tie Project Readiness Review

Date of issue to tie Chief Executive: 25 May 2006

Readiness Review dates: 22 May – 25 May 2006

Readiness Review Team Leader: Malcolm Hutchinson

Readiness Review Team Members:
  Mike Heath
  Sian Dunstan
  Willie Gillan
Background

The aims of the project:
The objective of the tram network is to help to create the transport infrastructure necessary to promote and support a growing local economy and create a healthy, safe and sustainable environment. Substantial road traffic growth across the Edinburgh area combined with forecast population and employment increases will lead to significant growth in road congestion. Sustainable growth can only take place with a step change in public transport. Road space must be created by modal shift away from cars, to enable economic growth to take place without aggravating congestion. A tram system will enable new development and continued growth of existing development in a sustainable way. Without it, growing traffic congestion and lack of access to development sites will curb future growth and threaten the economic prosperity of the city as the capital.

The driving force for the project:
The tram project is being promoted by City of Edinburgh Council ("CEC") and supported by the Scottish Executive. Capital funding is expected to be provided by CEC and Scottish Executive through Transport Scotland.

The procurement status:
Our understanding of the position is as follows:

- Operator designate appointed as a consultant to tie;
- Designer appointed;
- Technical Support Services contractors appointed
- Tramco vehicle suppliers prequalified, specifications provided to bidders
- Tramco vehicle maintenance bidders prequalified
- Infraco bidders prequalified;
- Mudfa tenders issued, returns are imminent.

Current position regarding Review Programme:
No OGC Gateway reviews have been undertaken. The project is considering whether to initiate a full OGC Gateway programme from Gateway 2 onwards.

Purposes and conduct of the Readiness Review

The primary purposes of the review were, in line with the terms of reference set out in Appendix A:

To provide an independent assessment of:

1. The procurement and contractual strategy in the light of market feedback;
2. Whether the Vehicles ITN is sufficiently developed to be released to bidders in the light of the above;
3. Whether the tie project team (including Transdev and advisers) are ready to
manage the processes which follow from release of the Vehicles ITN and
which lead up to the release of the Infraco ITN;
4. The programmes to deliver the project, including Infraco ITN documentation,
the TEL Business Plan and draft Tram Final Business Case; and
5. The extent to which the project satisfies relevant criteria which are similar to
those that would be assessed as part of an OGC Gateway 2 review.

Conduct of the Readiness Review

This Readiness Review was carried out from 22 May 2006 to 25 May 2006 at tie
offices in Edinburgh. The team members are listed on the front cover.

The people interviewed are listed in Appendix B.

A number of documents were made available to the review team but these were not
all comprehensively reviewed.

The review team would like to thank the tie and TEL teams and advisers for their
support and openness which contributed to the review team's understanding of the
Project and the outcome of this review.

Conclusion

The Review Team finds that:

- The procurement and contractual strategy in the light of market feedback
  should be reviewed.
- The Vehicles ITN is not yet sufficiently developed to be released to bidders.
- The project team (including Transdev and advisers) are not yet ready to
  manage the processes which follow from release of the Vehicles ITN and
  which lead up to the release of the Infraco ITN;
- The programmes to deliver the project, including Infraco ITN documentation,
  the TEL Business Plan and draft Tram Final Business Case are not fully
developed; and
- The project would not currently satisfy the criteria that would be assessed as
  part of an OGC Gateway 2 review.

A summary of recommendations can be found in Appendix C.
**Status**

The review team has assessed the overall status of the Project as Red as defined below.

**Red** – To achieve success the project should take action immediately.

**Amber** – The project should go forward with actions on recommendations to be carried out before the next review of the project.

**Green** – The project is on target to succeed but may benefit from the uptake of recommendations.

The recommendations in Appendix C have all been allocated an individual Red/Amber/Green (RAG) status and should be acted upon accordingly.

**Findings and recommendations**

1: Business case and stakeholders

A well drafted, high quality OBC has been produced. There remain a number of evolving issues principally; scope, integration, cost, modelling, affordability, timing of approvals and risk mitigations. Progress on these issues is covered in the paragraphs below.

2: Procurement approach

2.1 Bidder interest

We have not interviewed any of the Tramco or Infracos bidders. However, a number of the interviewees have made comments that lead us to suggest that the procurement model should be reviewed.

We understand some of the prequalified bidders (for both Tramco and Infracos) have expressed concern at the requirements to accept novation of subcontractors. For example, there are reports that potential Infracos may not want to take on designers or charge a premium for full novation of the SDS contract.

