.1 Administration (project offices)</b>						
Provision of Central Project office space	BB	BB				
Common furniture (inventory)	BB	BB				
Cars & other vehicles	Each	Each				
Communication system	BB	BB				
Insurances for BB	BB	BB				
Insurances for Siemens	Siemens	Siemens				
Work permits for BB	BB	Each				
Work permits for Siemens	Siemens	Siemens				
Project Office and infrastructure for Client	BB	BB				
<b>1.2 Contract management</b>						
General Contract monitoring and advice	BB	Consortium				
Overall Risk management (incl. Overall Risk Contingency)	BB	Consortium				
Claim management incl. change-order management	Each	Each				
Legal support BB	BB	BB				
Legal support Siemens	Siemens	Siemens				
Technical Risk management (incl. technical Risk Contingency)	Each	Each				
Close out reports (Abschlußbericht)	Each	Each				
Co-ordination of subcontractors	Each	Each				
<b>1.3 Procurement</b>						
Procurement (purchasing / subcontracts)	Each	Each				
<b>1.4 Finance management</b>						
Bonds, Guarantees (BB)	BB	BB				
Bonds, Guarantees (Siemens)	Siemens	Siemens				
Exchange risks, Hedging (Währungssicherung) (BB)	BB	BB				
Exchange risks, Hedging (Währungssicherung) (Siemens)	Siemens	Siemens				
Taxes, duties, penalties (BB)	BB	BB				
Taxes, duties, penalties (Siemens)	Siemens	Siemens				
Landfill tax, Aggregate Tax	BB	BB				
Taxes / duties for Employees (like Personensteuern, Sozialabgaben)	BB	Each				
Invoicing to customer	BB	Consortium				
Liabilities	Each	Each				
<b>1.5 Logistics</b>	Each	Each				
On-shore storage (central store)	BB	Each				
<b>1.6 Asset Management</b>						
Asset Management for BB	BB	BB				
Asset Management Plan for Siemens	Siemens	Siemens				
<b>1.7 Project Controlling</b>						
Planning / forecast, reporting towards client	BB	Consortium				
Planning / forecast, reporting (internally)	Each	Each				
Cost control (internally)	Each	Each				
Project calculation	Each	Each				
<b>2 OVERALL PROJECT MANAGEMENT</b>						
<b>2.1 - General Project Management for the Overall Contract</b>	Consortium	Consortium				
Overall System Acceptance Plan	SDS	SDS				
Trial run concept for Consortium incl. STS scope before provisional acceptance	SDS	SDS				
Provision of energy for Trial Run	TIE	TIE				
Running costs beginning with occupation by tie	TIE	TIE				
Operation Procedure Manual for trains	Tramco	Tramco				
Site Security outside Work bases after handover	TIE	TIE				
Site Security inside Work bases after handover	TIE	TIE				
Provision of classrooms & infrastructure for class room training purposes (e.g. overhead projector, flip chart, beamer/ projector ...) for common use	BB	Each				
<b>2.2 - Project Management for Siemens</b>	Siemens	Siemens				
<b>2.3 - System Engineering</b>	SDS	SDS				
Outline programs if requested	Siemens	Siemens				
<b>2.4 - Site Management</b>	Consortium	Consortium				
<b>2.5 - Site Safety &amp; Security Management</b>	BB	Consortium				
Utility Diversion (MUDFA contract)	TIE	TIE				
Utility Diversion of unrecovered utilities (not recovered by MUDFA)	BB	BB				
<b>3 DESIGN FOR CIVIL AND E&amp;M</b>	SDS	SDS	SDS			
<b>4 CIVIL WORKS</b>	BB		BB	BB	BB	BB
<b>4.1 - General</b>						
Construction	BB		BB	BB	BB	BB
Building Fixations	Siemens			Siemens	Siemens	Siemens
Signage Depot	Each		Each	Each	Each	Each
Signage Substations	Siemens		Siemens	Siemens	Siemens	Siemens
Temporary Signage	BB		BB	BB	BB	BB
<b>5 Track and Formation</b>						
Track Sub-Structure	BB		BB	BB	BB	BB
Track Super-Structure			Siemens	Siemens	Siemens	Siemens
Infill works as concrete, asphalt, pavements, grass etc.	BB	Siemens	BB	BB	BB	BB

