

include the establishment, maintenance and upkeep of the Project Health and Safety File.

- 3.4 The TSS Provider, assisted by the Operator and the SDS Provider, shall establish the monitoring and recording of the safety management system on behalf of **tie** for all critical design, construction, trial running, operation, maintenance and safety information. In addition, the TSS Provider will lead the development of key safety performance indicators (KPIs) for inclusion within the Infraco, Tram Supply, the DPOFA and other relevant contracts against which safety performance can be benchmarked and assessed contractually.
- 3.5 As a function of its responsibilities under Section 5 below, the TSS Provider shall ensure that it has capacity and accreditation to act as independent safety assessor for the purposes of certification for trial running and entry into public service in the event that HSE/HMRI are no longer mandated for this function.

#### **4. ENVIRONMENTAL COMPLIANCE**

- 4.1 The TSS Provider shall advise **tie** in relation to all Project related environmental matters which arise from the design, construction, commissioning (or decommissioning) operation and maintenance of The Edinburgh Tram Network and shall be responsible for putting in position an Environmental Compliance procedure for **tie** with all associated plans.
- 4.2 The TSS Provider shall carry out a comprehensive audit of Environmental Compliance measures planned during the development phase of the Project, determine any discrepancies and recommend action to eliminate or mitigate such discrepancies in the most time and cost effective manner consistent with Parliamentary Undertakings, Consents, Approval Body requirements and third party commitments made by **tie** and develop and maintain an Environmental Compliance Plan.
- 4.3 The TSS Provider shall provide expert evidence on Environmental Compliance, if required, for the parliamentary process.
- 4.4 The TSS Provider shall review in detail the SDS Provider's work product in terms of Environmental Compliance and shall also monitor the Infraco and the Tram Supplier in relation to satisfaction of Environmental Compliance, in particular through construction methodology, Code of Construction Practice and vehicle operating characteristics.
- 4.5 The TSS Provider shall be competent to represent **tie** in any inquiry, hearing or application before an Approval body concerned with Environmental Compliance.

#### **5. SYSTEM ACCEPTANCE CRITERIA**

- 5.1 The TSS Provider shall lead the development and application of the technical acceptance criteria ("System Acceptance Criteria") in relation to safety that will enable the Edinburgh Tram Network to commence trial running, complete commissioning and enter public service. The criteria and their use shall be sufficient to:
  - 5.1.1 satisfy HSE, HMRI or other regulatory agency or Approval Bodies;
  - 5.1.2 meet any third party requirement in relation to asset protection; and
  - 5.1.3 incorporate Infraco, Tram Supplier and Operator contribution and sign off.

- 5.2 The TSS Provider shall possess or shall have secured all relevant accreditation required at Law or otherwise to permit its performance of this function as independent safety assessor and certifier.

## 6. TECHNICAL DEVELOPMENT OF A PUBLIC TRANSPORT INTEGRATED TICKETING SYSTEM AND METHODOLOGY

- 6.1 The TSS Provider shall ensure that the Edinburgh Tram Network has the most relevant ticketing management and information systems. The TSS Provider shall coordinate input from **tie**, the Operator, the SDS Provider and **tie's** other advisors (as appropriate) to review options for revenue collection and protection and related data gathering, recording and monitoring. The option selection for further development and specification shall meet **tie's** requirements to provide overall value for money and serve as a flexible platform for the TSS Provider to produce integrated ticketing systems capacity which will translate into increased public transport partnership within Edinburgh.
- 6.2 The TSS Provider shall develop technical and procurement specifications in respect of software programmes which are to be procured by **tie** to achieve an integrated ticketing solution for the tram network and public transport operators within the City of Edinburgh and its immediate environs. Such software programmes should be specified to be capable of being modified to accommodate intermodel integrated ticketing for nationwide public transport networks.
- 6.3 The TSS Provider shall lead provision of advice on:
- 6.3.1 degree of ticketing integration achievable and realistic between tram, bus, rail and validation of smart cards;
- 6.3.2 functionality:
- ticket media;
  - payment media: card, coin, note and currency;
  - capacity: tickets and money;
  - reliability;
  - off/on peak flexibility for ticket prices;
  - integration with other modes: bus, rail and other;
- 6.3.3 interface between machines and power supply, telecoms and physical configuration;
- 6.3.4 information management to support Transport Edinburgh Limited and **tie** to develop future fares policy.

## 7. LAND ACQUISITION, COMPENSATION AND UNDERTAKINGS

- 7.1 Under specific instruction from **tie**, the TSS Provider shall be responsible for reviewing the status of objections to the Tram Bills and thereafter making recommendations (in the form of an objections management plan) to **tie**, with a view to ensuring so far as possible that any objections are resolved timeously to a sufficient degree thus avoiding or minimising the following risks:

- abortive advanced purchase of properties;
- blighting of property;
- the purchase of whole properties where only part is required;
- restriction on exercise of compulsory purchase powers, which may constrain the alignment of the Edinburgh Tram Network;
- a requirement to reroute the alignment of the Edinburgh Tram Network, resulting in significant delay whilst new powers are sought;
- the provision of expensive environmental mitigation measures beyond those promoted; or
- a recommendation of the Scottish Parliament following Consideration Stage that the Tram Bills should not be permitted to proceed.

7.2 In particular, the TSS Provider shall:

- 7.2.1 review comprehensively **tie's** existing process and forward plan for managing the resolution of objections and recommend such amendments to that process as it considers prudent to avoid or minimise the risks detailed above;
- 7.2.2 identify and undertake a review of key design issues which impact on the objectors to the Tram Bills and thereafter prepare a management plan for the resolution of such design issues and submit this for **tie's** approval to permit the provision of instructions to the SDS Provider accordingly;
- 7.2.3 identify and carry out a review of any other outstanding issues or tasks required to avoid or minimise the risks detailed above;
- 7.2.4 report to **tie** on human resources deployment required to action all identified tasks; and
- 7.2.5 generally investigate and report to **tie** any solutions or recommendations for minimising any adverse affects arising as a result of objections, including delays from addressing Parliamentary Undertakings, resolving objections, changes to the route alignment and claims for compensation.

7.3 The TSS Provider shall, as instructed:

- 7.3.1 review the land-take required for both Line One and Line Two taking into account any amendments to the design under development by the SDS Provider and provide a report setting out its conclusions. The TSS provider shall arrange, if requested by **tie**, for an independent review of the compensation cost estimate for acquiring such land, both on the basis that the land has to be compulsorily acquired and on the basis that land is acquired by mutual agreement, that the estimate include for all foreseeable compensation liabilities;
- 7.3.2 in relation to land and compensation, update as necessary **tie's** risk register to take account of any recommendations implemented by **tie**, risks which have been mitigated and any new risks identified; and

7.4 The TSS Provider shall support, as instructed, all action necessary to:

- 7.4.1 manage, implement and close out satisfactorily on behalf of **tie** all negotiations with third parties related to land acquisition (or temporary use) and compensation and in relation to Parliamentary Undertakings;
  - 7.4.2 monitor the implementation by Infraco (and SDS Provider) of all measures agreed with third parties as part of compensation payable or undertakings to secure non objection to the Tram Bills;
  - 7.4.3 liaise with affected third parties to ascertain and safeguard their satisfaction regarding **tie's** performance of any relevant commitments.
- 7.5 In the event that **tie** instructs accordingly, the TSS Provider shall mobilise appropriate resource to assume lead responsibility for the set of tasks set out in 7.4 above.

## **8. COMMERCIAL SUPPORT**

- 8.1 In consultation with all other **tie** advisors, the TSS Provider shall be responsible for supporting **tie** in the development and management of the Project Cost Plan.
- 8.1.1 The form of the Project Cost Plan and format of regular cost reports shall be recommended by the TSS Provider and require the approval of **tie**. The TSS Provider shall make proposals for reviewing and auditing these costs to ensure they are comprehensive in scope and reflect the realities of the scheme;
  - 8.1.2 The TSS Provider shall assist **tie** in the co-ordination and profiling of Project costs with the Master Project Programme to phase expenditure to appropriate realistic timescales for implementation, operation, maintenance and renewals;
  - 8.1.3 The TSS Provider shall report on the status of the Project and Project costs at monthly intervals to confirm the completeness and quality of the Project Cost Plan and shall agree with **tie** (with the support of other advisors) consistent and appropriate use of whole life costing, quantified risk assessments and NPV calculations;
  - 8.1.4 Review and audit by the TSS Provider will include Project development costs as well as appropriate approaches to the application of contingency and optimism bias as agreed with **tie**.
- 8.2 The TSS Provider shall implement and manage the process of change control on behalf of **tie**, developing an agreed process for reporting early on change control on the Infraco Contract, Tram Supply Contract and SDS Agreement and maintaining the Change Control Register.
- 8.3 The TSS Provider shall support value engineering and value management processes on behalf of **tie** throughout all phases of the implementation of the Project .
- 8.4 The TSS Provider shall adopt a process of risk management which shall include preparing technical and commercial risk allocation matrices for the proposed procurements to demonstrate the risk retention, sharing and transfer.
- 8.5 The TSS Provider shall monitor and collate the performance by the Operator and Infraco against the agreed KPIs on the applicable contractual basis. This shall include the monitoring and reporting of any corrective actions taken in respect of health and safety.

- 8.6 TSS Provider shall contribute to providing input to information initiatives and formal stakeholder reporting (for example: media releases, newsletters, web site, parliamentary briefings and Scottish Executive funding approval process) and shall assist with the development, refinement and maintaining of a communications protocol for dealing with all stakeholders affected by the design and future construction of the Edinburgh Tram Network.
- 8.7 The TSS Provider, in association with the SDS and Infraco, shall throughout the duration of the Project gather together a set of productivity rates for utilisation with the planning and costing of the ongoing development and modification of the Edinburgh Tram Network.
- 8.8 The TSS Provider shall:

Required Action from the TSS Provider	Timing/Frequency applicable to the SDS Provider/Infraco (For information to the TSS Provider)	Timing/Frequency applicable to the TSS Provider
<p>Lead the review of the adequacy and application of the project risk management plan to be developed by the SDS Provider/Infraco in accordance with the SDS Agreement/Infraco Contract. This plan should confirm the objectives of the plan, the roles and responsibilities of the SDS Provider/Infraco, the definitions of risk categorisation and impact, the risk management process and how the plan will be applied throughout the scheme development design, procurement and construction phases of the Edinburgh Tram Network. This plan should indicate the critical success factors, key areas of focus and individuals involved.</p> <p>The TSS Provider shall also prepare a report for <b>tie</b> setting out a review of the project risk management plan.</p>	<p>Plan will be issued by the SDS Provider to the Client (as defined in the SDS Agreement) within 1 month of the effective date of the SDS Agreement and shall be maintained by the SDS Provider/Infraco throughout the term of the SDS Agreement/Infraco Contract.</p>	<p>Ongoing review process to start within 1 month of the Effective Date.</p> <p>Review report to be issued bi-annually by the TSS Provider to <b>tie's</b> risk manager (as notified by <b>tie</b> from time to time) throughout the term of the Agreement</p>
<p>Lead the review of the adequacy and application of the assumptions register to be developed by the SDS Provider/Infraco in accordance with the SDS Agreement/Infraco Contract. This register should record all capex, opex, lifecycle, revenue, programme, quality, functionality and approvability assumptions and consequent risks to the Edinburgh Tram Network throughout the scheme development, design procurement and construction phases of the Project.</p> <p>The assumptions register will also be used by the SDS Provider/Infraco to contribute to the project risk register referred to below.</p>	<p>Format of the assumptions register to be agreed with the Client's (as defined in the SDS Agreement) designated risk manager within 1 month of the effective date of the SDS Agreement and will be maintained by the SDS Provider/Infraco throughout the term of the SDS Agreement/Infraco Contract</p>	<p>Input from the TSS Provider to commence within 1 month of the Effective Date and continue throughout the term of the Agreement</p>
<p>Maintain close liaison with <b>tie</b>, the <b>tie</b> project team, the Operator, Infraco, the stakeholders,</p>	<p>Monthly meeting with the Client (as defined in the SDS Agreement)/<b>tie</b></p>	<p>Monthly meeting with <b>tie's</b> project</p>

