tie LIMITED

EDINBURGH TRAM NETWORK

INFRACO
FINAL EVALUATION REPORT

4th October 2007

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1. INTRODUCTION

As part of the Edinburgh Tram Network project, **tie** is procuring a Contractor to carry out and/or manage a comprehensive turnkey contract which will include the design (novated), construction, installation, commissioning, tram vehicle procurement (novated), system integration, infrastructure maintenance, tram maintenance and supply of related equipment and materials in respect of the Edinburgh Tram Network, trams and related infrastructure. Infraco is liable for the design of the Edinburgh Tram Network (using the design already prepared by Parsons Brinckerhoff Limited (the "SDS Provider")) and is obliged to carry out all works required for the Edinburgh Tram Network to be fully constructed and capable of entering into full public service. The Infraco will also be responsible for the design, construction, delivery and testing of the Trams to run on the completed Edinburgh Tram Network. Following the entry into public service of the Edinburgh Tram Network, the Infraco will be required to provide maintenance services for a period of 15 years.

Following the issue by **tie** of a Prior Information Notice and an OJEU Notice on 6 October 2005 and 27 January 2006 respectively, **tie** conducted a prequalification process to select Tenderers for the role of the Infraco. The prequalification process identified the following candidates for the Infraco competition (in alphabetical order):

- Amec Spie,
- BBS (Bilfinger Berger and Siemens) and
- Tramlines (Bombardier, Grant Rail and Laing O'Rourke)

tie undertook a process of pre-bid technical dialogue with each of these companies during the late summer of 2006 and issued the formal invitation to tender on 3 October 2006. Unfortunately Amec Spie withdrew their interest which left the other two making their initial tender returns on 12 January 2007. These bids were used to support the Project Outline Business Case so that the Project was assured further funding to proceed. An iterative process of further Information Releases and Bid Updates was then embarked upon with the two bidders. A series of Technical, Commercial and Contract meetings was held with each bidder independently to build a mutual understanding of the Infraco scope and risk apportionment. During this process, the Evaluation Methodology has been followed by the **tie** team, whereby deficiencies within the bids have been identified and explored with the relevant bidder. Wherever possible, technical alterations have been made to the bids by the tenderer to make them compliant with relevant adjustments of the commercial offers and Programme submissions. Where adequate adjustment has not been made to the bid proposal, **tie** has advised the tenderer of a suitable "Normalisation Cost" to be allowed against the financial assessment so that the bids can be considered on a like for like basis. The "Normalisation Cost " represents the cost or benefit to **tie** of providing an alternative technically compliant solution and the Bidders have always understood that the normalised bids will be used to identify the party being taken into the Preferred Bidder stage.

A final bid was submitted by each tenderer on 7 August 2007 to collate the previous correspondence and financial submissions. This has been used by the Evaluation team to reach an assessment of the relative merits of the two

bids by allocating technical responses to the original ITN questions in the agreed evaluation matrix. Contractual and commercial proposals have been similarly compared both against each other and the Project Estimate on a spreadsheet so that major variances can be identified and understood. This Report summarises these matrices and the written Assessments extracted from them.

In the Evaluation Methodology, a code name is ascribed to each of the candidates. Accordingly, the remaining candidates (BBS and Tramlines) are henceforth referred to by these code names, which are (in alphabetical order):

- Roley
- Scoop

This report sets out the Evaluation of the final Infraco bids. The bids received have been evaluated in line with the Evaluation Methodology dated 11th October 2006 that was approved by the Tram Project Board. The Evaluation Team is identified within the paper and represents a senior and competent member from each of the **tie** operational teams.

2. STANDARD TENDER & VARIANTS

tie's ITN documents set out clear requirements for a Standard Tender and a number of mandatory or optional variants. These were based on the options for 6+6 tph, 8+8 tph, 3 or 15 years maintenance and the construction of Phase 1a with or without Phase 1b. At the first tender return date there was very little response against the specifics of these different options and it was agreed that the variants should be simplified to those given in the following table. The information provided by the Bidders has been set out in different ways so that the evaluators have needed to model the variants using the provided information so that a like for like comparison can be made.