**Project Name** Edinburgh Tram Network  
**List of Responsibilities**

**BBS CONSORTIUM**

DESCRIPTION	Tender phase	RESPONSIBLE PARTNER				
		Manage & Coordinate	Design	Delivery/Proc	Installation	Commissioning
Turnout motors	Siemens		Siemens	Siemens	Siemens	Siemens
Switches & Crossings	Siemens		Siemens	Siemens	Siemens	Siemens
Buffers	Siemens		Siemens	Siemens	Siemens	Siemens
Fencing & Track Barriers	BB		BB	BB	BB	BB
Track Reinstatement (e.g. road finish)	BB		BB	BB	BB	BB
<b>6 Tramstops &amp; Equipment (Building and Civil works incl. shelters)</b>	<b>BB</b>		<b>BB</b>	<b>BB</b>	<b>BB</b>	<b>BB</b>
REC Supplies	Siemens		Siemens	Siemens	Siemens	Siemens
Equipment Interfaces for Tramstop Equipment (OTN)	Siemens		Siemens	Siemens	Siemens	Siemens
Passenger Information System	Siemens		Siemens	Siemens	Siemens	Siemens
Help Points	Siemens		Siemens	Siemens	Siemens	Siemens
TVM, Validators	tbd		tbd	tbd	tbd	tbd
PA	Siemens		Siemens	Siemens	Siemens	Siemens
CCTV	Siemens		Siemens	Siemens	Siemens	Siemens
LV infeed and connection to Scottish power LV supply, incl. Station M	Siemens		Siemens	Siemens	Siemens	Siemens
<b>7 Depot</b>						
Operational Control Room (Building and Civil Works)	BB		BB	BB	BB	BB
Displays	Siemens		Siemens	Siemens	Siemens	Siemens
Personal Computers	Siemens		Siemens	Siemens	Siemens	Siemens
Printers	Siemens		Each	Each	Each	Each
Mimic Panel (TPDS)	Siemens		Siemens	Siemens	Siemens	Siemens
Furniture & Workstations (desks)	BB		BB	BB	BB	BB
Equipment Room (Building and Civil Works)	BB		BB	BB	BB	BB
UPS & power supply back-up	Siemens		Siemens	Siemens	Siemens	Siemens
Equipment Housings	Siemens		Siemens	Siemens	Siemens	Siemens
Master clock	Siemens		Siemens	Siemens	Siemens	Siemens
Environmental Control Equipment (HVAC)	BB		BB	BB	BB	BB
Maintenance Stations for E&M	Siemens		Siemens	Siemens	Siemens	Siemens
Maintenance Stations for CIV	BB		BB	BB	BB	BB
Printers & media printers	Siemens		Siemens	Siemens	Siemens	Siemens
Furniture & fittings	BB		BB	BB	BB	BB
Performance Monitoring system	Siemens		Siemens	Siemens	Siemens	Siemens
Specialist Equipment & facilities	Siemens		Siemens	Siemens	Siemens	Siemens
Gantry (2 tracks, both sides) (Roof working platforms)	BB		BB	BB	BB	BB
Underfloor piles including power, lighting, drainage and stairs	BB		BB	BB	BB	BB
Crane Rail Girder	BB		BB	BB	BB	BB
Aircon repair	Tramco		Tramco	Tramco	Tramco	Tramco
RST special tools	Tramco		Tramco	Tramco	Tramco	Tramco
Depot Building works	BB		BB	BB	BB	BB
Building services	BB		BB	BB	BB	BB
Access control and security system - personnel	BB		BB	BB	BB	BB
Telephone & PA system	Siemens		Siemens	Siemens	Siemens	Siemens
CCTV system	Siemens		Siemens	Siemens	Siemens	Siemens
Depot and workshop OCL interlocking with cranes and platforms	Siemens		Siemens	Siemens	Siemens	Siemens
Depot Power Building	BB		BB	BB	BB	BB
Traction Power ("depot substation")	Siemens		Siemens	Siemens	Siemens	Siemens
Traction Power distribution	Siemens		Siemens	Siemens	Siemens	Siemens
OLE system in depot	Siemens		Siemens	Siemens	Siemens	Siemens
Aux Power transformer	Siemens		Siemens	Siemens	Siemens	Siemens
Aux Power distribution	BB		BB	BB	BB	BB
Depot External Works / Landscaping	BB		BB	BB	BB	BB
CCTV masts	BB		BB	BB	BB	BB
Waste Water Treatment plant	BB		BB	BB	BB	BB
External Lighting	BB		BB	BB	BB	BB
<b>8 Highways</b>	<b>BB</b>	<b>BB</b>	<b>BB</b>	<b>BB</b>	<b>BB</b>	<b>BB</b>
Junction Signals (traffic signals)	BB		BB	BB	BB	BB
Civils works for Junction Signals (traffic signals)	BB		BB	BB	BB	BB
<b>9 Substations</b>		<b>BB</b>				
Haymarket Terrace Substation	Siemens		Siemens	Siemens	Siemens	Siemens
Bankhead Drive Substation	Siemens		Siemens	Siemens	Siemens	Siemens
Jenners's Depository Substation	Siemens		Siemens	Siemens	Siemens	Siemens
Gogar Depot Substation	Siemens		Siemens	Siemens	Siemens	Siemens
Ingliston Park & Ride Substation	Siemens		Siemens	Siemens	Siemens	Siemens
Leith Sands Substation	Siemens		Siemens	Siemens	Siemens	Siemens
Leith Walk SubStation	Siemens		Siemens	Siemens	Siemens	Siemens
Cathedral SubStation	Siemens		Siemens	Siemens	Siemens	Siemens
Craighall	Siemens		Siemens	Siemens	Siemens	Siemens
Granton Mains East	Siemens		Siemens	Siemens	Siemens	Siemens
Granton Road	Siemens		Siemens	Siemens	Siemens	Siemens
Access control and security system	Siemens		Siemens	Siemens	Siemens	Siemens
Cable Ducts and Sealings and Foundations	BB		BB	BB	BB	BB
<b>10 Interchanges</b>						
Provide inter modal transport interchange		tbd w/ tie				
Commission into service inter modal transport interchange		tbd w/ tie				
<b>11 Structures</b>		<b>BB</b>				
All Bridges and Viaducts	BB		BB	BB	BB	BB
Cuiverts	BB		BB	BB	BB	BB
A8 Underpass	BB		BB	BB	BB	BB
Retaining Walls	BB		BB	BB	BB	BB
Cable ducts and drawpits	BB		BB	BB	BB	BB