Required Action from the TSS Provider	Timing/Frequency applicable to the SDS Provider/Infraco (For information to the TSS Provider)	Timing/Frequency applicable to the TSS Provider
<p>the Tram Supplier and <b>tie's</b> technical, legal, financial and other advisors, regarding risk matters. Liaison to include attendance at risk management meetings facilitated by the SDS Provider/Infraco to support the scheme development, design, procurement and construction phases of the Edinburgh Tram Network.</p> <p>Liaison to include assistance with the risk identification procedure which will be carried out by <b>tie</b> and attendance at management workshops facilitated by the SDS Provider/Infraco to allow a sharing of previous experience.</p>	<p>and ongoing liaison with <b>tie's</b> project team, the Operator, stakeholders, the Tram Supplier and <b>tie's</b> technical, legal, financial and other advisers throughout the term of the SDS Agreement/Infraco Contract</p>	<p>team (as notified to the TSS Provider from time to time) and ongoing liaison with <b>tie's</b> project team, the Operator, stakeholders, the Infraco, the Tram Supplier and <b>tie's</b> technical, legal and other advisers throughout the term of the Agreement</p>
<p>Lead the review of the adequacy and application of the project risk register to be developed by the SDS Provider/Infraco in accordance with the SDS Agreement/Infraco Contract. This register should summarise all capex, opex, lifecycle, revenue, programme, quality, functionality and approvability risks to the Edinburgh Tram Network and the proposed mitigation of these risks.</p> <p>The project risk register should include analysis of each risk in terms of 'likelihood' and 'impact' prior to and following mitigation, responsible owner of each risk and graphical summaries of risk profile. Risks to be addressed should include strategic, commercial, economic, legal and regulatory, organisational, environmental, technical, operational and infrastructure risks.</p>	<p>Format of the project risks register with the Client's (as defined in the SDS Agreement) designated risk manager within 1 month of the effective date of the SDS Agreement. The project risk register is to be maintained, updated and circulated to parties designated by the Client (as defined in the SDS Agreement)/<b>tie</b> on a bi-monthly basis throughout the SDS Agreement/Infraco Contract</p>	<p>Input to commence within 1-month of the Effective Date and continue throughout the term of the Agreement</p>
<p>Lead the audit of the scheme design and prepare a design diligence risk report based upon the SDS Provider's/Infraco's deliverables under the SDS Agreement/Infraco Contract highlighting those areas that do not meet <b>tie's</b> specification requirements as set out in the SDS Agreement/Infraco Contract, those that require substantial development, those that require some development but are largely satisfactory and those that meet or exceed <b>tie's</b> specification for each key system component. The report shall be in the form required by <b>tie's</b> risk manager (as notified by <b>tie</b> from time to time)</p> <p>The report to be provided by the TSS Provider shall, in addition to the matters referred to</p>		<p>Agree format of report and scope and format of audits within 3 months of Effective Date. Reports to be delivered at quarterly intervals throughout the term of the Agreement</p>

Required Action from the TSS Provider	Timing/Frequency applicable to the SDS Provider/Infraco (For information to the TSS Provider)	Timing/Frequency applicable to the TSS Provider
<p>above, specifically refer to material commercial, safety and reliability matters.</p> <p>Such report shall include a simple scorecard system, the format of which will be agreed with <b>tie's</b> risk manager (as notified by <b>tie</b> from time to time) to allow presentation to the <b>tie</b> Board,</p>		
<p>The SDS Provider/Infraco is required pursuant to the SDS Agreement/Infraco Contract to prepare and submit a risk progress report to the Client (as defined in the SDS Agreement)/<b>tie</b> on the status of risk management and mitigation, giving a summary of new risks identified, new assumptions, key matters to be resolved and achievements.</p> <p>The report to be provided by the SDS Provider/Infraco should indicate "Red-Amber-Green" (RAG) status on key components including planning permissions, specification compliance, incomplete design, programme for outstanding work, adequacy of investigations and surveys, constructability, compliance with the CDM Regulations, Design Manual compliance, optimisation of run-time, interface design, Parliamentary objector concession, approvals which require to be obtained from the Client or the Client's Representative (as such terms are defined in the SDS Agreement) or <b>tie/tie's</b> Representative by the SDS Provider/Infraco, Consents and certification.</p> <p>The TSS Provider shall review and comment on the SDS Provider/Infraco risk progress report and additionally provide a monthly progress report on risk matters.</p>	<p>Format of the risk progress report with the Client's (as defined in the SDS Agreement) designated risk manager within 1-month of the effective date of the SDS Agreement and submit monthly reports to the said risk manager throughout the term of the SDS Agreement/Infraco Contract</p>	<p>Agree format of the TSS Provider's required monthly risk report with <b>tie's</b> designated risk manager (as notified to the TSS Provider from time to time) within 1-month of the Effective Date and submit monthly report to <b>tie</b> throughout the term of this Agreement</p>
<p>Lead the review of the adequacy of the cost and programme contingency report to be developed by the SDS Provider/Infraco in accordance with the SDS Agreement/Infraco Contract. This report should indicate the recommended capital cost and programme contingency allowances to be considered and summarise the recommended mitigation for the construction and installation phase, the commissioning and defects resolution phase (under the Infraco Contract) and the operational phase, including details of any</p>	<p>Final report to be submitted to the Client (as defined in the SDS Agreement) within 1-month prior to publication of OJEU notice (as notified by the Client to the SDS Provider) in respect of the Infraco Contract. Report to be updated by the SDS Provider/Infraco on quarterly basis thereafter throughout the term of the SDS Agreement/Infraco Contract and submitted to the Client's/<b>tie's</b></p>	<p>Input to ensure final report within 1-month prior to publication of OJEU notice (as notified by <b>tie</b> to the TSS Provider) in respect of Infraco Contract. Input thereafter required in order to ensure</p>

Required Action from the TSS Provider	Timing/Frequency applicable to the SDS Provider/Infraco (For information to the TSS Provider)	Timing/Frequency applicable to the TSS Provider
<p>residual development risks.</p> <p>The report to be provided by the SDS Provider/Infraco should include a detailed quantitative risk analysis using the Monte Carlo simulation (<i>@RISK4.5 and Pertmaster Project Risk or equivalents</i>) for both cost and programme components and should contain a review of the deliverables required under the SDS Agreement/Infraco Contract and should highlight where the project contingencies may be inadequate or exceeded, where the delivery programme may be in jeopardy and options for resolution.</p>	<p>designated risk manager (as appropriate).</p>	<p>that SDS Provider/Infraco meets requirement to update report on quarterly basis thereafter throughout the term of the Agreement.</p>
<p>Lead the review of the adequacy of the design construction risk report to be provided by the SDS Provider pursuant to the SDS Agreement. This report should indicate the risks to be considered by Infraco during remaining scheme development and construction including construction sequence, construction methodologies, access, quality, approvals, security, safety, public relations and compliance with Parliamentary Bill and objector requirements.</p> <p>The TSS Provider shall provide marked-up comments on the report provided by the SDS Provider and indicate areas for further development by the SDS Provider.</p>	<p>Final report to be submitted to the Client's (as defined in the SDS Agreement) designated risk manager within 1-month prior to appointment of Infraco.</p>	<p>Input to ensure delivery of final report within 1-month prior to appointment of Infraco.</p>
<p>Lead the review of adequacy of the design operation risk report to be provided by Infraco pursuant to the Infraco Contract. This report should indicate the risks to be considered by the Operator during remaining scheme development, the construction and installation phase, the commissioning and defects resolution phase under the Infraco Contract and the operational phase, including maintenance, lifecycle replacement, quality, approvals including HMRI, security, safety, public relations and compliance with Parliamentary Bill and objector requirements.</p> <p>The report to be provided by Infraco should also include HAZOP risk assessment for the scheme and detailed contingency plans.</p> <p>The TSS Provider shall provide marked-up comments on the report provided by Infraco and indicate areas for further development by</p>	<p>Infraco to submit final report within 3-months prior to start of the commissioning and defects resolution phase under the Infraco Contract.</p>	<p>Input to ensure delivery of final report within 3-months prior to start of commissioning and defects resolution phase under the Infraco Contract.</p>



Required Action from the TSS Provider	Timing/Frequency applicable to the SDS Provider/Infraco (For information to the TSS Provider)	Timing/Frequency applicable to the TSS Provider
Infraco.		

## 9. APPROVALS

- 9.1 The TSS Provider shall provide support to tie by monitoring and reporting the progress of the SDS Provider and Infraco in obtaining and maintaining all Consents to enable construction, installation and commissioning works to proceed, including temporary and permanent traffic regulation orders (during Construction and Installation Phase, Commissioning and Defects Resolution and Operations).
- 9.2 The TSS Provider shall monitor and report to tie on the acceptability of any changes proposed by the Infraco, SDS Provider or the Operator in connection with Consents.
- 9.3 The TSS Provider shall, as may be required by tie, provide additional resource to the Planning and Roads Authorities and generally to City of Edinburgh Council to assist with the timely management of Consents, in particular to support the efficient processing of CEC approvals and Planning Permissions during the Requirements Definition, Preliminary Design and Detailed Design Phases of the SDS Provider's commission.
- 9.4 The TSS shall support tie, as instructed, in liaising with CEC, Historic Scotland, World Heritage Trust, Scottish Natural Heritage, SEPA and other Approval Bodies, Relevant Parties or other parties whose formal or informal Consent is required for the Project.

## 10. DESIGN RELATED SERVICES AND SYSTEM INTEGRATION

### 10.1 General

The TSS Provider shall support tie in:

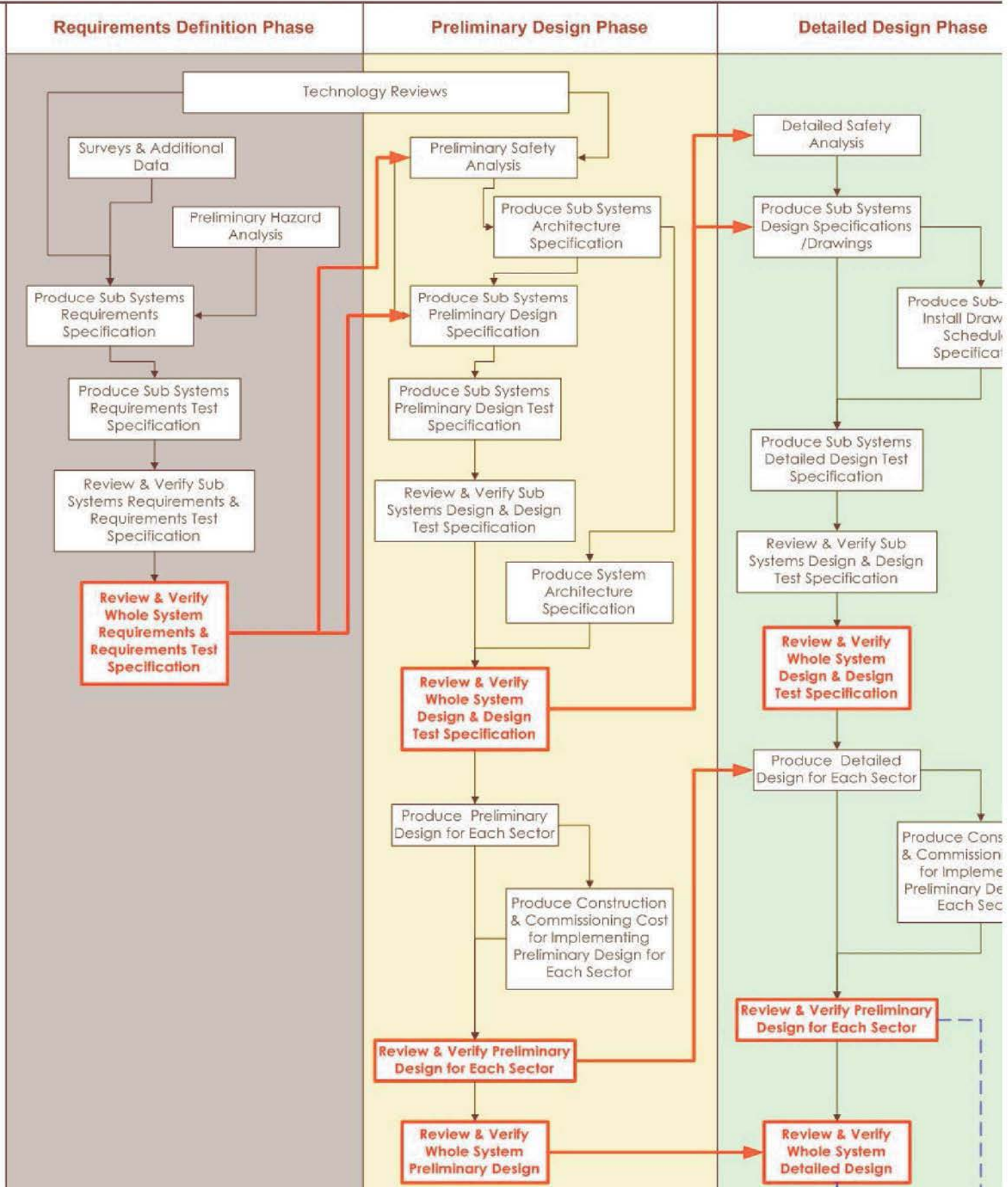
- 10.1.1 all co-ordination and review activities associated with the design function and related Deliverables, necessary to enable the Edinburgh Tram Network to be procured, constructed, tested and commissioned and then operated and maintained;
- 10.1.2 carrying out a comprehensive review to establish the SDS Provider's design covers all aspects of the Edinburgh Tram Network and the associated works adjacent to the proposed alignment; and
- 10.1.3 reviewing the SDS Provider's undertaking of all necessary research and investigations necessary to support the provision of a constructible and cost effective design, in particular ensuring that information/analysis has been used to establish base lines from all Surveys performed by the SDS Provider, the Infraco and Tram Supplier.