It will be important to retain at least three (and two as an absolute minimum) robust and appropriately constituted bidders as far into the procurement process as possible to maintain competitive pressure. We understand some existing Infracos bidders may merge and that some have corporate links to tram suppliers.

The project team must continue to monitor the procurement strategy in the light of the market situation.
2.2 Procurement model in light of market feedback

We understand that a review of procurement strategy has been initiated. We endorse this approach and recommend that leadership and responsibility for delivery of this review should be placed upon the incoming tram project director. (1)

We understand that there has been a strategy of building high levels of flexibility into the procurement documentation which appears to have been appropriate relevant to the original programme. For example, we understand that there are 48 mandatory variants for the Tramco procurement and 11 mandatory variants for the Infraco procurement.

However, we would note that this could only be achieved at the expense of simplicity and evaluation effectiveness. It could also compromise the desired level of cost certainty which may not now be achievable within the existing project resource and time constraints.

It may be possible to reduce this complexity and streamline the evaluation process by introducing a "reference bid" within the Infraco tender and further consider the necessity for all of the Tramco variants. We recommend that this should form part of the procurement review (2) mentioned above.

2.3 Contractual model

The tram specification calls for "high reliability", "minimum maintenance requirement", "ease of repair" and "proven design and technology"

The requirement for the provision of information in the Tramco tender documentation does not include this information which would enable the procurer to develop estimates of the whole costs of the bids. We recommend that bidders are required to provide data on asset life and reliability at least down to major replacement assembly level as part of a compliant bid. (3) We deduce that this will be available to tram maintenance bidders but believe that this is essential information to enable the procurer to make a reliable vfm evaluation of the bids received and ongoing costs of the project and the validity of the warranties offered.

We believe that there may be significant cost and time benefits derived from the current approach whereby the design contract and the tram contracts are novated to the Infraco but have heard of a number of concerns regarding this approach and a belief that bidders may wish to propose alternatives.

Therefore we recommend that the ITN documentation must enable the implications of variations to the novation approach to be properly evaluated in respect of cost, time, quality, and risk allocation. (4)

We understand that payment mechanisms for tram maintenance, infrastructure maintenance, and operations have not yet been finalised and have a concern that, at present, these may not be properly coordinated. We would recommend that these are agreed as soon as possible and in any event before the Infraco ITN documentation is released.
2.4 Negotiating strategy

At this stage, we have not seen evidence of the development of an agreed negotiation strategy for a project of this complexity. We recommend that the tram project director develops such a strategy for discussion on a confidential basis at chief executive level. (5)

2.5 Bid evaluation model and planned management

We have not seen a developed bid evaluation model for any of the procurements, but understand that this is work in progress. It will be essential that these are developed for each procurement and criteria included in the documentation provided to bidders.

2.6 Vehicles documentation set readiness for release

We note that the tram specification has already been released to bidders but do not believe that the tender documentation should be released until the issues in this report have been fully addressed.

3: Governance and related matters

3.1 Corporate governance model and strategy

The governance structure for the project appears complicated compared to best practice. We acknowledge that it is in the process of evolution and a number of key players have changed recently. A best practice project governance structure would consist of an empowered project team under the direct control of an empowered and accountable project director. The project director would report to a project board chaired by the Senior Responsible Owner ("SRO") for the project on behalf of the project promoter.

The project board and the project director would have clear terms of reference in respect of their respective responsibilities delegated from the project stakeholders.

The OGC describes the role of the SRO as "the individual responsible for ensuring that a project or programme of change meets its objectives and delivers the projected benefits. They should be the owner of the overall business change that is being supported by the project. The SRO/PO should ensure that the change maintains its business focus, has clear authority and that the context, including risks, is actively managed. This individual must be senior and must take personal responsibility for successfully delivery of the project. They should be recognised as the owner throughout the organisation”

The tram project is being promoted by CEC and majority funded by Transport Scotland. CEC owns two organisations that are involved in the delivery of the project.

The has been set up to be a delivery and contracting organisation and this continues to be the role it is playing in the development of the tram project (and the other projects for which it has been charged). It has been set up using a model whereby most of its expertise is “bought in” through the TSS and SDS contractors.
tie is the organisation that faces the market and is perceived as the procurer of the contracts and owner of the project's resource and delivery expertise. Its directors are expected to independently review the quality of output from the team.

