

# Edinburgh Tram Network Draft Final Business Case

## Response from CEC, TEL and tie

A detailed review of the comments from Transport Scotland on the DFBC has now been performed by CEC, tie and TEL. The following represents the combined response and proposed action plan for the production of the Final Business Case (FBC) in line with the conditions set out in the grant award for 2007/2008.

An outline action plan and timetable is provided as appendix 1. It is important to note that the timetable for addressing the actions and the production of the FBC must be fully aligned to the programme for the tram project, particularly the procurement element.

		Response / proposed action
<b>1.0</b>	<b>General Comments</b>	
1.1	<u>Content</u>	
•	Any sections excluded at DFBC stage due to lack of information and to be included.	Structure and sections of FBC to be agreed between tie, Transport Scotland and CEC
1.2	<u>Presentation</u>	
•	Section specific content lists for individual section to aid reference are to be included.	Noted
•	Attention is to be paid to the treatment of inserts in relation to version control.	Noted
1.3	<u>Phase 1a &amp; 1b</u>	
•	Specific consideration must be given to the presentation of content on Phase 1b.	The FBC will require to include clear decision criteria and decision points for Phase 1b. An agreement is required between Transport Scotland and CEC on this point and it may be part of the discussion on the Funding Agreement.
1.4	<u>Funding availability</u>	
•	The conversion of the £375m grant should be reported consistently in the FBC unless a different arrangement is agreed.	The issue will be addressed as part of the discussion on the Funding Agreement.
<b>2.0</b>	<b>Introduction</b>	
2.1	Sub-sections are to be included for ease of reference	Noted

<b>3.0</b>	<b>Project Justification</b>	
3.1	<u>General</u>	
•	Transport Scotland states that the case for Phase1a founds on the importance of tackling congestion in Edinburgh for the benefit of the greater Scottish economy.	It must be noted that the case to Parliament for Tramline 1 was strongly based on the economic regeneration of Granton.
3.2	<u>Construction impacts</u>	
•	Transport Scotland expect the FBC to contain specific proposals for mitigating construction impacts together with a full description of the process to keep mitigation measures under review and manage them effectively.	The plans for mitigating construction impacts will be made explicit. Among others, the FBC can make reference to the Code of Construction Practice (CoCP), which was approved by Scottish Ministers as part of the Parliamentary Approval. Further, details of the responses from the Infraco contractors to balance reduction in construction impacts against cost and programme and their proposed methodology can be included. CEC also requires that plans for mitigating the post-construction impact are explained. These will form part of the approved TRO process, including for wider-area impacts.
3.3	<u>Bus Alternatives</u>	
•	Comparison of the reference case that contains bus priority measures not currently in place with a do-minimum case which represents the current situation, show significant benefits could in theory be achievable by a bus priority scheme.	Greater reference can be provided based on the 2002 report which analysed all modal change alternatives and concluded that tram was the best option.
•	The narrative explaining the limitation of Leith Walk / Princess Street to accommodate continuing increases in bus number requires strengthening.	Noted
3.4	<u>EARL</u>	
•	The ongoing development phase of the EARL project will need to be observed as the FBC is produced.	Noted
<b>4.0</b>	<b>Project Scope</b>	
4.1	The section requires further refinement to identify the project's functional specification, with suitable presentation and version control, allowing for revision at appropriate times.	Formal update reports to the Tram Project Board will ensure appropriate control over any changes and revisions. The approved document will form part of the FBC.
4.2	More detail on interchanges is to be	Formal update reports on design

	provided in the FBC.	development are provided to the Tram Project Board and the approved decisions will be incorporated in the FBC. Greater clarity is required from Transport Scotland on the level of technical detail desired.
4.3	Observations in respect of interfaces with other projects and infrastructure are to be revisited.	Noted
<b>5.0</b>	<b>Governance</b>	
5.1	The section on governance is to be strengthened to show how the broad governance arrangements have been developed in detail to manage and control the project.	Detailed Project Management Plans and control procedures, including financial reporting procedures are now in place. Additionally, a formal operating agreement is in preparation. Details of all the above can be included in the FBC – clarification is required from Transport Scotland regarding the level of detail desired.
<b>6.0</b>	<b>Procurement and Implementation</b>	
6.1	Section to be separated into two separate sections or sub-sections separating the two phases.	Noted
6.2	Transport Scotland recognises that the FBC comes at the end of procurement, so only a short description of the strategy and risk transferred achieved is required.	A summary only of the Procurement Strategy and Process will be included to provide context for the Procurement process.
<i>Based on the above statement, the following comments are general responses and will not necessarily form part of the FBC</i>		
•	Clarification is required on the risks of failing to achieve planned convergence and closure within required time scales.	The steps clarifying the approach to the period to Financial Close have been provided via various papers to the Tram Project Board in autumn 2006.
•	Some explanation of how infrastructure contract bidders are being able to input design development over the coming period is to be provided.	These will be updated and presented to the May Tram Project Board Procurement Sub-committee.  Comments regarding timescales will be addressed in the current review of the programme which will be presented to the May Tram Project Board.
•	Some commentary references are required on <b>tie's</b> ability to sustain certain procurement methods, which helped inform the initial procurement selection criteria.	
•	Clarification is required with respect to the tendering and award of the proposed maintenance contracts.	