### 10.2 Design Review Process

The TSS Provider shall fully acquaint itself with the design review process which tie has established for the SDS Provider and the Infraco.

The TSS Provider shall support tie in the coordination and management of the Design and Technical Gateway Process. The operation of the Design and Technical Gateway Process is set out diagrammatically below and illustrates the three Design Phases:

## Glasgow Tramway Indicative Design Review Process



- 10.3 At the conclusion of the each of the three Design Phases for each Sector or Sub-Sector as shown in Appendix 1 (Programme Phasing Structure) (as appropriate), the TSS Provider shall carry out an audit to ensure that the SDS Provider has produced and delivered to **tie** the appropriate level of design and specification of all specified works, associated sub-systems and components and their associated installation drawings/schedules, test specifications, manuals and records (all of which shall have been submitted and approved in accordance with the Design and Technical Gateway Process).
- 10.4 The TSS Provider shall support and co-ordinate technology reviews such that the selected technologies will meet the requirements developed in the Requirements Definition Phase.
- 10.5 The TSS Provider shall support the SDS Provider in review of SDS Deliverables to provide assurance to **tie** that there are no gaps, omissions or over-design in the specification and design of the elements of the Edinburgh Tram Network and shall assist **tie** in considering whether the detailed design has properly considered and adopted the most advantageous whole life cost solutions.
- 10.6 The TSS Provider shall support **tie** generally in the co-ordination and review of the delivery of designs and/or technical specifications from the SDS Provider including:
- 10.6.1 detailed alignment and associated civil and structural works;
  - 10.6.2 specifications of sub system functionality and technical requirements for the E & M System Components;
  - 10.6.3 the Network Infrastructure required to support the E&M system components in 10.6.2 above.
- 10.7 By the end of the Detailed Design Phase, the TSS Provider shall have ensured that the SDS Provider has produced, in appropriate sequence, the detailed design of the Edinburgh Tram Network for each Sub-Sector or Sector (as appropriate) such that it has full approval of **tie** and the relevant Approval Bodies and such that the Edinburgh Tram Network as designed can be constructed, installed, tested and commissioned by Infraco.
- 10.8 The TSS Provider shall co-ordinate, support and review the work of the SDS Provider, Infraco, and the Operator (and other relevant parties) relating to the:
- 10.8.1 detailed design, documentation, schedules, drawings and other deliverables for all elements of the Edinburgh Tram Network infrastructure and associated systems from which installation, testing and commissioning activities can commence and be satisfactorily concluded;
  - 10.8.2 production of procurement specifications and associated schedules for all E&M Systems Components and sub-systems for the Edinburgh Tram Network;
  - 10.8.3 demonstration that all elements of the detailed design meet the requirements agreed, especially those related to run-time, performance/reliability and safety;
  - 10.8.4 finalisation of the Technical Specifications such that it is ensured that the design of the Network Infrastructure Systems and the trams are compatible.

- 10.9 During the Construction and Installation Phases the TSS Provider shall advise **tie**/CEC (as part of regular reporting) on compliance by the Infraco with the Technical Specifications and/or on the acceptability of any changes proposed by Infraco or recommended by the Operator.
- 10.10 During each Design Phase the TSS Provider shall support **tie**, CEC and the SDS Provider in the ongoing development of the Design Manual, reviewing proposals as instructed for buildability, potential maintenance implications and value for money. During Construction and Installation Phase, the TSS Provider shall advise **tie**/CEC (as part of regular reporting) on compliance by the Infraco with the Design Manual.
- 10.11 The TSS Provider shall advise, as instructed, on any aspect of the Design Manual, which includes requirements regarding streetworks, surface finishes, street furniture, tram stops and facilities, OLE, building fixings and tram apparatus.
- 10.12 The TSS Provider shall attend any meetings required to discuss development of the Design Manual and record all agreed changes and additions.
- 10.13 The TSS Provider shall audit on a continuing basis the development by Infraco of the System Integration Plan and coordinate and convene regular meetings for this purpose and shall report when required to **tie** on any aspect of this plan setting out options and making recommendations for particular courses of action.
- 10.14 The TSS Provider shall continue to review and audit implementation of the System Integration Plan across all System Components and disciplines and at all phases of the Infraco and Tram Supply Contracts by means of a System Integration Plan Topic Audit. The TSS Provider will audit and report to **tie** on the updating of the System Integration Plan for all network modification or expansion prior to commencement of any works. This will include constraints on design that are imposed by the existing tram network, additional infrastructure facilities required on the existing tram network, access restrictions, interfaces with existing system and technical and operational information.
- 10.15 Through all phases of the Project the TSS Provider will interrogate to ensure that timely requisite sign-off of inter-disciplinary checks to verify Network Infrastructure and E&M System Component compatibility has been obtained.
- 10.16 TSS Provider shall provide support and advice to **tie** in connection with a review of the set of Functional Requirements Specification produced by the SDS Provider and of the means by which they will be tested, such that Preliminary Design Phase can commence.
- 10.17 By the end of the Preliminary Design Phase, the TSS Provider shall have ensured that the SDS Provider has produced a preliminary design for every sector to such a level that the TSS Provider, the SDS Provider, **tie** and the relevant Approval Bodies are satisfied that when progressed, the detailed design in respect of each sector will deliver the agreed and specified functionality, be acceptably safe, constructible, will comply with the Design Manual and deliver the Functional Requirements Specification in a fully integrated manner.
- 10.18 By the end of the Detailed Design Phase the TSS Provider shall have ensured that the SDS Provider has produced the detailed design of the Edinburgh Tram Network for each Sub-Sector or Sector (as appropriate), in appropriate sequence, such that it has full approval of **tie** and the relevant Approval Bodies and such that the Edinburgh Tram Network, as designed

can be constructed, installed, tested and commissioned by Infraco and operated by the Operator as an integrated system.

10.19 At all stages, the TSS Provider shall ensure it has directed Infraco to review all design proposals for consistency with construction productivity and limitation of disruption, reporting when appropriate to **tie** with any suggestions for improvement.

10.20 The TSS Provider shall develop a Testing and Commissioning Plan to support the System Acceptance Criteria.

## 11. UTILITIES AND THIRD PARTY UNDERTAKINGS

11.1 The TSS Provider shall provide assistance to **tie** in connection with the management of an advanced utilities diversion programme. This assistance shall include:

- the appointment of the Utilities Diversions Contractor;
- assessing the need for data relating to the presence and location of all buried and above ground utility services;
- agreeing with affected parties the need for and extent of diversions;
- undertaking critical design and developing a strategy for all utilities diversions to minimise diversion requirements;
- ensuring appropriate servitudes for access and related possessions planning and management;
- providing technical support for the parliamentary process;
- maintenance of an emergency contact list and a 24 hour incident report and Help Desk facility during execution of all advanced utilities diversion works.

11.2 The TSS Provider shall be responsible for arranging and managing activities required to support the utilities diversion process including Roads Authorities Consent, Lothian and Borders police notifications, traffic management plans/traffic regulation orders and site meetings. Where third party works (such as routine maintenance or the current Capital Streetworks Programme) are proposed along the alignment of the Edinburgh Tram Network, prior to the appointment of the Infraco or the commencement of any works by the Utilities Diversion Contractor, the TSS Provider shall, in conjunction with the SDS Provider, review the implications and benefits of procuring any advance utility diversion works and advise **tie** accordingly.

11.3 The TSS Provider shall support the procurement of any such agreed advance utility diversions (or similar works) on behalf of **tie**. The TSS Provider shall assist **tie** in the tendering process including the provision of input in relation to the OJEU Notice, the setting of evaluation criteria for short-listing of bidders, evaluation of pre-qualification submissions, attendance at presentations, preparation of technical tender documentation and tender evaluation.

11.4 TSS shall assist **tie** in managing the efficient and full discharge of all third party commitments and Parliamentary Undertakings in relation to objectors and affected third parties.

## **12. HEAVY RAIL INTERFACE**

- 12.1 The TSS Provider shall support **tie** in relation to the interface between Network Rail and the Project in order to achieve and implement appropriate agreements with Network Rail. The TSS Provider shall review and recommend to **tie** for approval, any proposals by the SDS Provider which affect the interface with Network Rail.
- 12.2 During the Construction and Installation Phase and the Commissioning and Defects Resolution Phase, the TSS Provider shall maintain an overview of all relevant railway matters (involving both the Infraco, SDS Provider and the Operator as it determines appropriate) to safeguard **tie's** position with regard to future operation of the Edinburgh Tram Network.
- 12.3 The TSS Provider shall assist **tie**, as required, with the protection, co-ordination and efficient management of the Possessions Strategy and due attendance at all relevant meetings with Network Rail.
- 12.4 The TSS Provider shall review the Network Rail asset investigation study and preparation of accurate engineering drawings for input into the detailed design process and Network Rail agreements with **tie**.
- 12.5 The TSS Provider shall assist and support **tie** in connection with Project interface with all Heavy Rail Parties where technical and/or commercial tasks are required.

## **13. PROJECT PLANNING SUPPORT**

The TSS Provider shall assist **tie** in the preparation and use at all stages of the Project of a series of master management plans, (as well as the Master Project Programme) incorporating nested management plans from Infraco, the Tram Supplier, the SDS Provider, the Operator and other **tie** technical advisors including; safety management/engineering, cost estimating and control, project management, environmental management, configuration management, verification and validation.

## **14. NETWORK EXPANSION**

Upon instruction and in association with **tie's** other advisors, the TSS Provider shall provide guidance and assistance to **tie** on outline feasibility in respect of any proposed modification or expansion to the Edinburgh Tram Network. The TSS Provider shall assist **tie**, if required, to promote acquisition of requisite legal authority and funding, and to procure and manage the implementation of such modification or expansion works.

Sub-sector	Criticality	Commissioning Sequence for Trial Running(Line 1&2 and Line 2 only)	Commissioning Sequence for Trial Running(Line 1 only)	Preliminary Design Approved By	Detailed Design Approved By	
	C	3		28-Feb-06	30-Sep-06	
	A1	1		30-Nov-05	30-Mar-06	
	C			28-Feb-06	30-Sep-06	
Access	C	2		28-Feb-06	30-Sep-06	
oad North (inc)	C			28-Feb-06	30-Sep-06	
DHY5a	B			30-Jan-06	30-May-06	
DHY5b				Balgreen Road(exc)-Murrayfield(exc)	30-Jan-06	30-May-06
	A(2)	3		30-Nov-05	30-Mar-06	
HOT1a	A(1)	4	3 (section now includes Haymarket Tramstop)	30-Nov-05	30-Mar-06	
HOT1b						Shandwick Place(exc)-Princes St West(inc)
HOT1c						Princes St West(exc)-Waverley Bridge(inc)
HOT1d						Waverley Bridge(exc)-St. Andrew SQ.(inc)
	A(2)	4	3	30-Nov-05	30-Mar-06	
HOT3a	A(2)	5	2	30-Nov-05	30-Mar-06	
HOT3b						MacDonald Rd(exc)-Balfour St(inc)