The tie board comprises two elected members of CEC and three non-executive directors including the chair. Attendees are the Chief Executive and Finance director.

TEL has recently been established as the organisation to deliver Edinburgh's integrated transport policy.

The TEL board of directors comprises two elected members of CEC, the Lothian Buses operations director, CEO of tie, CEO of TEL, a non-executive chair and an independent non-executive director. In addition, the following are attendees: tie finance director, tie external relations director, Transdev Edinburgh general manager, CEC head of city development (officer), tie project finance director, PUK representative, TEL consultant, Transport Scotland representative (officer), Lothian buses FD,

In order for the governance of the tram project to most closely reflect best practice and to be fully effective, we recommend that a project board is set up as a matter of urgency and that there is clarity as to the identity of the SRO for the project. (6) Good practice suggests this board is a small group comprising the decision makers in respect of scope and funding and delivery.

The terms of reference of the project board should be developed as soon as possible and we recommend that the project board is the only forum through which key decisions in respect of the scope of the project are determined. (7)

We also recommend that the operation of tie and its board is reviewed to ensure it remains fit for purpose as a high quality delivery organisation. (8)

3.2 Project Management, structure and resources

Notwithstanding the outsourcing policy, there is a requirement for the tram project team to have an adequate level of skill in certain areas to be able to operate as a long term "intelligent customer". For example, we believe that the engineering, transport planning and commercial skills available to the project director as permanent staff should be reviewed in this context. We recommend that the project director conducts a review of the skills available as permanent staff and makes timely recommendations to tie. (9)

The review team were surprised at the number of times there were inconsistent messages from interviewees and have a concern that this is evidence of impaired communications within the team and its advisers.
3.3 Current and planned business/technical policies, strategies and constraints (e.g. health and safety plan, information security plan)

It has not been possible for the review team to focus on these policies specifically within the time available for the review. However we would comment that, on the basis of a limited examination of the risk documentation, health and safety issues need to figure more prominently.

4: Risk management

4.1 Risk Registers

We have interviewed the risk manager and had sight of the risk registers. These appear widely drawn although some risks are not clearly defined.

4.2 Risk Management Plan

Whilst we understand that “top 5” and “top 10” risks are regularly reported to senior management and board members however there is no obvious evidence of this being acted upon. We recommend that the project director reviews the process for acting upon and mitigating the risks to ensure successful delivery of the project. (10)

5: Programme

The terms of reference required us to consider the following areas of programme:

- Overall project programme and current view of critical path factors and construction programme issues;
- Programme to finalise ITN for Infracos;
- Programme to deliver TEL Business Plan and;
- Programme to deliver draft Tram Final Business Case

As these are all interdependent, we have considered them together.

We have reviewed the original programme and found it was consistent with the procurement strategy and key milestones at the time of issue (August 2005). Since then, there have been a number of activities that have taken longer than expected necessitating a series of revisions to the project programme.

Given our recommendation to review the procurement and contract strategies and the content of the tram and Infracos suite of contracts, there is merit in re-phasing the programme to take account of these activities and to consider the dependencies to obtain the necessary approvals for the project from stakeholders. The re-phasing should contemplate some actions to bring forward aspects of the Infracos procurement and other activities that could be advanced to generate some “float” in the programme.

The major standalone aspect of the project that will require attention outside of the procurement linkages is the work stream relating to the JRC. This work may need separate attention as a key “project within a project” because of its significance in the project business case and the TEL business plan.
We believe that more clarity is needed surrounding the timetables and criteria for future funding approval.

We recommend that a revised programme is developed and agreed by all stakeholders. (11)

5.1 Affordability and funding

There is no agreed common understanding as to the expected outturn costs of the project and the consequent balance between scope and affordability.

Looking forward, the tender returns for the Infrac and Tramco will inform the cost estimating process, but will not represent comprehensive tendered costs at the time the business case is next considered due to the negotiated procurement procedure being followed. The implications of this will need to be understood by all stakeholders.