•	Confirmation of funding and awarding body for these contracts is required.	The funding body for maintenance costs will be TEL as part of meeting ongoing operational requirements.
•	Further clarification is required with respect to the definition of "substantial completion" and with respect to the level of liquidated damages.	A detailed description of the concluded contracts will be included in the FBC. Updates to the Tram Project Board will be provided in the period to Financial Close as outlined above.
•	Explain the incentivisation is included in the proposed contracts.	
•	Detail the actual contracting strategy proposed.	
<b>7.0</b>	<b>Operational Plan</b>	
7.1	Transport Scotland request that the Operational plan should be fully integrated with the TEL BP and approved by TEL.	This is already the case.
7.2	TS note the assumption that the concessionary fare scheme will be extended to include Trams and that Scottish Ministers intend to bring forward necessary changes to secondary legislation.	Noted – CEC would prefer stronger assurance on this issue from Transport Scotland.
7.3	Further development of patronage issues surrounding interchanges is required.	Noted
7.4	Clarification is required on how passengers will be incentivised to buy before boarding.	The strategy proposed by TEL and agreed by the Tram Project Board is to incentivise passengers by applying a higher fare to on-board ticket purchases and control fare evasion by using on-tram inspectors.
<b>8.0</b>	<b>Financial Analysis</b>	
8.1	TS recognise this is a commercially sensitive area and propose to feedback using existing arrangements.	Noted – it is also recognised that mechanisms will require to be found for briefing of elected council members and ministers. Greater detail of financial analysis will be provided in the FBC to allow informed decision making.
8.2	Requirement to report the conversion of the £375m consistently in a manner acceptable to TS (as section 1).	The issue will be addressed as part of the discussion on the Funding Agreement.
8.3	Analysis of proposed nature and drawdown of CEC funding is required.	This should be addressed as part of the discussions on the Funding Agreement.

9.0	Risk	
9.1	Transport Scotland perceives 12% risk allowance for a rail-related project to be optimistic, although questioned whether some of this may be included in the base costs. Further detail of cost assumptions are needed to provide clarity.	<p>The process for risk management is defined in the Project Risk Management Plan and related project control procedures as previously shared with Transport Scotland.</p> <p>The risk allowance equating 12% of project base costs represents the quantification of the identified risks profile at the time of the DFBC preparation. The adopted procurement approach has resulted in a different risk profile to that of a traditionally procured rail project – details of the risk profile have been discussed in depth with Transport Scotland. The risk profile is under continual review and reporting mechanisms have been agreed with Transport Scotland on a period basis.</p>
9.2	Transport Scotland state that the cost of tram planned maintenance and defect rectification should be quantified to allow informed decision making on the transfer of risk.	<p>The assessment of the bidders' proposals will be based on an evaluation of the whole of life costs (and risk) basis. The Tram maintenance requirements are transferred to Tramco through contract for the initial phase of maintenance. Subsequent to this maintenance period, tram maintenance will be undertaken by TEL as part of their operating costs. It is therefore inappropriate to include Tramco maintenance cost uncertainty in the capex risk register. It is appreciated that there remains a negotiation risk in this area and results will be reflected in the Final Business Case after Financial Close has been achieved.</p>
9.3	Actions to address the cost of delay and increased inflation should be addressed.	<p>The risk that inflation is higher than estimated is mitigated by passing it to Infraco and has now been removed following the return of the Initial Proposals.</p> <p>The risk of increased costs arising from delays is mitigated through a variety of treatments depending on the cause of delay. This is dealt with in the detailed risk register.</p>
9.4	Clarity needed on tie's confidence that tram will commence operations in time to realise revenue expected: no schedule QRA info.	Noted. Further discussion is required with Transport Scotland to agree the process for Schedule QRA. At this point, the proposed programmes included in the initial proposals from the bidders show that commencement of tram operations