			6 T&Z and Line 2 only)	6 T Only)		
HOT4b	Constitution St(exc)-Ocean Drive(inc)					
nc)		A(3)	6	1	30-Nov-05	30-May-06
		D	5	1	30-Mar-06	30-Nov-06
HCT1a	Roseburn Jct(exc)- Roseburn(inc)	D	4	4	30-Mar-06	30-Nov-06
HCT1b	Roseburn(exc)-Ravelston Dykes(inc)				30-Mar-06	
HCT1c	Ravelston Dykes(exc)-Craigleith(inc)				30-Mar-06	
HCT1d	Craigleith(exc)-W.General Toll(inc)	Hosp-Crewe			30-Mar-06	
CTO1a	Crewe Toll(exc)-W. Granton(inc)	D	5	5	30-Mar-06	30-Nov-06
CTO1b	W. Granton(exc)-Caroline Pk(inc)				30-Mar-06	
CTO1c	Caroline Pk(exc)-Granton Waterfront(inc)				30-Mar-06	
CTO1d	Granton Waterfront(exc)-Granton Sq.(inc)				30-Mar-06	
CTO2a	Sea Wall Survey	A1	6	6	30-Nov-05	28-Feb-07
CTO2b	Granton Sq.(exc)-Lower Granton Rd	E	6	6	30-Mar-06	
CTO2c	Lower Granton Rd-Newhaven Rd					
CTO2d	Newhaven Rd-Ocean Terminal(exc)					
		F	7		30-Mar-06	28-Feb-07

## APPENDIX 2

### Key Deliverables

Quality Management Plan

Master Project Management Plan

Safety Management Plan

Health and Safety File

Change Control Register

Environmental Compliance Plan

Topics Register

End of project reports audits, on completion of significant work packages

Certificates of InfraCo milestone completion

Testing and Commissioning Plan

System Acceptance Criteria

Integrated Ticketing Software Programmes

System Integration Plan Topic Audit

---

Director/Authorised Signatory  
**TIE LIMITED**

---

Director/Authorised Signatory  
**TSS PROVIDER**

**This is Schedule Two referred to in the foregoing Agreement  
between tie and the TSS Provider**

**SCHEDULE TWO**

**KEY PERSONNEL**

<b>Forename</b>	<b>Surname</b>	<b>Company</b>	<b>Current Level 2005</b>
Anan	Allos	Scott Wilson	Director
Robert	Baughan	Scott Wilson	Lead
Willie	Burrell	Scott Wilson	Lead
Gareth	Clarke	Scott Wilson	Technical Director
Nigel	Hackett	Scott Wilson	Lead
Mike	Hackney	Scott Wilson	Technical Director
Mark	Jackson	Scott Wilson	Project Director
Gordon	Lindsay	Scott Wilson	Senior Project Manager
Jim	Millar	Scott Wilson	Technical Director
Ken	Mosley	Scott Wilson	Lead
Rod	Tidbury	Scott Wilson	Technical Director
Keith	Wallace	Scott Wilson	Director
David	Webster	Scott Wilson	Technical Director
Erik	Bates	Scott Wilson	Lead
James	Boyle	Scott Wilson	Lead
John	Forshaw	Scott Wilson	Lead
Peter	Jeffries	Scott Wilson	Lead
David	Johnston	Scott Wilson	Project Manager
Mike	Lipscombe	Scott Wilson	Senior
Chris	Rose	Scott Wilson	Lead
John	Skinner	Scott Wilson	Lead
Paul	Smith	Scott Wilson	Lead
Steve	West	Scott Wilson	Systems
Ricky	Campbell	Scott Wilson	Planning Engineer
Stuart	Bryson	Aedas	Architect
Maurice	Rodger	Aedas	Director
Andrew	Mackie	Aedas	Lead Architect
Jonathan	Wragg	Interfleet	Director
Timothy	Knapp	Interfleet	Lead Systems
Alan	Player	Interfleet	Lead Systems
Steve	Radford	Interfleet	Lead Systems
Gary	Easton	Turner and Townsend	Director
Neil	McCowan	Turner and Townsend	Director
Bill	Woolgar	Turner and Townsend	Director
John	Woosey	Turner and Townsend	Lead
Graham	Duncan	Turner and Townsend	Senior
Alan	Renfree	Turner and Townsend	Project Co-ordinator

Ernest	Godward	Scott Wilson	Lead
Martin	Eason	Scott Wilson	Lead
Tom	Osorio	Scott Wilson	Lead
Martin	Pickup	Scott Wilson	Lead
Debbie	Wyllie	James Barr secondment to SW	Lead

---

Director/Authorised Signatory  
**TIE LIMITED**

---

Director/Authorised Signatory  
**TSS PROVIDER**

**This is Schedule Three referred to in the foregoing Agreement  
between tie and the TSS Provider**

**SCHEDULE THREE  
PRICING SCHEDULES**

**EDINBURGH TRAMWAY TSS PRICING SCHEDULE**

The undernoted provides a description of definition of grades of personnel required throughout this Pricing Schedule.

<b>Grade</b>	<b>Qualifications/Experience</b>
<b>Lead Role</b>	Chartered or equivalent status with 10 years experience including 5 years as functional lead. Appropriate functional lead experience, circa 10 years, may be acceptable in lieu of Chartered status.
<b>Senior Role</b>	Chartered or equivalent status with 10 years experience. Appropriate senior experience, circa 5 years, may be acceptable in lieu of Chartered status.
<b>Engineer Role</b>	Degree plus 3 years experience. Appropriate experience, circa 5-10 years, may be acceptable in lieu of degree status.
<b>Graduate Role</b>	Degree plus 2 years experience.
<b>Junior Role</b>	1st or 2nd year of a recognised Degree/HNC qualification
<b>Senior CAD Technician</b>	HNC plus 10 years experience
<b>CAD Technician</b>	HNC plus 2 years experience

## EDINBURGH TRAMWAY TSS PRICING SCHEDULE

### TENDER SUMMARY

TSS Management	£519,850.45
Function Lead	£2,200,214.50
Function Support	£2,268,698.50
Provisional Additional Work	£335,105.00
<b><i>Tender Summary Carried to Formal Offer</i></b>	<b>£5,323,868.45</b>

**EDINBURGH TRAMWAY TSS PRICING SCHEDULE**

**TSS MANAGEMENT**

TSS Management	Time/Lump Sum	£
<p>Tenderers shall price here for all non-quantity related elements of the work. Examples of this would be head office overheads, management required throughout the project, mobilisation, demobilisation, insurance etc.,</p> <p>Tenderers shall detail and price each item individually and confirm if the items are time related or lump sum prices.</p> <p>In addition to the above Tenderers shall price separately the following items:</p> <p>a Professional indemnity insurance</p> <p>b All other insurances</p> <p><b><u>Other TSS Management</u></b></p> <p>Accommodation - 3 bed flat for 4 years (Time)</p> <p>Project Director at £120/hr for 3000hrs (Time)</p> <p>2.5% on all services for overhead (Based on 66500 hours at rates quoted -Time)</p>	<p></p> <p></p> <p></p> <p>£</p> <p>£</p> <p></p> <p>Time</p> <p>Time</p> <p>Time</p>	<p></p> <p></p> <p></p> <p>Inc</p> <p>Inc</p> <p></p> <p>£50,000.00</p> <p>£360,000.00</p> <p>£109,850.45</p>
<i>Carried Forward</i>		<b>£519,850.45</b>

<i>Brought Forward</i>	<b>£519,850.45</b>
<b><i>TSS Management Carried to Tender Summary</i></b>	<b>£519,850.45</b>



## EDINBURGH TRAMWAY TSS PRICING SCHEDULE

### FUNCTION LEAD SUMMARY

Quality Assurance/Environmental Engineer	£502,275.00
Safety Services	£563,500.00
Land Acquisition, Compensation and Undertakings	£500,965.00
System Acceptance	£395,337.00
Integrated Ticketing System	£95,637.50
Risk Management	£142,500.00
<b><i>Function Lead Carried to Tender Summary</i></b>	<b>£2,200,214.50</b>

## EDINBURGH TRAMWAY TSS PRICING SCHEDULE

### Quality Assurance Lead Support Services

Function Lead and Support	Hours	Rate	Amount £
Function Support Services shall only have authority for payment and execution when instructed by tie, or authorised tie Representative prior to the work being carried out. The rates stated shall include all overheads, profit, non-productive overhead and time, holiday allowance, travelling, administration etc., and shall be the all-in rate for the respective grade of personnel. The values contained in this section shall only be allowed on the specific written instruction of tie.			
a Lead Quality Assurance/Environmental Engineer	3500	£74.00	£259,000.00
b Senior Quality Assurance Engineer	4000	£58.50	£234,000.00
c Graduate Quality Assurance Engineer	500	£37.75	£18,875.00
<b><u>Call Off Value Discounts</u></b>			
Tenderers to indicate discounts to be allowed for volume of call off hours to be applied to all of the above rates in the following bandings, irrespective of grade. Discounts to be applied to the specific band of rates			
e Quality Assurance Lead and Support from 1001-2500 hours	1500	£0.00	£0.00
f Quality Assurance Lead and Support from 2501-5000 hours	2500	-£1.28	-£3,200.00
g Quality Assurance Lead and Support from 5001-7500 hours	2500	-£1.92	-£4,800.00
h Quality Assurance Lead and Support above 7500 hours	500	-£3.20	-£1,600.00
<b>Quality Assurance Lead Carried to Function Leader Summary</b>			<b>£502,275.00</b>

## EDINBURGH TRAMWAY TSS PRICING SCHEDULE

### Safety Lead Support Services

Function Lead and Support	Hours	Rate	Amount £
<p>Function Support Services shall only have authority for payment and execution when instructed by tie, or authorised tie Representative prior to the work being carried out. The rates stated shall include all overheads, profit, non-productive overhead and time, holiday allowance, travelling, administration etc., and shall be the all-in rate for the respective grade of personnel. The values contained in this section shall only be allowed on the specific written instruction of tie.</p>			
a Lead Safety Engineer	6000	£85.00	£510,000.00
b Senior Safety Engineer	500	£80.00	£40,000.00
c Graduate Safety Engineer	500	£45.00	£22,500.00
		Sub Total	£572,500.00
<p><b><u>Call Off Value Discounts</u></b></p> <p>Tenderers to indicate discounts to be allowed for volume of call off hours to be applied to all of the above rates in the following bandings, irrespective of grade. Discounts to be applied to the specific band of rates</p>			
e Safety Lead and Support from 1001-2500 hours	1500	£0.00	£0.00
f Safety Lead and Support from 2501-5000 hours	2500	-£1.64	-£4,100.00
g Safety Lead and Support from 5001-7500 hours	2000	-£2.45	-£4,900.00
<b><i>Safety Lead Carried to Function Lead Summary</i></b>			<b>£563,500.00</b>

## EDINBURGH TRAMWAY TSS PRICING SCHEDULE

### Land Acquisition, Compensation and Undertakings Property Lead/Support Services

Function Lead and Support	Hours	Rate	Amount £
Function Support Services shall only have authority for payment and execution when instructed by tie, or authorised tie Representative prior to the work being carried out. The rates stated shall include all overheads, profit, non-productive overhead and time, holiday allowance, travelling, administration etc., and shall be the all-in rate for the respective grade of personnel. The values contained in this section shall only be allowed on the specific written instruction of tie.			
a Lead Chartered Surveyor Property Advisor	2500	£75.00	£187,500.00
b Senior Chartered Surveyor Property Advisor	4000	£60.00	£240,000.00
c Graduate Surveyor	2000	£42.00	£84,000.00
		Sub Total	£511,500.00
<b><u>Call Off Value Discounts</u></b>			
Tenderers to indicate discounts to be allowed for volume of call off hours to be applied to all of the above rates in the following bandings, irrespective of grade. Discounts to be applied to the specific band of rates			
e Land and Property Lead and Support from 1001-2500 hours	1500	£0.00	£0.00
f Land and Property Lead and Support from 2501-5000 hours	2500	-£1.20	-£3,000.00
g Land and Property Lead and Support from 5001-7500 hours	2500	-£1.81	-£4,525.00
h Land and Property Lead and Support above 7500 hours	1000	-£3.01	-£3,010.00
<b><i>Land Acquisition, Compensation and Undertakings Lead Carried to Function Leader Summary</i></b>			<b>£500,965.00</b>

**EDINBURGH TRAMWAY TSS PRICING SCHEDULE**

**System Acceptance Lead Support Services**

	<b>Function Lead and Support</b>	<b>Hours</b>	<b>Rate</b>	<b>Amount £</b>
	Function Support Services shall only have authority for payment and execution when instructed by tie, or authorised tie Representative prior to the work being carried out. The rates stated shall include all overheads, profit, non-productive overhead and time, holiday allowance, travelling, administration etc., and shall be the all-in rate for the respective grade of personnel. The values contained in this section shall only be allowed on the specific written instruction of tie.			
a	Lead Systems Acceptance Engineer	3650	£85.00	£310,250.00
b	Principle Systems Acceptance Engineer	500	£85.00	£42,500.00
c	Graduate Systems Acceptance Engineer	650	£45.00	£29,250.00
d	Senior CAD Technician	350	£50.00	£17,500.00
			Sub Total	£399,500.00
	<b><u>Call Off Value Discounts</u></b>			
	Tenderers to indicate discounts to be allowed for volume of call off hours to be applied to all of the above rates in the following bandings, irrespective of grade. Discounts to be applied to the specific band of rates			
f	System Acceptance Lead and Support from 1001-2500 hours	1500	£0.00	£0.00
g	System Acceptance Lead and Support from 2501-5000 hours	2500	-£1.55	-£3,875.00
h	System Acceptance Lead and Support from 5001-7500 hours	150	-£1.92	-£288.00
	<b><i>System Acceptance Function Lead Summary</i></b>			<b>£395,337.00</b>