FINALLY PROPOSED STANDARD AND MANDATORY VARIANT TENDER
for Infraco Consolidated Proposals
Showing Tram Fleet Size (in blue) and options on Infraco and Tramco (in orange or further alternatives in plum)

	15 year infrastructure maintenance (i.e. Years 0 to 15)			3 year infrastructure maintenance (i.e. Years 0 to 3)		
	Standard Tender			MV1		
	initially	by 2013	?	initially	by 2013	?
Fleet Size	27	+ 4 = 31	+3 = 30	27	+ 4 = 31	+3 = 30
PHASE 1a (only)						
Edinburgh Airport to Newhaven	6 TPH Airport to Ocean Terminal + 6 TPH Haymarket to Newhaven	8 TPH Airport to Ocean Terminal + 8 TPH Haymarket to Newhaven	10 TPH Airport to Ocean Terminal + 5 TPH Haymarket to Newhaven	6 TPH Airport to Ocean Terminal + 6 TPH Haymarket to Newhaven	8 TPH Airport to Ocean Terminal + 8 TPH Haymarket to Newhaven	10 TPH Airport to Ocean Terminal + 5 TPH Haymarket to Newhaven
PHASE 1a + PHASE 1b option						
Edinburgh Airport to Ocean Terminal	6 trams per hour	8 trams per hour	10 trams per hour	6 trams per hour	8 trams per hour	10 trams per hour
Granton Square to Newhaven	6 trams per hour	8 trams per hour	5 trams per hour	6 trams per hour	8 trams per hour	5 trams per hour

NOTES

1. The initial fleet size of 27 trams would initially support the 6 TPH operation of Phase 1a (with capacity for any initial problems). It would also support the 'ramp up' to 8 TPH on Phase 1a and allow testing of that operation or alternatively 6 TPH on the Phase 1a + Phase 1b option. As a further alternative it would also support 10 TPH between Airport and Ocean Terminal + 5 TPH between Haymarket and Newhaven.
2. If the Phase 1b option is implemented then the option to purchase a further 4 trams could also be exercised to bring the fleet size up to 31 trams to support the 8 TPH operation of Phase 1a + Phase 1b. This would be the intention but not necessarily definite.
3. A further alternative if the Phase 1b option is implemented would be to purchase a further 3 trams to bring the fleet size up to 30 trams to support the 10 TPH operation of Phase 1a + 5 TPH on Phase 1b.
4. Bidders are free to submit optional variants for alternative designs, programme, risk transfer or the like **PROVIDED** that they accompany the Standard Tender and Mandatory Variant MV1.
5. The Mandatory Variant MV1 are to incorporate a facility to extend beyond the three years, at **tie's** discretion.

Key Dates	**Phase 1a**	**Phase 1b Option**
Instruct Option	n/a	by March 2009
Commencement on Site	October 2007	July 2009
Completion of Construction Works	July 2010	July 2011
Commencement of Revenue Service (following completion of Trial Running)	December 2010	December 2011

Summary of Optional Variants

Tenderers were invited to submit any Optional Variants which they could demonstrate offer a benefit to **tie** in terms of design, programme, risk transfer etc., in a format similar to that required for the Mandatory Variant Tenders. These were generally presented as Value Engineering proposals and are being dealt with as a separate activity by **tie**.

An optional variant Tender must meet the following criteria:

- It must not adversely affect any health and safety criteria;
- It must offer better value than any compliant Tender by

optimization of time, cost, quality and risk. In this context, cost has been considered in terms of the net present cost. Better value will be a function of both construction and operating costs;

- The rationale of the variant Tender must be explained;
- It must accompany a fully compliant Tender;

A number of Supplier Specific variants were identified in the discussions with the bidders such as track and OLE. They were asked to provide priced proposals accordingly.

Both bidders complied with **tie**'s requirements for compliant tenders during the iterative process of further information releases, Technical and Clarification Questions, Meetings and updated bid submissions. The Evaluation has therefore been on a continually updating basis and it should be noted that this Report recommends the adoption of one party to become Preferred Bidder with a known set of issues that have still to be resolved before a full contract can be recommended.

Preferred Bidder Status

It is recognised that there is a body of detailed analysis and work that needs to be carried out to create a defined scope, cost, risk allocation, programme and contractual framework before a Contract Package can be executed. This can really only be achieved with a single Bidder allocating sufficient resource on the realistic prospect of being reimbursed for such effort. The tasks may include:

- Due Diligence of the SDS and their design to date
- Due Diligence of the Tramco and their design to date
- Detailed collation of a construction programme in liaison with CEC, Network Rail, MUDFA, 3rd Parties and recognition of the other known constraints
- Confirmation of the technical solutions to be adopted that may have impact upon other key documents such as design, Employers Requirements, Planning Permission
- Confirmation of the risk allocation to be adopted which may affect Contractual Terms, Insurance or Bond provision and Funder Liabilities
- Confirmation that the above scope can be provided within budget whilst allowing for any extant risks or scope through client contingencies.