5.2 Specification of the project’s expected outputs and outcomes

The strategy for delivering an affordable project appears to be to scale the scope to the funds available. At present there is not a clear baseline scope agreed by all parties however we understand that one has been prepared for TEL board approval. We recommend that a baseline scope together with a change protocol is confirmed by the board and all stakeholders as a matter of priority. (12) In particular, areas of uncertainty such as route, interchanges and incorporation of wider areas impacts within the project should be agreed.
APPENDIX A

Edinburgh Tram Programme – Readiness Review

Terms of Reference

Purpose

To provide an independent assessment of:

6. The procurement and contractual strategy in the light of market feedback;
7. Whether the Vehicles ITN is sufficiently developed to be released to bidders in the light of the above;
8. Whether the tie project team (including Transdev and advisers) are ready to manage the processes which follow from release of the Vehicles ITN and which lead up to the release of the Infraco ITN;
9. The programmes to deliver the project, including Infraco ITN documentation, the TEL Business Plan and draft Tram Final Business Case; and
10. The extent to which the project satisfies relevant criteria which are similar to those that would be assessed as part of an OGC Gateway 2 review.

Approach

The review will be undertaken by a small team led by Malcolm Hutchison and including Mike Heath, Willie Gillan (Transport Scotland nomination), and Sian Dunstan. CVs of all the team members have been provided to tie and TEL.

The review will be high level and strategic and will not be concerned with contract drafting or detailed provisions of the ITN documentation and schedules, nor with the economic case for the project, but will focus on key issues which underpin successful procurements and will take 4 full days.

The review team will have access to the OBC, draft Infraco ITN documentation, Vehicles ITN documentation and other key documentation on request but will rely principally on interview with members of the tie project team, advisers (financial, legal, TSDS), JRC, SDS, Transdev and representatives of TEL, CEC and Transport Scotland. The output from the review will be a short report addressed to the tie board.

Scope

- Procurement
  - Bidder interest (derived from completed pre-qualification process and evidence from interviewees)
  - Procurement model in light of market feedback
  - Contractual model in light of market feedback
  - Negotiating strategy
  - Bid evaluation model and planned management
  - Vehicles documentation set readiness for release

- Programme
  - Overall project programme and current view of critical path factors and construction programme issues
  - Programme to finalise ITN for Infraco
  - Programme to deliver TEL Business Plan
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competition sensitive

- Programme to deliver draft Tram Final Business Case
- Affordability and funding
- Specification of the project's expected outputs and outcomes
- Business Change Plan

- Governance and related matters
  - Corporate governance model and strategy
  - Project management, structure and resources
  - Risk management plans and risk registers
  - Current and planned business/technical policies, strategies and constraints (e.g. health and safety plan, information security plan)
## APPENDIX B

### Interviewees

<table>
<thead>
<tr>
<th>NAME</th>
<th>ROLE</th>
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<tbody>
<tr>
<td>Michael Howell</td>
<td>Chief Executive, (tie)</td>
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<tr>
<td>Graeme Bisset</td>
<td>Finance Director (tie)</td>
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<tr>
<td>David Mackay</td>
<td>Chairman (TEL)</td>
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<td>Paul McCauley</td>
<td>Parsons Brinckerhoff</td>
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<td>Alan Dolan</td>
<td>Parsons Brinckerhoff</td>
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<td>Colin McDonald</td>
<td>Parsons Brinckerhoff</td>
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<tr>
<td>Mark Bourke</td>
<td>Risk manager (tie)</td>
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<tr>
<td>Damian Sharp</td>
<td>Head of Major Projects (Transport Scotland)</td>
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<tr>
<td>Bill Reeve</td>
<td>Director, (Transport Scotland)</td>
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<tr>
<td>Sharon Fitzgerald</td>
<td>DLA Piper</td>
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<tr>
<td>Andrew Ritchie</td>
<td>DLA Piper</td>
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<tr>
<td>Iain Bowler</td>
<td>DLA Piper</td>
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<tr>
<td>James Papps</td>
<td>Partnerships UK</td>
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<tr>
<td>Neil Renilson</td>
<td>Chief Executive (TEL)</td>
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<td>Alistair Richards</td>
<td>(TEL)</td>
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<td>Stewart McGarrity</td>
<td>Project Finance Director (tie)</td>
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<td>Adil Chaudry</td>
<td>Steer Davis Gleave</td>
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<td>Rod Cameron</td>
<td>PWC</td>
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<tr>
<td>Willie Gallagher</td>
<td>tie and TEL board member</td>
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<tr>
<td>David Ramsay</td>
<td>Head of Design and Construction (tie)</td>
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<td>Willie Fraser</td>
<td>Head of Project Controls (tie)</td>
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<tr>
<td>Trudie Craggs</td>
<td>Senior Project Adviser (tie)</td>
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<tr>
<td>Barry Cross</td>
<td>External Relations Director (tie)</td>
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<td>Tom Clark</td>
<td>Transport (CEC)</td>
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<td>Jim Harries</td>
<td>Transdev</td>
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<tr>
<td>Andrew Holmes</td>
<td>Head of Development (CEC)</td>
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# APPENDIX C