**EDINBURGH TRAMWAY TSS PRICING SCHEDULE**

**Integrated Ticketing Lead Support Services**

	<b>Function Lead and Support</b>	<b>Hours</b>	<b>Rate</b>	<b>Amount £</b>
	Function Support Services shall only have authority for payment and execution when instructed by tie, or authorised tie Representative prior to the work being carried out. The rates stated shall include all overheads, profit, non-productive overhead and time, holiday allowance, travelling, administration etc., and shall be the all-in rate for the respective grade of personnel. The values contained in this section shall only be allowed on the specific written instruction of tie.			
a	Lead System Design Engineer	1100	£80.00	£88,000.00
b	Principle System Design Engineer	50	£115.00	£5,750.00
c	Graduate System Design Engineer	50	£37.75	£1,887.50
			Sub Total	£95,637.50
	<b><u>Call Off Value Discounts</u></b>			
	Tenderers to indicate discounts to be allowed for volume of call off hours to be applied to all of the above rates in the following bandings, irrespective of grade. Discounts to be applied to the specific band of rates			
d	System Acceptance Lead and Support from 1001-2500 hours	200	£0.00	£0.00
	<b><i>Integrated Ticketing Function Lead Summary</i></b>			<b>£95,637.50</b>

**EDINBURGH TRAMWAY TSS PRICING SCHEDULE**

**Risk Management Lead Support Services**

	<b>Function Lead and Support</b>	<b>Hours</b>	<b>Rate</b>	<b>Amount £</b>
	<p>Function Support Services shall only have authority for payment and execution when instructed by tie, or authorised tie Representative prior to the work being carried out. The rates stated shall include all overheads, profit, non-productive overhead and time, holiday allowance, travelling, administration etc., and shall be the all-in rate for the respective grade of personnel. The values contained in this section shall only be allowed on the specific written instruction of tie.</p>			
a	Lead Risk Manager	1250	£114.00	£142,500.00
			Sub Total	£142,500.00
	<p><b><u>Call Off Value Discounts</u></b></p> <p>Tenderers to indicate discounts to be allowed for volume of call off hours to be applied to all of the above rates in the following bandings, irrespective of grade. Discounts to be applied to the specific band of rates</p>			
b	Risk Lead from 1001-2500 hours	250	£0.00	£0.00
	<b><i>Risk Manager Function Lead Summary</i></b>			<b>£142,500.00</b>

**EDINBURGH TRAMWAY TSS PRICING SCHEDULE**

**FUNCTION SUPPORT SUMMARY**

Commercial Support	£510,250.00
Approvals Support	£592,650.00
Design and Technical Gateway Support	£195,598.50
Utility Support	£408,050.00
Heavy Rail interface and Support	£157,500.00
Project Programming Support	£331,650.00
Network Expansion Support	£73,000.00
<b><i>Function Support Carried to Tender Summary</i></b>	<b>£2,268,698.50</b>



**EDINBURGH TRAMWAY TSS PRICING SCHEDULE**

**Commercial Function Support Services**

Function Support	Hours	Rate	Amount £
<p>Function Support Services shall only have authority for payment and execution when instructed by tie, or authorised tie Representative prior to the work being carried out. The rates stated shall include all overheads, profit, non-productive overhead and time, holiday allowance, travelling, administration etc., and shall be the all-in rate for the respective grade of personnel. The values contained in this section shall only be allowed on the specific written instruction of tie.</p>			
a Senior Quantity Surveyor	4000	£88.00	£352,000.00
b Graduate Quantity Surveyor	2000	£38.00	£76,000.00
c Intermediate Grade Quantity Surveyor	1000	£63.00	£63,000.00
d Junior Quantity Surveyor	1000	£30.00	£30,000.00
		Sub Total	£521,000.00
<p><b><u>Call Off Value Discounts</u></b></p>			
<p>Tenderers to indicate discounts to be allowed for volume of call off hours to be applied to all of the above rates in the following bandings, irrespective of grade. Discounts to be applied to the specific band of rates</p>			
e Commercial support from 1001-2500 hours	1500	£0.00	£0.00
f Commercial support from 2501-5000 hours	2500	-£1.50	-£3,750.00
g Commercial support from 5001-7500 hours	2500	-£2.00	-£5,000.00
h Commercial support above 7500 hours	500	-£4.00	-£2,000.00
<p><b><i>Commercial Support Carried to Function Support Summary</i></b></p>			<p><b>£510,250.00</b></p>

**EDINBURGH TRAMWAY TSS PRICING SCHEDULE**

**Approval Function Support Services**

	Function Support	Hours	Rate	Amount £
	Function Support Services shall only have authority for payment and execution when instructed by tie, or authorised tie Representative prior to the work being carried out. The rates stated shall include all overheads, profit, non-productive overhead and time, holiday allowance, travelling, administration etc., and shall be the all-in rate for the respective grade of personnel. The values contained in this section shall only be allowed on the specific written instruction of tie.			
a	Senior Architect/Town Planner	6500	£82.50	£536,250.00
b	Graduate Architect/Town Planner	500	£55.00	£27,500.00
c	Intermediate Architect/Town Planner	500	£44.00	£22,000.00
d	Junior Architect/Town Planner	500	£33.00	£16,500.00
			Sub Total	£602,250.00
	<b><u>Call Off Value Discounts</u></b>			
	Tenderers to indicate discounts to be allowed for volume of call off hours to be applied to all of the above rates in the following bandings, irrespective of grade. Discounts to be applied to the specific band of rates			
e	Approvals support from 1001-2500 hours	1500	-£1.00	-£1,500.00
f	Approvals support from 2501-5000 hours	2500	-£1.30	-£3,250.00
g	Approvals support from 5001-7500 hours	2500	-£1.60	-£4,000.00
h	Approvals support above 7500 hours	500	-£1.70	-£850.00
	<b><i>Approval Support Carried to Function Support Summary</i></b>			<b>£592,650.00</b>

**EDINBURGH TRAMWAY TSS PRICING SCHEDULE**

**Design and Technical Gateway Function Support Services**

	Function Support	Hours	Rate	Amount £
	Function Support Services shall only have authority for payment and execution when instructed by the authorised tie Representative prior to the work being carried out. The rates stated shall include overheads, profit, non-productive overhead and time holiday allowance, travelling, administration etc., and shall be the all-in rate for the respective grade personnel. The values contained in this section shall only be allowed on the specific written instruction of the tie.			
a	Senior System Design Engineer	750	£111.16	£83,370.00
b	Principle System Design Engineer	750	£119.71	£89,782.50
c	Graduate System Design Engineer	150	£55.58	£8,337.00
d	Assistant System Design Engineer	150	£94.06	£14,109.00
				£195,598.50
	<b><u>Call Off Value Discounts</u></b>			
	Tenderers to indicate discounts to be allowed for volume of call off hours to be applied to all of the above rates in the following bandings, irrespective of grade. Discounts to be applied to the specific band rates			
e	Design/Technical Gateway support from 1001-2500 hours	800	£0.00	£0.00
	<b><i>Design and Technical Gateway Support Carried to Function Support Summary</i></b>			<b>£195,598.50</b>

**EDINBURGH TRAMWAY TSS PRICING SCHEDULE**

**Utility Function Support Services**

	<b>Function Support</b>	<b>Hours</b>	<b>Rate</b>	<b>Amount £</b>
	Function Support Services shall only have authority for payment and execution when instructed by tie, or authorised tie Representative prior to the work being carried out. The rates stated shall include all overheads, profit, non-productive overhead and time, holiday allowance, travelling, administration etc., and shall be the all-in rate for the respective grade of personnel. The values contained in this section shall only be allowed on the specific written instruction of tie.			
a	Senior Utilities Engineer	2000	£135.00	£270,000.00
b	Principle Utilities Engineer	1500	£80.00	£120,000.00
c	Graduate Utilities Engineer	500	£40.00	£20,000.00
			Sub Total	£410,000.00
	<b><u>Call Off Value Discounts</u></b>			
	Tenderers to indicate discounts to be allowed for volume of call off hours to be applied to all of the above rates in the following bandings, irrespective of grade. Discounts to be applied to the specific band of rates			
e	Utility support from 1001-2500 hours	1500	£0.00	£0.00
f	Utility Support from 2501-5000 hours	1500	-£1.30	-£1,950.00
	<i>Utility Support Carried to Function Support Summary</i>			<b>£408,050.00</b>

**EDINBURGH TRAMWAY TSS PRICING SCHEDULE**

**Heavy Rail Interface Function Support Services**

	Function Support	Hours	Rate	Amount £
	Function Support Services shall only have authority for payment and execution when instructed by tie, or authorised tie Representative prior to the work being carried out. The rates stated shall include all overheads, profit, non-productive overhead and time, holiday allowance, travelling, administration etc., and shall be the all-in rate for the respective grade of personnel. The values contained in this section shall only be allowed on the specific written instruction of tie.			
a	Senior Rail Project Manager	1750	£80.00	£140,000.00
b	Senior Possessions Interface Engineer	250	£70.00	£17,500.00
			Sub Total	£157,500.00
	<b><u>Call Off Value Discounts</u></b>			
	Tenderers to indicate discounts to be allowed for volume of call off hours to be applied to all of the above rates in the following bandings, irrespective of grade. Discounts to be applied to the specific band of rates			
c	Heavy Rail Interface support from 1001-2500 hours	1000	£0.00	£0.00
	<b><i>Heavy Rail Support Carried to Function Support Summary</i></b>			<b>£157,500.00</b>

**EDINBURGH TRAMWAY TSS PRICING SCHEDULE**

**Project Programming Function Support Services**

	Function Support	Hours	Rate	Amount £
	Function Support Services shall only have authority for payment and execution when instructed by tie, or authorised tie Representative prior to the work being carried out. The rates stated shall include all overheads, profit, non-productive overhead and time, holiday allowance, travelling, administration etc., and shall be the all-in rate for the respective grade of personnel. The values contained in this section shall only be allowed on the specific written instruction of tie.			
a	Senior Programme/Planning Engineer	4500	£70.00	£315,000.00
b	Graduate Programme/Planning Engineer	500	£40.00	£20,000.00
			Sub Total	£335,000.00
	<b><u>Call Off Value Discounts</u></b>			
	Tenderers to indicate discounts to be allowed for volume of call off hours to be applied to all of the above rates in the following bandings, irrespective of grade. Discounts to be applied to the specific band of rates			
c	Project Programme support from 1001-2500 hours	1500	£0.00	£0.00
f	Project Programme support from 2501-5000 hours	2500	-£1.34	-£3,350.00
	<b><i>Project Programming Support Carried to Function Support Summary</i></b>			<b>£331,650.00</b>

**EDINBURGH TRAMWAY TSS PRICING SCHEDULE**

**Network Expansion Function Support Services**

Function Support		Hours	Rate	Amount £
<p>Function Support Services shall only have authority for payment and execution when instructed by tie, or authorised tie Representative prior to the work being carried out. The rates stated shall include all overheads, profit, non-productive overhead and time, holiday allowance, travelling, administration etc., and shall be the all-in rate for the respective grade of personnel. The values contained in this section shall only be allowed on the specific written instruction of tie.</p>				
a	Senior Designer	500	£70.00	£35,000.00
b	Principle Designer	300	£80.00	£24,000.00
c	Graduate Designer	200	£40.00	£8,000.00
d	Assistant Designer	100	£60.00	£6,000.00
			Sub Total	£73,000.00
<p><b><u>Call Off Value Discounts</u></b></p> <p>Tenderers to indicate discounts to be allowed for volume of call off hours to be applied to all of the above rates in the following bandings, irrespective of grade. Discounts to be applied to the specific band of rates</p>				
e	Design/Technical Gateway support from 1001-2500 hours	100	£0.00	£0.00
<p><b><i>Network Expansion Support Carried to Function Support Summary</i></b></p>				<p><b>£73,000.00</b></p>