The Preferred Bidder places one of the tenderers in pole position but does not relieve them of the need to remain competitive during the period to contract close. In theory their performance can be deemed inadequate or their proposals for a cost / time / quality package unacceptable so that the other Bidder is recalled to the competition. The increased prospect of signing the Contract does however encourage the Preferred Bidder to dedicate the required resources to the above tasks. There may also be an opportunity to agree a relatively small "preconstruction contract" to reimburse for mobilisation and long lead procurement activities.

3. EVALUATION

The evaluation of the bids falls into the following work streams as defined in the Evaluation Methodology:

- Programme and Project Execution
- Project Team
- Technical
- Financial
- Legal and Commercial
- Insurance

The detail of the process whereby the bids are evaluated is set out in the Evaluation Methodology. A summary of each of the evaluation workstreams is presented below. The detailed evaluation worksheets are set out in the appendices to this document.

The candidates' responses to the invitation to negotiate and subsequent clarifications have been factored into this evaluation.

To ease analysis, colour coding has been used within the detailed evaluation worksheets to represent the four evaluation categories. The correlation is as follows:

Blue	Exceptional
Green	Compliant
Yellow	Deficient
Red	Unacceptable

3.1 PROGRAMME AND PROJECT EXECUTION

In general the candidates have followed the format for responses prescribed at each stage of the bidding process. The key issues arising from the evaluation of each the Bidders submissions are as follows:

3.1.1 Roley

Roley provided a disorganised response in January that was poorly structured and did not present the obvious capabilities of the consortium members in a coherent manner. Many of the topics requested within the ITN had not been addressed or could not be found by the Evaluation Team. A significant number of Clarification Questions was therefore raised by the Team and responded to over the ensuing months.

The Roley Consortium includes some very experienced and large international contractors. Their involvement in British light rail schemes has, however, been very limited and there is no local office establishment to support individual projects that they have won. This is largely being overcome by the deliberate and defined use of local subcontractors and suppliers who can be integrated into the corporate and project management structure. The consortium has offered joint and several liability and this has forced a cohesion to the bid proposals that was not initially revealed.

Specific points arising from the evaluation include:

Positive

- Good Corporate structure and Governance with a wealth of experience that is able to provide established and auditable procedures and systems to project level activities. Sample and auditable documents have been produced for things like Project Management Plans, Quality Assurance and Change Control Procedures. These need to be developed to be project specific during the Preferred Bidder stage.
- Project specific method statements have been started and there is a clear understanding of the requirements for working to Network Rail Line Standards. Roley has confirmed that they understand and will comply with relevant statutory approvals requirements such as ROGS, HMRI and RAVR. The completion of the APA is required before compliance can be verified.
- Roley has accepted the concept of having SDS and Tramco novated into their control for completion of design and integration of systems. The SDS design has essentially been adopted for the proposals and a matrix of extant design completion allocation between suppliers and consultants has been presented. A management and communication structure for these designers has been proposed but full liability for designs and achieving required consents and Approvals is deferred until Due Diligence has been successfully completed.
- Acceptable Stakeholder management proposals, including 3rd Party Conditions, were eventually presented. Roley will employ a dedicated Public Liaison Manager to deal with all of the communications initiatives. There is an exhibited structure for

recognising and resolving other stakeholder input through meetings and collaborative working with organisations such as **tie**, TEL, Transdev, 3rd Parties, CEC.

- Roley has provided a realistic assessment of the issues relating to environmental control and sustainability with the proposed appointment of a dedicated Ecological Clerk of Works. The Code of Construction Practice is accepted as a key constraint and the Considerate Contractors Scheme will be deployed.
- There is a sensible programme against **tie**'**s** currently exhibited schedule of key dates. Manipulation of activities that are known to be at risk such as design delivery and Consents Approvals allows a proposed delivery into service of the ETN for the beginning of 2011. It is more likely that the programme to be developed during Preferred Bidder Stage will show a Spring 2011 date.