## Summary of recommendations

<table>
<thead>
<tr>
<th>No.</th>
<th>Recommendation</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Leadership and responsibility for delivery of the procurement strategy review should be placed upon the incoming tram project director.</td>
<td>Red</td>
</tr>
<tr>
<td>2.</td>
<td>Consider reduction of variants and introduce reference bid within procurement strategy review</td>
<td>Red</td>
</tr>
<tr>
<td>3.</td>
<td>Require tram supply bidders to provide data on asset life and reliability at least down to major replacement assembly level as part of a compliant bid</td>
<td>Amber</td>
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<tr>
<td>4.</td>
<td>The ITN documentation must enable the implications of variations to the novation approach to be properly evaluated in respect of cost, time, quality, and risk allocation.</td>
<td>Red</td>
</tr>
<tr>
<td>5.</td>
<td>The tram project director develops a negotiation strategy for discussion on a confidential basis at chief executive level</td>
<td>Amber</td>
</tr>
<tr>
<td>6.</td>
<td>A project board is set up as a matter of urgency and that there is clarity as to the identity of the SRO for the project.</td>
<td>Red</td>
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<tr>
<td>7.</td>
<td>The project board is the only forum through which key decisions in respect of the scope of the project are determined.</td>
<td>Red</td>
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<td>8.</td>
<td>The operation of Tie and its board is reviewed to ensure it remains fit for purpose as a high quality delivery organisation.</td>
<td>Amber</td>
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<tr>
<td>9.</td>
<td>The project director instigates a review of the skills available as permanent staff and makes timely recommendations to Tie.</td>
<td>Amber</td>
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<tr>
<td>10.</td>
<td>The project director reviews the process for acting upon and mitigating the risks to ensure successful delivery of the project.</td>
<td>Amber</td>
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<tr>
<td>11.</td>
<td>A revised programme is developed and agreed by all stakeholders.</td>
<td>Amber</td>
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<tr>
<td>12.</td>
<td>A baseline scope together with a change protocol is confirmed by the board and all stakeholders as a matter of priority.</td>
<td>Red</td>
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NB: Full R/A/G definitions can be found in the status section.
Comments of the committee after the review:

"This is a good project. "It is being undertaken in a complex and difficult environment. It is nevertheless eminently doable."

"Was excellent to have newly appointed Interim Project Director involved throughout. Provided he is given the authority and clear governance framework to do his job effectively, this project has every chance of success."

"The urgent recommendations need to be tackled with an appropriate degree of dispatch – we recommend the target for resolution of most should be one week."

OUTCOMES

The review highlighted the following aspects of the programme. These have been reordered to reflect urgency. The categories are:

1 – immediate action appropriate
2 – action required before next review
3 – additional recommendation

Immediate action points:

1. Ensure leadership and responsibility for programme, including procurement, sits clearly with Tram PD and that groups providing input to the process feed into programme

2. Now that bidder positions are more visible, ITN documentation:
   - Should reflect minimum number of variants consistent with preserving desired negotiating flexibility – current number of variants is too large for both trams and infrastructure.
   - Should allow proper evaluation of possible amendments to novation approach (proposed by bidders), in respect of cost, schedule, quality and risk allocation. It may be appropriate to incorporate a "reference bid" to streamline the evaluation process.

3. Project Board structure to be clarified and reduced to minimum number to cover scope, funding and delivery, identifying SRO, and ensuring this Board is the only forum through which key decisions are executed.

4. Baseline scope and change protocol to be confirmed by Project Board and all stakeholders.
DRAFT (2)

Action before next review:

1. Procurement negotiation strategy should be documented and agreed prior to release of Infracos set of documents.

2. Tie to perform an early review, followed by periodic reviews, of its fitness for purpose as a high quality delivery organisation

3. Tram PD to execute skills and resource audit within the team including balance between contractors and permanent staff

4. Tram PD to assess risk management approach with focus on mitigation plans

5. Full project programme to be refreshed and agreed by all stakeholders.

Additional recommendation:

Ensure bid documents for trams require bidders to provide data on asset life and reliability at least down to major replacement assembly level as part of compliant bid.

25th May 2006