**EDINBURGH TRAMWAY TSS PRICING  
SCHEDULE**

**Provisional Additional Work**

	<b>Provisional Additional Work</b>	<b>Hours</b>	<b>Rate</b>	<b>Amount £</b>
	Provisional Additional Work shall only have authority for payment and execution when instructed by tie, or authorised tie Representative prior to the work being carried out. The values contained in this section shall be deducted if not instructed by tie. The rates stated shall include all overheads, profit, non-productive overhead and time, holiday allowance, travelling, administration etc., and shall be the all-in rate for the respective grade of personnel. The rates shall apply for both the Lead and Sub Consultants.			
a	Senior Designer	2000	£70.00	£140,000.00
b	Principle Designer	1250	£80.00	£100,000.00
c	Graduate Designer	1250	£40.00	£50,000.00
d	Senior CAD Technician	500	£50.00	£25,000.00
e	CAD Technician	500	£28.00	£14,000.00
	<b><u>Call Off Value Discounts</u></b>			
	Tenderers to indicate discounts to be allowed for volume of call off hours to be applied to all of the above rates in the following bandings, irrespective of grade. Discounts to be applied to the specific band of rates			
f	Design support from 1001-2500 hours	1500	£0.00	£0.00
g	Design support from 2501-5000 hours	2500	-£1.20	-£3,000.00
h	Design support from 5001-7500 hours	500	-£1.79	-£895.00
i	Additional payment of fees, supply of equipment etc			£10,000.00
j	Management, Uplift, oncost and profit		% Inc	
	<b><i>Provisional Additional Work Carried to Tender Summary</i></b>			<b>£335,105.00</b>

Director/Authorised Signatory  
**TIE LIMITED**

Director/Authorised Signatory  
**TSS PROVIDER**



**This is Schedule Four referred to in the foregoing Agreement  
between tie and the TSS Provider**

**SCHEDULE FOUR**

**MASTER PROJECT PROGRAMME**



**This is Schedule Five referred to in the foregoing Agreement  
between tie and the TSS Provider**

**SCHEDULE FIVE**

**COMMERCIALLY SENSITIVE INFORMATION**

The contents of Schedule 3 (*Pricing Schedules*) are, for the purposes of this Agreement, Commercially Sensitive Information.

---

Director/Authorised Signatory  
**TIE LIMITED**

---

Director/Authorised Signatory  
**TSS PROVIDER**

**This is Schedule Six referred to in the foregoing Agreement  
between tie and the TSS Provider**

**SCHEDULE SIX**

**REQUIRED INSURANCES**

**Part 1**

**1. PROFESSIONAL INDEMNITY INSURANCE**

<b>Insured Party:</b>	The TSS Provider
<b>Coverage:</b>	The legal liability of the TSS Provider as a result of any negligent act, error, or omission in the performance of its professional activities and duties in connection with the Services.
<b>Limit of Indemnity:</b>	Minimum £10,000,000 on an each and every claim basis and £10,000,000 on an aggregate basis in respect of pollution and contamination claims and date recognition claims. There is no requirement to maintain cover in respect of asbestos or terrorism related claims.
<b>Period of Insurance</b>	From the Effective Date until 30 April 2006 and thereafter each further 12 month period until the earlier of 12 years from (a) the Expiry Date or (b) the Termination Date.
<b>Extensions:</b>	The insurance must include the following minimum extensions: <ol style="list-style-type: none"><li>1. Including cover for sub-consultants</li><li>2. Mitigation of loss costs</li><li>3. Worldwide jurisdiction</li></ol>

**2. THIRD PARTY LIABILITY INSURANCE**

<b>Insured Party:</b>	The TSS Provider.
<b>Coverage:</b>	The legal liability of the TSS Provider for death, injury, illness, disease contracted by third party persons or loss of or damage to property arising out of or in connection with the Services.
<b>Limit of Indemnity:</b>	Unlimited as to the number of occurrences in each 12 month period in respect of death or injury to persons. For all other occurrences, a minimum of £5,000,000 any one occurrence (unlimited as to number of occurrences in the Period of Insurance stated below) in respect of third party liability and £5,000,000 any one occurrence and in the aggregate in any one 12 month period of insurance in respect of products liability and in annual aggregate in respect of pollution and contamination claims.

**Period of Insurance:** From the Effective Date until 1 May 2006 and thereafter each further 12 month period until the earlier of (a) the Termination Date or (b) the Expiry Date.

**Minimum Extensions:** The insurance must include the following minimum extensions:

1. Contractual Liability
2. Damage to temporary premises
3. Cross liabilities clause
4. Indemnity to principals/main contractors clause
5. Including cover for sub-contractors
6. Worldwide jurisdiction
7. Cover for NR and BAA minimum insurance requirements

### 3. EMPLOYERS LIABILITY INSURANCE

**Insured Party:** The TSS Provider

**Coverage:** The legal liability of the TSS Provider for death, injury, illness, disease contracted by employees of the TSS Provider caused by or arising out of or in connection with the Services.

**Limit of Indemnity:** Minimum limit of indemnity of £10,000,000 any one occurrence or series of occurrences arising from one original cause or event.

**Period of Insurance:** From the Effective Date until 1 May 2006 and thereafter each further 12 month period until the earlier of the Expiry Date or the Termination Date.

**Extensions:** The insurance must include the following minimum extensions:

1. Contractual liability
2. Cross liabilities clause
3. Indemnity to principals/main contractors clause
4. Worldwide jurisdiction

## Part 2

### Form of Brokers Letter of Undertaking

To: Transport Initiatives Edinburgh Ltd ("**tie**")

Dear Sirs

We confirm in our capacity as insurance brokers that the Required Insurances specified in Clause 15 (*Required Insurances*) and Schedule 6 (*Required Insurances*) of the Agreement dated 25 July 2005 between Scott Wilson Railways Limited (the "TSS Provider") and **tie** as defined therein are, as at the date hereof, in effect in respect of the risks set out in the attached cover notes.

We have arranged the Required Insurances on the basis of the information and instructions given by the TSS Provider. We have not made any particular or special enquiries regarding the Required Insurances beyond those that we would normally make in the ordinary course of arranging the insurances on behalf of our insurance broking clients.

The confirmations set out in this letter are given by reference to our state of knowledge at the date hereof.

Pursuant to instructions received from the TSS Provider, we hereby undertake in respect of the interests of the TSS Provider and **tie** in the Required Insurances referred to in the attached cover notes:

1. to use reasonable endeavours to have endorsed on each and every policy evidencing the Required Insurances when the same is issued, endorsements substantially in the form set out in Schedule 6 (*Required Insurances*) of the Agreement;
2. to advise **tie** :
  - 2.1 promptly after receiving notice of any insurer's cancellation or suspension of any of the Required Insurances or receiving notice of the intended cancellation or suspension of any of the Required Insurances;
  - 2.2 promptly upon our receipt from the TSS Provider of any notice of any changes proposed to be made to the Required Insurances which, if effected, would result in a material reduction in limits or coverage (including in respect of extensions of cover) or in an increase in deductibles, exclusions or exceptions;
  - 2.3 of any default in the payment of any premium for any of the Required Insurances;
  - 2.4 at least 20 days prior to the expiry of any of the Required Insurances if we have not received written renewal instructions from the TSS Provider or if we receive written instructions to renew, to advise **tie** of the details thereof; and
  - 2.5 on receipt of notice of any act or omission of the TSS Provider or any TSS Provider Party which will invalidate or render unenforceable in whole or in part, any of the Required Insurances;
3. no later than 7 days (in respect of certificates) and as soon as reasonably practicable in respect of policies and other documents, to supply you and/or your insurance advisors (or your or their authorised representative) copies of all placing slips, certificates, cover notes,

renewal receipts and confirmations of renewal and payment of premiums and all policy documents (or confirmation of the terms of such policy documents where such policy documents cannot be made available) in respect of the Required Insurances, or upon request, to make available to you the originals of any or all such documents held by us;

4. to disclose to the insurers any fact, change of circumstance or occurrence is material to the risks insured against under the Required Insurances;
5. to treat as confidential all information in relation to the Required Insurances supplied to us by the TSS Provider or any TSS Provider Party or **tie** and not to disclose, without the written consent of **tie**, such information to any third party other than the insurers under the Required Insurances, unless required to do so by law or any regulatory authority; and
6. to notify **tie** as soon as reasonably practicable prior to our ceasing to act as brokers to the TSS Provider, unless impracticable because of circumstances beyond our control, in which case we shall notify **tie** as soon as reasonably practicable upon becoming aware that we shall cease, or have ceased, so to act.

Where insurers wish any of the Required Insurances to be cancelled for reasons of non-payment of premium, we will request those insurers to give you a reasonable opportunity of paying such amounts outstanding before issuing notice of cancellation on behalf of such insurers.

The above undertakings are given subject to our continuing appointment for the time being as insurance brokers to the TSS Provider in relation to the Required Insurances concerned and the monitoring and handling of claims in relation to the TSS Provider, and our obligations set out in this letter shall automatically cease upon termination of our appointment.

For the avoidance of doubt all undertakings and other confirmations given in this letter relate solely to the Required Insurances. They do not apply to any other insurances and nothing in this letter should be taken as providing any undertakings or confirmations in relation to any other such insurance that ought to have been placed or may at some future date be placed by other brokers.

This letter is given by us on the instructions of the TSS Provider and with the TSS Provider's full knowledge and consent as to its terms as evidenced by the TSS Provider's signature below.

This letter shall be governed by and shall be construed in accordance with Scots Law and any dispute as to its terms shall be submitted to the exclusive jurisdiction of the courts of Scotland.

Yours faithfully

.....

For and on behalf of ( Insurance Broker )

.....

For and on behalf of (The TSS Provider)

---

Director/Authorised Signatory  
**TIE LIMITED**

---

Director/Authorised Signatory  
**TSS PROVIDER**

This is Schedule Seven referred to in the foregoing Agreement between the  
TSS Provider