Negative

- The lack of structure to the submissions may indicate a poorly structured management team and raises concerns that **tie** may need to deploy additional resource to manage and control the contract.
- There are some project controls initiatives that have not been addressed in the submissions to date such as KPIs. Project Controls, including payment mechanisms, will need to be finalised during the Preferred Bidder Stage.
- Roley has provided an early Risk Register and Schedule of Clarifications that identifies a number of Risks that they do not expect to be in a position to control and it is proposed that tie retain liability. Most of these issues should be resolved during the Due Diligence and Preferred Bidder stages and some others are being resolved by proposed amendments to Contract Conditions.
- Qualifications to the proposals include issues such as design delivery to programme that can be addressed during Due Diligence. The probability of encountering Utilities Assets during excavations is dealt with through Compensation or Relief Events as are unforeseen Ground conditions, contamination, obstructions and archaeological finds. Consents and Approvals for items such as TTROs and Buildings Fixings should be addressed during the Preferred Bidder stage.
- Most of the responses to specific questions do not explore the subject in any detail. An example may be that although the CoCP is accepted by Roley, there is no indication of the mitigation measures that will be deployed to maintain compliance or the costs and time that could be saved if the conditions were to be relaxed. Such minimalist answers probably reflect the limited resource that could be mobilised for the tender team but if this Contractor were to be selected as Preferred Bidder, tie would need to achieve a greater level of detail in the proposals.

3.1.2 Scoop

The Scoop submission is organised and coherent. The Consortium has clearly allocated responsibilities for sections of the tender and implementation amongst the companies involved. Joint and several liability has been assumed and Scoop has indicated a good procedure for communications and systems integration. The whole approach has been professional and well presented.
The consortium members all have relevant British experience and some level of local presence from which resources can be provided. The E&M systems are more likely to be subcontracted to one of the major suppliers in the market.
Specific points arising from the evaluation of the Scoop proposal include:

Positive

- Clear demonstration of tried and tested corporate and project level procedures and systems including project controls. These systems, from each of the consortium members, are to be used on an integrated and hierarchical manner for the project.
- Scoop has assured that they can work collaboratively with the project stakeholders and have proposed the adoption of collective problem solving techniques and ADR procedures. A protocol for promoting partnering is provided. Good mobilisation proposals
- Despite agreeing that unforeseen ground conditions may lead to a Compensation or Relief Event, Scoop has indicated that every attempt will be made to mitigate any disruption through the redeployment of resources onto adjacent work fronts.
- There is a sensible programme against **tie**'**s** currently exhibited schedule of key dates. Manipulation of activities that are known to be at risk such as design delivery and Consents Approvals allows a proposed delivery into service of the ETN for the beginning of 2011. It is more likely that the programme to be developed during Preferred Bidder Stage will show a Spring 2011 date.
- The mobilisation Plan presented provides some good detail of office and compound locations and the proposal for a centralised logistics centre to control JIT deliveries to work sites makes sense.
- Public communications and project team stakeholder management proposals are well developed with possibly the exclusion of specific staff allocation to these duties. Access for 3rd Parties and adjacent property users is understood with procedures instigated to check that requirements are dealt with. Management and integration of stakeholder design input with certification is allocated between the parties.
- A sample Environmental Management Plan has been presented with mitigation measures and sustainability issues described. Accreditation to ISO 14001 is demonstrated and more widely Quality Assurance is in accordance with ISO 9002 although there is little information in relation to the Maintenance part of the Contract.

Negative

- Scoop has made a superficial attempt at identifying potential risks and means of mitigating them. This may be a tendering strategy to

defer identification of cost and programme deficiencies but issues such as long lead materials supply (rail and copper) are as likely to remain an Infraco risk.

- Scoop has not yet addressed the implementation requirements of drawing down TTROs and all of the traffic signage and management that will be entailed. Some specific points of major traffic disruption have been considered but other method related statements presented lack a project specific detail at this stage.
- Although constraints such as the CoCP have been recognised, there is little exploration of the effects on cost and programme if these could be varied. These opportunities will need to be checked during the Preferred Bidder Stage if this contractor is selected.
- Scoop has confirmed compliance with all of the Network Rail interfaces requirements and statutory burdens such as ROGs and HMRI conditions but have made the point that they will not cover the costs of NR management charges or the rearrangement of possessions if required. The implications of the APA can only be addressed once presented during the Preferred Bidder stage.
- Construction methodology consents and approvals will be achieved by Scoop but they are expecting all other consents to be achieved by SDS or **tie** prior to full contract award.
- Questions relating to Incident and Crisis Management and Disaster Recovery have not been addressed.

3.2 PROJECT TEAM AND STRUCTURE

Both Bidders have advised some sample names and cvs for key members of their team and some of these have attended the meetings during the bid process. The teams will be essentially provided from their consortium parent companies resources during the construction and commissioning phase and recruited locally for the maintenance phase. Findings from the Evaluation include:

3.2.1 Roley

Roley has a well defined organisation chart that indicates the interfaces between the consortium members, subcontractors and suppliers. Outline resource schedules and some cvs have been provided for both the construction and maintenance phases. A good mobilisation strategy is described. They have proposed a project team including a good mix of personnel from their reference projects including employees with tram specific experience.