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**Project Name** Edinburgh Tram Network  
**List of Responsibilities**

**BBS CONSORTIUM**

DESCRIPTION	Tender phase	RESPONSIBLE PARTNER				
		Mount & Installation	Supply	Delivery/Phase	Installation	Commission
<b>12 Supervisory Control &amp; Comms Systems (SCC)</b>		Siemens				
SCADA (Depot & Park & Ride)						
Signaling Operation Control System (VICOS)	Siemens		Siemens	Siemens	Siemens	Siemens
Operational Radio	Siemens		Siemens	Siemens	Siemens	Siemens
Operational Data Network (OTN)	Siemens		Siemens	Siemens	Siemens	Siemens
Telephone Network	Siemens		Siemens	Siemens	Siemens	Siemens
CCTV	Siemens		Siemens	Siemens	Siemens	Siemens
Passenger Help Point Control system	Siemens		Siemens	Siemens	Siemens	Siemens
Public Address System	Siemens		Siemens	Siemens	Siemens	Siemens
Passenger Information System	Siemens		Siemens	Siemens	Siemens	Siemens
Tram Positioning & Detection System (mainline & depot)	Siemens		Siemens	Siemens	Siemens	Siemens
Signal mast foundations	BB		BB	BB	BB	BB
<b>13 Overhead Line Contact System &amp; HV Supplies</b>	Siemens	Siemens	Siemens	Siemens	Siemens	Siemens
Scottish Power Compartment contents (e.g. medium voltage switchgear, MV)	tie	tie	tie	tie	tie	tie
Support Structure Foundations	BB		BB	BB	BB	BB
Fire Detection	BB	BB	BB	BB	BB	BB
Pole foundations	BB		BB	BB	BB	BB
<b>14 Spares</b>						
Spares for testing (T1-T3) and trial run phase	Each		Each	Each	Each	Each
Provide Initial Spares for CIV after handover (incl. T4-T5)	BB		BB	BB	BB	BB
Provide Initial Spares for E&M after handover (incl. T4-T5)	Siemens		Siemens	Siemens	Siemens	Siemens
<b>15 Training</b>						
Operation Training Support	Siemens		Siemens	Siemens	Siemens	Siemens
Supplier Training	Each		Each	Each	Each	Each
<b>16 Manuals</b>						
Operating and maintenance manuals	Each		Each	Each	Each	Each
<b>17 Maintenance</b>	Siemens/BB		Siemens/BB	Siemens/BB	Siemens/BB	Siemens/BB
<b>18 Rolling stock</b>	Tramco		Tramco	Tramco	Tramco	Tramco
<b>19 Onboard equipment included in BBS offer</b>	Siemens		Siemens	Siemens	Siemens	Siemens