## SCHEDULE SEVEN

### PANELS FOR THE DISPUTE RESOLUTION PROCEDURE

#### CONSTRUCTION / OPERATIONAL

**Alan Wilson**  
8 Somersby Avenue  
Chesterfield  
DERBYSHIRE  
S42 7LY

**Peter Chapman**  
Somersby House  
Stokesheath Road  
OXSHOTT  
SURREY KT22 0PS

**Tony Canham**  
The Old School  
School Lane  
Thorpe St Andrew  
NORWICH  
NR7 0PE

**Guy Cottam**  
2 Old Track  
Upper Limpley Stoke  
BATH  
BA3 WY

#### FINANCIAL

**Nigel Lowe**  
Nigel Lowe Consulting Limited  
27 Old Gloucester Street  
LONDON  
WC1N 3XX

**John Hunter**  
Hunter Consulting  
Commercial Centre  
Stirling Enterprise Park  
STIRLING  
FK7 7BF

**Bryan Porter**  
1 Waterfoot Road  
Newton Mearns  
GLASGOW  
G77 5RU



**Eric Mouzer**  
111 Hagley Road  
Edgebaston  
BIRMINGHAM  
B11 8LB

**LEGAL**

**Gordon Reid, QC**  
Blebo House  
By St Andrews  
FIFE  
KY15 5TZ

**Robert Howie, QC**  
41A Fountainhall Road  
EDINBURGH  
EH9 2LN

**Lord Dervaird (Prof. John Murray QC)**  
4 Moray Place  
EDINBURGH  
EH3 6TS

**Gordon Coutts, QC**  
6 Heriot Row  
EDINBURGH  
EH3 6HU

**Angus Glennie, QC**  
Threeburnford  
Oxton  
Lauder  
BERWICKSHIRE  
TD2 6PU

---

Director/Authorised Signatory  
**TIE LIMITED**

---

Director/Authorised Signatory  
**TSS PROVIDER**

**This is Schedule Eight referred to in the foregoing Agreement between tie and the  
TSS Provider**

**SCHEDULE EIGHT**

**DISPUTE RESOLUTION PROCEDURE**

1. The Parties agree that this Schedule 8 (*Dispute Resolution Procedure*) shall have effect for the resolution of any Dispute.
2. Any Dispute shall, in the first instance, be referred to the Internal Resolution Procedure in accordance with paragraph 10.
3. Neither Party shall commence any court proceedings until the procedures in paragraphs 10 to 57.3 have been completed, under exception that the provisions of this Schedule 8 (*Dispute Resolution Procedure*) shall not apply so as to prevent either Party seeking an interim order, or interim relief, in the Scottish courts.
4. In the event that any court proceedings whatsoever are initiated by either Party against the other, the Parties agree that the Court of Session, Scotland, shall have exclusive jurisdiction.
5. Neither Party shall be entitled to suspend the performance of its undisputed obligations under this Agreement merely by reason of the reference of any Dispute to the Dispute Resolution Procedure contained in this Schedule 8 (*Dispute Resolution Procedure*).
6. Subject to **tie's** discretionary rights set out in paragraphs 55 to paragraph 57.2 to require that a Dispute and a Related Dispute (as defined in paragraph 55) be dealt with together at an appropriate stage of the Dispute Resolution Procedure, the provisions of this Schedule 8 (*Dispute Resolution Procedure*) are mandatory and binding upon the Parties.
7. Unless a Party refers a Dispute to the Dispute Resolution Procedure contained in this Schedule 8 (*Dispute Resolution Procedure*) within three months of the date on which the event, matter or situation giving rise to the Dispute first occurred, such Party shall be deemed to have irrevocably waived any right to refer such Dispute to the Dispute Resolution Procedure, under exception that if such Party was not aware, and could not with reasonable diligence have been aware, that such event, matter or situation had occurred, this paragraph 7 shall have effect as if for the reference herein to the date on which such event, matter or situation occurred, there was substituted a reference to the date when such Party first became, or could with reasonable diligence have become, aware that such event, matter or situation had occurred. This paragraph 7 is without prejudice to the right of either Party to raise in defence to any Dispute any defence (including, without prejudice to the foregoing generality, any defence of retention, compensation or set-off) which would otherwise be available to it.
8. Except in relation to the matters provided for in paragraphs 15 to 54 and subject to the provisions of paragraph 9, in the event that either Party pursues any Dispute under the Dispute Resolution Procedure, and in the event that such Party fails to observe any time limit or timescale provided for in this Schedule 8 (*Dispute Resolution Procedure*) in relation to the pursuit or progression of such Dispute, such Party shall, immediately upon such failure occurring, be deemed to have irrevocably waived any right to pursue or progress such Dispute any further. In that event, such Party shall be deemed to have elected not to have referred such Dispute or to have withdrawn such Dispute from the Dispute Resolution Procedure and shall be deemed to have irrevocably waived any right to refer any Dispute

arising from the same or substantially the same Dispute or similar circumstances to the Dispute Resolution Procedure and shall be liable for payment of the whole fees incurred by any mediator or adjudicator who has acted in respect of such Dispute. This paragraph 8 is without prejudice to the rights of either Party to raise in defence to any Dispute any defence (including, without prejudice to the foregoing generality, any defence of retention, compensation or set-off) which would otherwise be available to it.

9. Notwithstanding the provisions of paragraph 8, in the event that a Party who pursues any Dispute under the Dispute Resolution Procedure fails to observe any time limit or timescale provided for in this Schedule 8 (*Dispute Resolution Procedure*) in relation to the pursuit or progression of the Dispute, the other Party may elect to waive such failure, in which event the time limit or timescale to which such failure relates shall be extended at the discretion of such other Party and the Dispute shall progress in accordance with the Dispute Resolution Procedure, subject that all other time limits and timescales provided for in this Schedule 8 (*Dispute Resolution Procedure*) which are affected by such extension shall be deemed to have been extended to give effect to such extension of the time limit or timescale to which such failure relates.

### **Internal Resolution Procedure**

10. The following procedure is the Internal Resolution Procedure referred to in paragraph 2:
  - 10.1 In the event of any Dispute arising, the TSS Provider's Representative and **tie**'s Representative shall seek to resolve the Dispute at a meeting to be convened within three Business Days of written notification by either Party to the other that it wishes to initiate the Internal Resolution Procedure in respect of that Dispute ("Notification"). Such Notification shall be given in accordance with the provisions of Clause 34 (*Notices*) of this Agreement.
  - 10.2 Further meetings may follow the meeting referred to in paragraph 10.1, but in any event, if the Dispute is not resolved within seven Business Days of Notification, each Party shall, before the expiry of the period of ten Business Days from Notification, serve, in accordance with the provisions of Clause 34 (*Notices*) of this Agreement, a written position paper ("Position Paper") upon the other Party. Each Party's Position Paper shall state in reasonable detail that Party's position and required objectives in relation to the Dispute; any required redress, and, where possible, any comments on the other Party's position.
  - 10.3 Upon such service of a Position Paper by the Party initiating or pursuing the Dispute, the Chief Executive (or equivalent) of the TSS Provider and the Chief Executive (or equivalent) of **tie** (or their respective deputies in the event of their unavailability) shall seek to resolve the Dispute by meeting in good faith to discuss and negotiate upon the Dispute without recourse to legal or other proceedings.
  - 10.4 In the event that resolution of the Dispute is achieved by the Chief Executive (or equivalent) of the TSS Provider and the Chief Executive (or equivalent) of **tie**, the resolution shall be reduced to writing and, once it is signed by the duly authorised representatives of both Parties, shall be binding on the Parties.
  - 10.5 Unless concluded by a written legally binding agreement, all discussions and negotiations connected with the Dispute shall be conducted in confidence and without prejudice to the rights of the Parties in any future legal or other proceedings. Nor may such matters be produced or relied upon in evidence in any such proceedings.
11. In the event that any Dispute is not resolved by the Internal Resolution Procedure within a period of thirty Business Days from Notification (or longer if so agreed by the Parties) then the following provisions of this paragraph 11 shall apply;

11.1 The Chief Executive (or equivalent) of the TSS Provider and the Chief Executive (or equivalent) of **tie** (or their respective deputies in the event of their unavailability) shall, within a further period of five Business Days, seek to agree that the Dispute shall be resolved by any one of the following procedures:

11.1.1 mediation in accordance with paragraphs 12 to 14; or

11.1.2 adjudication in accordance with this paragraphs 15 to 54, in which event the Referring Party must give its Notice of Adjudication to the other Party within five Business Days of the date of expiry of the period of thirty five Business Days from Notification (or longer if so agreed by the Parties); or

11.1.3 litigation before the Court of Session, Scotland, in which event the Summons or Petition in any such litigation shall be signetted and served within ten Business Days of the date of expiry of the period of thirty-five Business Days from Notification (or longer if so agreed by the Parties).

In the event that the Chief Executive (or equivalent) of the TSS Provider and the Chief Executive (or equivalent) of **tie** (or their respective deputies in the event of their unavailability) are unable to agree that the Dispute be resolved by the procedures described in paragraphs 11.1.1, 11.1.2 or 11.1.3, the Party initiating or pursuing the Dispute shall refer the Dispute to mediation (and thereafter adjudication, if necessary) in accordance with paragraphs 12 to 14.

## Mediation

12. The Parties shall attempt in good faith to resolve the Dispute by a procedure of mediation in accordance with the Centre for Effective Dispute Resolution mediation rules or Model Mediation Procedure in force at the commencement of the mediation, (or in the event that the Centre for Effective Dispute Resolution has ceased to exist as at the time of the commencement of the mediation, mediation rules or a model mediation procedure offered by any other body offering commercial mediation services which shall be selected by **tie**), which procedure shall be commenced within five Business Days of the date of expiry of the period of thirty-five Business Days from Notification (or longer if so agreed by the Parties). In the event that any provision of such mediation rules or model mediation procedure conflicts with any provision of this Schedule 8 (*Dispute Resolution Procedure*), the provisions of this Schedule 8 (*Dispute Resolution Procedure*) shall take precedence. In the event that any timescales contained in such mediation rules or model mediation procedure conflicts with the timescales referred to in this Schedule 8 (*Dispute Resolution Procedure*), the timescales contained in such mediation rules or model mediation procedure shall be amended accordingly such that the timescales referred to in this Schedule 8 (*Dispute Resolution Procedure*) shall be adhered to.
13. In the event that resolution of the Dispute is achieved in consequence of such mediation procedure, such resolution shall be reduced to writing and, once it is signed by the duly authorised representatives of both Parties, shall be binding on the Parties. Unless concluded by a written legally binding agreement, all discussions and negotiations connected with the mediation procedure referred to in paragraph 12 shall be conducted in confidence and without prejudice to the rights of the Parties in any future legal or other proceedings. Nor may such matters be produced or relied upon in evidence in any such proceedings.
14. If any Dispute to which this Schedule 8 (*Dispute Resolution Procedure*) relates is not resolved by the mediation procedure referred to in paragraphs 12 and 13 within a period of 55 Business Days from Notification (or longer if so agreed by the Parties), the mediation procedure shall be terminated and, unless the Party initiating or pursuing the Dispute withdraws the Dispute, the Dispute shall within a further five Business Days, be referred to adjudication in accordance with paragraphs 15 to 54.

## Adjudication

15. In the event that either Party refers a Dispute to adjudication in terms of paragraph 11.1.2 or 14, or exercises a statutory right available to it (if any) under the Housing Grants Construction and Regeneration Act 1996 to raise adjudication proceedings, such adjudication shall be conducted in accordance with paragraphs 15 to 5454, wherein any reference to "days" is a reference to calendar days.

### Notice of intention to seek adjudication

16. Either Party may give written notice (the "**Notice of Adjudication**") of its intention to refer the Dispute to adjudication and the Party giving such notice shall be the "**Referring Party**".
17. The Notice of Adjudication shall be given to the other Party and the Party receiving the Notice of Adjudication shall be the "**Responding Party**".
18. The Notice of Adjudication shall set out briefly:
  - 18.1 the nature and a brief description of the Dispute and of the parties involved;
  - 18.2 details of where and when the Dispute has arisen;
  - 18.3 the nature of the redress which is sought; and
  - 18.4 the names and addresses of the Parties (including the addresses which the Parties have specified for the giving of notices).
19. The adjudicator selected to consider the Dispute shall be selected from one of the panels ("**Panels**") appointed by the Parties in accordance with the following:
  - 19.1 there shall be four Panels, one in respect of legal matters, ("**Legal Panel**") one in respect of construction matters and construction/operation interface matters ("**Construction Panel**"), one in respect of operational and maintenance matters ("**Operations Panel**") and one in respect of financial matters ("**Financial Panel**").
  - 19.2 each Panel shall be comprised of at least four members, who are listed in Schedule 7 (Panels for the Dispute Resolution Procedure) to the Agreement.
  - 19.3 if any member of a Panel resigns or dies or becomes incapax or ill to the extent of being unable to reasonably discharge his duties as a member of the Panel, a replacement shall be appointed by the Parties as soon as practicable. Any such replacement shall be wholly independent of **tie**, any **tie** Party, the TSS Provider, any TSS Provider Party, City of Edinburgh Council or any Relevant Authority, any Approvals Body, the Tram Supplier, the Infraco or any equipment supplier or any party associated with the Edinburgh Tram Network, and any successor to or subsidiary or parent of any of the aforementioned parties. If the Parties are unable to agree on the identity of such replacement(s), the President or Vice President for the time being of The Chartered Institute of Arbitrators (Scottish Branch) or the Institution of Civil Engineers shall appoint such replacement(s) within thirty days of any application for such appointment by either Party.
20. The Referring Party shall at the same time as giving the Notice of Adjudication to the Responding Party, send to each of the members of the relevant Panel a copy of the Notice of Adjudication and a request that each member of the relevant Panel advises both Parties within three days as to whether or not he is able and willing to act. The Parties shall attempt to agree within two further days as to which one of the members of the relevant Panel who responded indicating that they are able and willing to act shall be requested to act as adjudicator. In the event that such agreement is reached, the Referring Party shall, within a

further period of one day, request the member of the relevant Panel upon whom agreement has been reached to act as adjudicator. In the event that such agreement is not reached, the Responding Party shall, within a further period of two days, select one of the members of the relevant Panel who responded indicating that they are able and willing to act and the Referring Party shall request that member to act as adjudicator.