Positive

- There are interesting suggestions that the Roley team could co-locate with **tie** at Citypoint during the Preferred Bidder Stage and perhaps in the longer term rather than establishing such a big office complex at the Depot site.
- Most of the E&M plant and installation will be provided using in-house staff with a wealth of experience.
- Management of any external suppliers and subcontractors will be carefully controlled using their established Supply Chain Strategy and integration of QA and Management Systems.
- There is an infrastructure maintenance proposal with indications of planned and collaborative working with the Operator and other Maintenance contractors. This is supported by an interface management plan.

Negative

- There is little attention to the concerns over recruitment of suitable staff to the project. Roley is relying on the local contractors and suppliers supported by their own international resources.
- There does not appear to be any concern over procurement of long lead items such as rail and copper.
- Roley continues to reserve their position on Tramco novation and liabilities until the exact Terms of Contract are presented. This may be readily resolved during Preferred Bidder Due Diligence but there could be a clash of competitor commercial interests.
- There is concern that the supply and installation of Trackwork and OLE is not resolved although Roley has provided pricing against a technically acceptable solution. There would appear to be a lack of clarity between the scope of the civils contracts and the Trackwork installer. The selected technical solution is being left open by Roley to allow them maximum commercial manoeuvrability at contract award.

- There is no indication of the provision of Tram Helpers during the construction period. The Public Liaison officer will ensure that all operatives display allegiance to the project and can answer direct queries or refer them to the central help desk.
- Sample CVs for Maintenance staff have not been supplied as these staff will not be recruited until the year before operations commence.
- The commissioning phase of the project has not been considered at this stage of the bid.

3.2.2 Scoop

The Scoop response is generally strong and builds on their staffs tram delivery record. The mobilisation and construction organisation is well defined and there are indications that even Maintenance staff will be appointed from as early as 6 months into the programme. Maintenance staff cover will be provided 24/7.

Positive

- A good proposal is made for local recruitment using established contacts with training and employment agencies.
- Depth of personnel within organisation
- Clear project organisation showing relationship to corporate management
- Designated project managers have been involved in developing the proposal.
- Scoop is able to provide considerable experience of working to Network Rail standards. Staff with relevant experience will be assigned to those sections of the project.
- The civils work will be carried out using consortium resources and the E&M work will be supplied and installed using established and suitably experienced subcontractors.
- A Joint Design Development Process is proposed to assist in building a coherent team of novated contractors and suppliers with the Operator. Co-location of these teams into the Depot Building during commissioning will assist the co-operation.
- Scoop has an established supply chain and has also provided a clear programme for awarding contracts and evaluating any new suppliers.

Negative

- A good proposal is made for the location of site offices and logistics centre but there is no real indication of co-location with SDS and the tie team.
- No sample CVs have been provided for maintenance staff so there is no indication of the level of experience available.
- There is no indication of commissioning activities and the relationship to construction and maintenance staff.
- Interfaces with CEC, TEL, Transdev are recognised but there is no indication of who owns the responsibility to make these interfaces work.

- There is a Communications Manager indicated but it is unclear how Scoop will comply with the requirements of the Employers Requirements in relation to Tram Helpers.
- There is no indication of concerns over long lead items such as rail and copper.
- A list of likely concerns in managing Tramco has been raised but these can only be addressed at Preferred Bidder stage.

3.3 TECHNICAL

This technical evaluation predominantly covers the physical characteristics of the Bidders Proposals, however the candidates' maintenance proposals have also been considered.

In broad terms both Bidders have submitted their proposals as predominantly using the SDS design which, it is anticipated, will comply with the Employers Requirements and 3rd Party Agreements. Both Bidders have qualified their technical submissions on the basis that liability for the SDS design cannot be accepted by the Infraco until successful Due Diligence has been carried out during the Preferred Bidder stage. A similar position is taken in regard to the Tramco novation and therefore any consequential design to items such as power consumption or run-times cannot be verified at this time.