21. If no member of the relevant Panel indicates that he is able and willing to act within three days of receiving a request to act as adjudicator, the Referring Party shall request the President or the Vice President for the time being of The Chartered Institute of Arbitrators (Scottish Branch) or the Institution of Civil Engineers to select a person to act as adjudicator.
22. Any person appointed, requested or selected to act as adjudicator in accordance with paragraphs 20, 21 and 24 shall be a natural person acting in his personal capacity. A person appointed, requested or selected to act as an adjudicator shall be wholly independent of **tie**, any **tie** Party, the TSS Provider, any TSS Provider Party, City of Edinburgh Council or any Relevant Authority, any Approvals Body, the Tram Supplier, the Infraco or any equipment supplier or any party associated with the Edinburgh Tram Network, and the TSS Provider Parties and any successor to or subsidiary or parent of any of the aforementioned parties.
23. The request referred to in paragraph 20 shall be accompanied by a copy of the Notice of Adjudication.
24. The Chartered Institute of Arbitrators (Scottish Branch) or the Institution of Civil Engineers must communicate the selection of an adjudicator to the Referring Party within three days of receiving a request to do so.
25. If the Chartered Institute of Arbitrators (Scottish Branch) or the Institution of Civil Engineers fails to comply with paragraph 24, the Referring Party may:
  - 25.1 agree with the other Party to the Dispute to request a specified person to act as adjudicator; or
  - 25.2 request any other adjudicator nominating body to select a person to act as adjudicator. An "adjudicator nominating body" shall mean a body (not being a natural person and not being a Party to the Dispute) which holds itself out publicly as a body which will select an adjudicator when requested to do by a Referring Party.
26. The person requested to act as adjudicator in accordance with the provisions of paragraph 20 or 21 shall indicate whether or not he is willing to act within two days of receiving the request.
27. Where an adjudicator has been selected in accordance with paragraph 20 or 21 the Referring Party shall, not later than seven days from the date of the Notice of Adjudication, refer the Dispute in writing (the "**Referral Notice**") to the adjudicator.
28. A Referral Notice shall be accompanied by copies of, or relevant extracts from the Agreement and such other documents as the Referring Party intends to rely upon.
29. The Referring Party shall, at the same time as he sends to the adjudicator the documents referred to in paragraphs 27 and 28, send copies of those documents to the Responding Party.
30. The adjudicator may, with the consent of the parties to those Disputes, adjudicate at the same time on more than one Dispute under the Agreement.
31. The Parties may agree to extend the period within which the adjudicator may reach a decision in relation to all or any of these Disputes.
32. An adjudicator may resign at any time on giving notice in writing to the Parties.

33. An adjudicator must resign where the Dispute is the same or substantially the same as one which has previously been referred to adjudication, and a decision has been taken in that adjudication.
34. Where an adjudicator ceases to act under paragraph 32 or 33, or dies or becomes incapax or ill to the extent of being unable to reasonably discharge his duties:
  - 34.1 the Referring Party may serve a fresh notice in accordance with paragraphs 16 to 19 and shall in accordance with paragraphs 20 to 29 request an adjudicator to act; and
  - 34.2 if requested by the new adjudicator, the Parties shall supply him with copies of all documents which they had made available to the previous adjudicator.
35. The Parties to a Dispute may at any time agree to revoke the appointment of the adjudicator and in such circumstances the fees and expenses of that adjudicator shall, subject to paragraph 36, be determined and payable in accordance with paragraphs 52 and 53.
36. Where the revocation of the appointment of the adjudicator is due to the default or misconduct of the adjudicator, the Parties shall not be liable to pay the adjudicator's fees and expenses.

### **Powers of the Adjudicator**

37. The adjudicator shall:
  - 37.1 act impartially in carrying out his duties and shall do so in accordance with any relevant terms of the Agreement and shall reach his decision in accordance with Scots law; and
  - 37.2 avoid incurring unnecessary expense.
38. The adjudicator may take the initiative in ascertaining the facts and the law necessary to determine the Dispute, and shall decide on the procedure to be followed in the adjudication. In particular, he may:
  - 38.1 request either Party to supply him with such documents as he may reasonably require including, if he so directs, any written statement from either Party supporting or supplementing the Referral Notice and any other documents given under paragraphs 27 and 28;
  - 38.2 conduct the adjudication in the English language and decide whether a translation of any document is to be provided and, if so, by whom, by when, and at whose cost;
  - 38.3 meet and question either Party and their representatives;
  - 38.4 subject to obtaining any necessary consent from a third party or the Parties, make such site visits and inspections as he considers appropriate, whether accompanied by the Parties or not;
  - 38.5 subject to obtaining any necessary consent from a third party or the Parties, procure the carrying out of any tests or experiments, and make directions as to the conditions for and responsibility for the cost of the same;
  - 38.6 obtain and consider such representations and submissions as he requires, and, provided he has notified the Parties of his intention, appoint experts, assessors or legal advisers;
  - 38.7 give directions as to the timetable for the adjudication, any deadlines, or limits as to the length of written documents or oral representations to be complied with; and

- 38.8 issue other directions relating to the conduct of the adjudication.
39. The Parties shall comply with any request or direction of the adjudicator in relation to the adjudication.
40. If, without showing sufficient cause, a Party fails to comply with any request, direction or timetable of the adjudicator made in accordance with his powers, fails to produce any document or written statement requested by the adjudicator, or in any other way fails to comply with a requirement under these provisions relating to the adjudication, the adjudicator may:
- 40.1 continue the adjudication in the absence of that Party or of the document or written statement requested;
  - 40.2 draw such inferences from that failure to comply as may, in the adjudicator's opinion, be justified in the circumstances;
  - 40.3 make a decision on the basis of the information before him, attaching such weight as he thinks fit to any evidence submitted to him outside any period he may have requested or directed;
  - 40.4 disqualify any part or parts of that Party's submissions affected by the failure to comply; and
  - 40.5 grant the other Party proper opportunity to consider and respond to any evidence or representation made late.
41. Subject to any agreement between the Parties to the contrary, either Party may be assisted by, or represented by, such advisers or representatives (whether legally qualified or not) as he considers appropriate.
42. The adjudicator shall consider any relevant information submitted to him by either Party and shall make available to them any information to be taken into account in reaching his decision.
43. The adjudicator and the Parties shall not disclose to any other person any information or document provided in connection with the adjudication which the Party supplying it has indicated is to be treated as confidential, except to the extent that disclosure is required by law or is necessary for the purposes of, or in connection with, the adjudication, or the information is already in the public domain.

#### **Adjudicator's Decision**

44. Unless otherwise agreed in accordance with paragraph 56.1 or 57.1 the adjudicator shall reach his decision not later than:
- 44.1 twenty eight days after the date of the Referral Notice mentioned in paragraph 27;
  - 44.2 forty two days after the date of the Referral Notice if the Referring Party so consents; or
  - 44.3 such period exceeding twenty eight days after the Referral Notice as the Parties may, after the giving of that notice, agree.
45. Where the adjudicator fails, for any reason, to reach his decision in accordance with paragraph 44;



- 45.1 either of the Parties to the Dispute may serve a fresh notice in accordance with paragraphs 16 to 19 and shall request an adjudicator to act in accordance with paragraphs 20 to 29; and
- 45.2 if requested by the new adjudicator the Parties shall supply him with copies of all documents which they had made available to the previous adjudicator.
46. As soon as possible after he has reached a decision, the adjudicator shall deliver a copy of that decision to each of the Parties.
47. The adjudicator shall decide the matters in Dispute and may make a decision on different aspects of the Dispute at different times.
48. The adjudicator may take into account any other matters which the Parties agree should be within the scope of the adjudication or which are matters under the Agreement which he considers are necessarily connected with the Dispute and, in particular, he may
- 48.1 open up, review and revise any decision taken or any notice certifying payment given by any person referred to in the Agreement, unless the Agreement states that the decision or notice certifying payment is final and conclusive;
- 48.2 decide that any of the Parties to the Dispute is liable to make a payment under the Agreement (whether in sterling or some other currency) and, subject to the terms of the Agreement, when that payment is due and the final date for payment;
49. The adjudicator shall provide written reasons for his decision.

#### **Effect of the Decision**

50. In his decision, the adjudicator may, if he thinks fit, order either or both of the Parties to comply peremptorily with his decision or any part of it. In the absence of any directions by the adjudicator relating to the time for performance of his decision, the Parties shall be required to comply with any decision of the adjudicator immediately on delivery of the decision to the Parties in accordance with paragraph 46.
51. The decision of the adjudicator shall be binding on the Parties, and they shall comply with it, until the Dispute is finally determined by legal proceedings or by agreement between the Parties.
52. The adjudicator shall be entitled to the payment of such reasonable amount as he may determine by way of fees and expenses incurred by him and the Parties shall be jointly and severally liable to pay that amount to the adjudicator.
53. Without prejudice to the right of the adjudicator to effect recovery from either Party in accordance with paragraph 52, the Parties shall each be liable to pay one-half share of the adjudicator's fees and expenses.
54. The adjudicator shall not be liable for anything done or omitted in the discharge or purported discharge of his functions as adjudicator unless the act or omission is in bad faith, and any employee or agent of the adjudicator shall be similarly protected from liability.

#### **Related Disputes**

55. Notwithstanding the terms of paragraphs 2, 3 and 6 to 9 above, in the event that a dispute or potential dispute under, or in connection with any contract associated with the Edinburgh Tram Network (referred to in this Schedule 8 (*Dispute Resolution Procedure*) as "**Related Contracts**")), has arisen or arises out of substantially the same issues of fact and/or law (as the case may be) as a Dispute under the Agreement (a "**Related Dispute**"), then providing

that the Related Contract contains dispute resolution provisions in terms substantially the same as set out in this Schedule 8 (Dispute Resolution Procedure) (save for necessary changes), **tie** may require and direct that the Dispute and the Related Dispute be dealt with together at an appropriate stage of the Dispute Resolution Procedure.

56. In the event that a Related Dispute has already been referred to the decision of an adjudicator in accordance with the provisions of the Related Contract, and **tie** is of the opinion that a Dispute is to be (but has not yet been) referred to adjudication under this Schedule 8 (*Dispute Resolution Procedure*), **tie** may refer the Dispute, or may by notice in writing to the TSS Provider require that the Dispute be referred (as the case may be) to the adjudicator appointed under the Related Contract to decide upon the Related Dispute, and:

56.1 the adjudicator shall, if practicable, hear the Dispute at the same time as the Related Dispute and shall request such extension of time for producing his decision or award as he may require in order to reach a decision in respect of each of the Dispute and the Related Dispute at the same time. The Parties shall agree to such request for an extension of time, except in the event that the Dispute or the Related Dispute relates to "construction operations" within the meaning ascribed to that term by the Housing Grants, Construction and Regeneration Act 1996 (if applicable) (unless otherwise agreed by the Parties, all parties to the Related Dispute and the Adjudicator);

56.2 except in the event that the Dispute or the Related Dispute relates to "construction operations" within the meaning ascribed to that term by the Housing Grants, Construction and Regeneration Act 1996 (if applicable) (unless otherwise agreed by the Parties, all parties to the Related Dispute and the Adjudicator), the adjudicator shall have power (if so requested by **tie**) to make his decisions or awards in the Dispute and the Related Dispute in such a manner as if the rules applicable in the Court of Session, Scotland as to the joining of one or more defenders or third parties or conjoining actions were applicable to the Parties to the Dispute and the Related Dispute, and to the adjudicator; and

56.3 **tie** shall procure that, as soon as practicable, the other party or parties to the Related Dispute shall give the TSS Provider copies of the Related Contract, the Referral Notice in the Related Dispute and any other documentation provided to the adjudicator by any party to the Related Dispute.

57. In the event that a Dispute has already been referred to the decision of an adjudicator, and **tie** is of the opinion that a Related Dispute is to be (but has not yet been) referred to adjudication, **tie** may refer the Related Dispute to the adjudicator appointed under this Schedule 8 (*Dispute Resolution Procedure*) to decide upon the Dispute, and:

57.1 the Adjudicator shall, if practicable, hear the Related Dispute at the same time as the Dispute and shall request such extension of time for producing his decision or award as he may require in order to reach a decision in respect of each of the Dispute and the Related Dispute at the same time. The Parties shall agree to such request for an extension of time, except in the event that the Dispute or the Related Dispute relates to "construction operations" within the meaning ascribed to that term by the Housing Grants, Construction and Regeneration Act 1996 (if applicable) (unless otherwise agreed by the Parties, all parties to the Related Dispute and the Adjudicator).

57.2 except in the event that the Dispute or the Related Dispute relates to "construction operations" within the meaning ascribed to that term by the Housing Grants, Construction and Regeneration Act 1996 (if applicable) (unless otherwise agreed by the Parties, all parties to the Related Dispute and the Adjudicator), the adjudicator shall have power (if so requested by **tie**) to make his decisions or awards in the Dispute and the Related Dispute in such a manner as if the rules applicable in the Court of Session, Scotland as to the joining of one or more defenders or third parties

or conjoining actions were applicable to the Parties to the Dispute and the Related Dispute, and to the adjudicator;

- 57.3 as soon as practicable, **tie** shall give to the TSS Provider copies of the Related Contract, the Referral Notice in the Related Dispute and any other documentation provided to the adjudicator by any party to the Related Dispute.

---

Director/Authorised Signatory  
**TIE LIMITED**

---

Director/Authorised Signatory  
**TSS PROVIDER**