3.3.1 Roley

Positive

- Roley has presented a **trackform** installation proposal that has wavered between using the SEDRA SDS system and the CDM Classic form of embedded track. Experience of using the latter in Manchester and Croydon has indicated significant deficiencies in service and despite Infraco having to take the responsibility for maintenance, this form cannot be recommended. Roley has concluded negotiations by proposing to use the SEDRA system which is structurally acceptable.
- Roley has proposed the sensible adoption of tried and tested **Points and Crossings** manufactured by Hanning and Kahl but the detail will need to be checked for wheel/rail interface compatibility.
- The Roley proposals for **track drainage** include drain boxes every 60m to 70m connected into the existing carrier drains. This should be acceptable where the existing drains have the capacity.
- The proposed rail sections are suitable for return current conductors and Roley has bid on the basis of not providing any **Stray Current** mats or collectors. This is in accordance with good European practice where stray current monitoring is acceptable.
- Roley has bid against the **structures** design provided by SDS. Roley has offered some savings in terms of cost and time if some of the structures can be re-engineered using steel or other functional structural forms. Re-use of excavated materials is also proposed where Specifications and designs can be amended.
- The Roley proposals against **Power Supply** and protection are expectedly competent. Most of the equipment and installation is provided from within the consortium and their power simulation reports confirm the SDS design. The Russell Road Paralleling hut can be deleted if Phase 1b is not built. Stray current monitoring systems and proposals would appear to meet requirements.
- Roley has provided a Provisional Sum against the hook-up to **Scottish Power** and accept that they will manage the interfaces.
- Roley has offered an essentially in-house **Signalling and Communications** System which will provide the required level of

functionality, redundancy and reliability. They have not proposed any significant alternative innovative suggestions which would give acceptable levels of functionality and have qualified their interface to the Urban Traffic Control system.

- A comprehensive set of proposals for **Maintenance** has been further reinforced by meetings with knowledgeable people presented by Roley. Staffing proposals have been streamlined to reflect the similar scopes of work for civils, E&M and vehicles maintenance activities. The pricing has been reduced to reflect this.

Negative

- The proposed SEDRA trackform only allows **noise and vibration** mitigation and enhancement by adding some combination of glued blocks, special shims and grouting in the fixings during installation. Roley has not addressed this issue despite confirming compliance with the noise and vibration clauses within the Employers Requirements. The commercial bid may not reflect the need for such measures at sensitive receptor locations.
- The base offer of a standard LRT solution **OLE** is for auto-tensioned equipment throughout. Within street running sections a trolley wire is proposed but from Russell Road to the Airport it is a full catenary system. Whereas this is compliant with the ERs it does not appear to be in sympathy with the aesthetic ambitions of the Tram Design Manual.
- Roley has advised that they intend to use the support locations identified by SDS but they expect all Consents for **Building Fixings** and pole locations to be achieved by **tie.** The auto-tension equipment requires strong building fixings and poles with obtrusive balance weights or spring tensioning mechanisms. Pole mounted motorised isolators and lightning protection are proposed and these can also be obtrusive so alternative cabinet mounted equipment has been requested due to the associated Planning risk. Roley has confirmed the availability of all of these alternatives but have yet to provide the commercial variants for each element
- The information provided by Roley in relation to the specification, supplier and cost of the **Depot Equipment** is not sufficiently detailed to allow comparison with alternative offers.

3.3.2 Scoop

Positive

- Scoop has proposed a two pour **trackform** construction technique using coated rail, aligned and levelled using base plates but then permanently encapsulated in concrete. Scoop has agreed that tie-bars will be required at key locations to maintain gauge and alignment. Installation and therefore the critical quality control will be achieved by one of the consortium members who is able to bring experience and lessons learned from previous British tram projects. The proposed construction methodology in sections of 300m to 400m at a time with both tracks available to the contractor may not

be achievable once the detail of the TTROs and junctions possessions has been agreed.

- The Scoop trackform provides full compliance to the ERs on **Stray Current** mats and collectors but with the coated rail it should be perfectly feasible to make the cost savings and move to a fully monitored traction power return circuit.
- Although few details have been provided against ballast or grass track, **drainage** and **points**, the Evaluation Team are not concerned at this stage of development.
- Scoop has bid against the **structures** design provided by SDS. Scoop has offered some savings in terms of cost and time if some of the structures can be re-engineered using steel or other less aesthetic structural forms. There is a risk of programme delay and cost incursion during the redesign and submission for Planning Consent.
- The proposals from a named supplier and installer for the **Power Supply** systems are thorough and project specific giving a good indication of appropriate solutions.
- The proposals from a good named supplier and installer for the **OLE** systems are also thorough and appropriate to the Edinburgh streetscape. Fixed Termination Trolley Wire within the street running sections is entirely compatible with the aesthetic aspirations of the Tram Design Manual and does not require any obtrusive wire level equipment. Auto-tensioned trolley wire off-street achieves the same visual acceptability although a separate VE proposal for manual isolators will achieve the best balanced solution in terms of cost, operation and safety.
- The integrated **Signalling and Communications** System offered is built up from a number of different suppliers but integrated by the consortium. The system is based on loop detection with data transmitted to the UTC and Tram Control Centre. A VE option to use GPS based signalling may be attractive and achievable but the technical and cost benefits have still to be demonstrated. All signals proposals meet UK standards and Points machines are expected to be by Hanning and Kahl again. The system will provide the required level of functionality, redundancy and reliability.
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- Roley has proposed the sensible adoption of tried and tested **Points and Crossings** manufactured by Hanning and Kahl but the detail will need to be checked for wheel/rail interface compatibility.

The Roley proposals for **track drainage** include drain boxes every 60m to 70m connected into the existing carrier drains. This

Negative

- The coated track can be “tuned” to mitigate **noise and vibration** mitigation in particularly sensitive areas but Scoop has not been able to confirm that any such measures have been allowed for.
- The costs associated with achieving hook-up to the **Scottish Power** mains are qualified out.
- The **Depot Equipment** is to be subcontracted to a very experienced organisation and is therefore expectedly comprehensive and competent. There is a lack of detail at this stage regarding the

specification and manufacturer of each piece of equipment that makes comparison with other bids impossible.

- The **Maintenance** proposals remain under-developed but generally indicate an understanding of the tasks and organisation required. The pricing information is still not available which does not allow for a fixed price at this stage.

3.4 FINANCIAL

The spreadsheets included in this section compare the figures of the two Bidders for the various base bids and Mandatory Variants, including a summary in graphical format, price build ups, milestone payments, variant proposals, maintenance and an incremental adjustment for differing technical proposals. When benchmarked against other UK and international tram projects, the two bids would appear to be on the expensive side which may reflect the current market conditions and the perceived risk of engaging on this project with its own and other British tramway political interventions.

3.4.1 Roley

3.4.2 Scoop

3.4.3 Price Comparisons

The tabulations below show the comparative prices between the Bidders.

The following tables detail the Incremental Adjustments and Mandatory and Bidder Variants used in the tabulations.

The following S curve shows the payment dates against percentage complete for the various options with compliant bid from both candidates in yellow.

3.5 LEGAL AND COMMERCIAL

Detailed summaries of the Infraco Bidders' legal submissions are contained in Appendix 4. These will be subject to further review as negotiations take place, however the following represents a brief outline of the principal aspects:

3.5.1 Roley

Roley has indicated that it is unwilling to discuss the detail of the contract at this time and that it wishes to consider only the 'high level' issues. Roley's attitude to finding a way forward on contentious issues has, in the later meetings, been less than positive.

Specific points arising from the evaluation:

Positive

- Roley has agreed to extend their cap on liabilities to 20% in addition to bond proceeds and insurance liabilities (Clause 77.9 was drafted on the basis of 15% plus bonds and insurance).

- Roley has considered alternative contractual structures involving the Tramco that could, but is not guaranteed to result in a price reduction.

Negative

- Clause 88.5 – Roley refuses to identify a percentage figure for their profit, even though the clause is their addition. This clause deals with payment in the event of Termination for **tie** Default. They seemed to have concern about 'opening their books' even though that isn't the intention.

- Clause 102 – Roley will not give **tie** title to Project IPR (that **tie** will have paid for).

- Clause 62 – Liquidated Damages, Roley wants the percentage cap to be applied to the construction value (i.e. excluding the tram supply value). Also they appear to be wriggling on the LDs. Based on the original draft this should be £246,000 per week for Section D, although we haven't yet been clear on the values for Sections A, B & C other than say that they would be less.

- Clause 20 – Building Fixing Agreements has been revised to reflect the concerns of both bidders. The process had been discussed with Roley previously and they were content with the flow chart that we had prepared. The drafting reflects that, crucially giving them a **tie** Change if a Building Fixing Agreement is not accepted by the Heritable Proprietor and if this is then upheld by the Sheriff Court.

- Roley has inserted an exclusive remedies provision whilst deleting a number of the express remedies contained within the provisions.

- Roley has requested revision of the Sole Liability and Indemnity provision to the effect that it has removed the blanket indemnity required by the original drafting. In effect, this will limit tie to an express remedy contained within the contract.

- Roley does not appear to fully understand the effect of novation in respect to the transfer of SDS liabilities. Roley has stated that it will accept liability where 'back to back' with SDS.

3.5.2 Scoop

Negotiations were initially fairly slow but **tie** emphasized the need to make better progress and improvements were achieved. Scoop additionally submitted a revised 'mark-up' on 25th July and a further one on 29th August 2007. Scoop's attitude to later contract meetings has been both pragmatic and conciliatory.

Specific points arising from the evaluation:

Positive

- Scoop has amended its position on all of **tie**'s 'walk away' issues.

- Scoop has highlighted areas in relation to the bonding arrangements where substantial savings can be made.

- Scoop has agreed to consider an aggregate cap, fixed as amount, that a higher level than is currently required.

- Scoop is prepared to consider the adoption of 'Employer's Dependencies' in relation to agreed compensation events in order to substantial redrafting of the contract documents.

- Scoop is prepared to grant title to the project specific IPR.

- Scoop appears to understand and accept the risk of consents and approvals but does require concessions for prior approvals and TRO's,

Negative

- Clause 62 – Liquidated Damages, Scoop wants the percentage cap to be applied to the construction value (i.e. excluding the tram supply value).

- Scoop has inserted an exclusive remedies provision whilst deleting a number of the express remedies contained within the provisions.

- Scoop has requested revision of the Sole Liability and Indemnity provision to the effect that it has removed the blanket indemnity

required by the original drafting. In effect, this will limit tie to an express remedy contained within the contract.

3.6 INSURANCE

The evaluation can be summarised as follows:

3.6.1 Roley

Positives:-

- Most concerns have been dealt with and requirements are compliant.
- Accepted proposed ETN Owner Controlled Insurance Programme (OCIP)
- Accepted responsibility for OCIP deductibles, other than if another party was negligent.

Negatives:-

- One of the Roley consortium does not have any Professional Indemnity (PI) insurance cover for direct and economic loss. It has cover for injury or damage to third parties only.
- In the BAFO Roley stated that it did not believe a project specific insurance was necessary and would only add cost. No quotations were provided by **tie** to enable this decision to be made.
- The Evaluation Team requested an increased in the PI Limit of Indemnity to £20m, which has not been accepted.

3.6.2 Scoop

Positives

- Most concerns have been dealt with and requirements are compliant.
- Accepted proposed ETN Owner Controlled Insurance Programme (OCIP)

Negatives:

- One of the Scoop consortium does not have any PI insurance and another has only declared £5m.
- A consortium PI insurance of £10m with excess of £1m can be provided for £1.5m and if **tie** wants to increase the limit to £20m, a further £750,000 is required.
- During the negotiation the Team tried to persuade the bidder to accept responsibility for all OCIP deductibles, other than if another party was negligent. At this stage the bidder has not responded on this proposed change.

Recommendation and Actions Required

In the view of the Insurance Evaluation Team, based on the responses received to date, either Bidder can be accepted.

The following actions should be addressed with both bidders:

1. Due to one party having no PI insurance for economic loss:
    - With Roley, request again for a quote for project-specific PI or that the party with adequate PI insurance, arranges for its PI cover to accept the joint and several liabilities under the consortium for a minimum limit of £10m.
    - Try to negotiate a reduction in the PI premiums with Scoop.
    - If no PI provided or found not to be value for money:-
        - 1) Complete a financial check on it to ensure adequate balance sheet capability,
        - 2) Increase the contractual cap to reflect the exposure and to exclude insurance proceeds.
        - 3) Ensure all Performance Bonds etc. cater for uninsured risk.
2. A review should be undertaken of the full PI cover of the parties who have PI insurance.
3. Further discussion should be undertaken on transferring responsibility to pay the OCIP deductibles with Scoop.
4. Contract mark-ups to be reviewed and amended.
5. If contract awarded, evidence of Required Insurances to be obtained from those parties who have not yet purchased the Required Insurances.
6. The Brokers Letter of Undertaking must be accepted.

4. CONCLUSIONS AND RECOMMENDATIONS

The evaluation has enabled a clear picture of the Bidders' relative strengths and weaknesses to be formed.

In overall terms, either of the Bidders could provide a good solution for Edinburgh Tram Network. They have both generally complied with **tie**'s tendering requirements. Accordingly, there is no reason to exclude either of the Bidders.

Both Bidders have sensible programmes and have demonstrated that they understand what is required to execute the project.

Either of the Bidders would be able to provide a suitably skilled team to execute the Edinburgh Tram project.

Technically, both bids broadly meet **tie**'s requirements.

Incremental Adjustments have been factored into the financial evaluation, reflecting the Bidders' relative strengths and deficiencies.

Geoff Gilbert
Commercial Director
4th October 2007

APPENDICES – TENDER EVALUATIONS

Appendix 1	Programme and Project Execution Proposals
Appendix 2	Project Team
Appendix 3	Technical Proposals
Appendix 4	Legal and Commercial
Appendix 5	Insurance