		within specified timescales is feasible. It should also be noted that any delay in commencement of tram operations will also delay running costs. The impact on the overall TEL business case is likely to be minimal.
9.5	Evidence of tie's confidence in meeting the projects key milestones should be provided.	The programme is currently under review and updates will be provided via the agreed governance structure. The approved programme will be incorporated into the FBC.
9.6	The very high probability/low impact risks should be reassessed to see whether they are appropriate. Where risks are assessed as having 95% probability, they should be transferred to the cost estimate, where appropriate.	With regard to the 17 very high probability/low impact risks, we believe that Transport Scotland are commenting on Initial Risk Assessments contained within the Risk Register of 20 November, presented at the same time as the Business Case. At the time of identifying these risks, they were recognised as being of significant impact but were not capex quantifiable in a realistic manner. Because of the importance of these risks, they were given a value that would draw attention to them in order that they would be prioritised for treatment. Thus, they have seemingly "strange" initial assessment figures. Quantitative Risk Analysis is undertaken on the Current assessment profile, which for these risks is shown to be nil and thus not contributing to QRA.
9.7	A Stakeholder Management Plan should provide evidence that appropriate actions are planned to address stakeholder expectations.	A Communication and Stakeholder Management Plan was provided as an appendix to the FBC. Progress is being monitored against this plan on a periodic basis and reported to Transport Scotland. Updates will be incorporated into the FBC. Greater clarity is required from Transport Scotland on the level of detail desired.
9.8	The cost QRA should be undertaken at the MUDFA, TRAMCO level to understand where the major areas of risk lie.	Risk figures were expressed as percentages in order to easily allow a high level of assessment – "discrete" overall figures were also provided. It was felt that inclusion of figures at project element level would be too detailed of the main document. These can be updated an incorporated in the FBC – clarification is required from Transport Scotland to the level of detail desired.

9.9	Funding of the quantified 'shared' risks should be identified/agreed.	This should be addressed as part of the discussions on the Funding Agreement.
9.10	An indication of tie's confidence that the mitigation that they have put in place will be effective should be provided together with an indication of what the residual risk is.	None of the risks were described as mitigated, which would imply that an impact reduction strategy was undertaken and that residual risk remains. At the stage of the project on 20 November, risks that were closed were regarded as fully treated with any impact either having been avoided or transferred to the base estimate. This is indicated through the Current Risk column having nil value against closed risks. This was an appropriate approach at the time of production of the Draft Final Business Case. However, it will be found that as the project nears the completion of the development phase and into construction phase, the ability to completely avoid risk impact through this treatment method will reduce and this will be reflected in figures presented within the Final Business Case.
9.11	The risk confidence levels should be expressed at the P50 and P80 levels as costs.	Percentage uplifts are given to allow easy comparison with other schemes. The risk allowance was calculated as a discrete sum by applying QRA. These figures have been provided separately. The approach including the use of P90 was agreed by TS advisers as appropriate in autumn 2006.
9.12	Details of how a fund for "unknown" risks will be allocated.	tie and Transport Scotland undertook an exercise in July 2004 to ascertain how OB should be applied and agreed that, as the guidance contains insufficient data to confirm that light rail schemes can be grouped with other rail projects and as an enhanced procurement strategy was being undertaken, OB would be eradicated or very low at the time of scheme investment. Instead of using OB, Transport Scotland decided to adopt a very high confidence figure of 90% in the estimate of risk allowances to cover for specified risk, unspecified risk and optimism bias. Hence the unknown risks are taken into account by applying the P90 confidence level to the QRA.
9.13	Details of where will the residual Optimism Bias cost uplift will be allocated should be provided.	
<b>10.0</b>	<b>Programme</b>	
10.1	<u>General Comments</u>	
•	There is general concern that the	A review of programme is currently being

	programme is tight, with little float and that the programme only considers a best case scenario.	undertaken and will be presented to the TPB in May 07.
10.2	<b>Detailed Recommendations</b>	
	<ul style="list-style-type: none"> <li>Based on the detailed schedule the main key milestones should be separated and be reviewed.</li> <li><b>tie</b> should clarify the durations allowed for review, revisions and approval processes that have already been taken into consideration.</li> <li><b>tie</b> should clarify the responsibilities and feasibility in regard to their achieving their key assumptions.</li> </ul>	<p>A review of programme is currently being undertaken and will be presented to the TPB in May 07.</p> <p>These comments will be addressed as part of this review and incorporated in the FBC.</p>
10.3	<b>tie</b> should show and clarify the interdependences that exist in relation to the other Major Projects (e.g. EARL and Airdrie – Bathgate).	This will be incorporated in the FBC based on the receipt and negotiation of Infracore's detailed programme to be returned with the consolidated Proposals – July 07.
10.4	The programme needs to be baselined in the first instance at this DFBC stage.	The programme was baselined with submission of the DFBC. Separate copies have been previously provided.
10.5	The programme also needs to be cost and risk loaded at an appropriate level.	The approach has now been agreed with Transport Scotland and is being reported on periodic basis.
10.6	A detailed monitoring process of the key milestones is essential.	This is provided at the Period Project Director reviews with Project Managers and by the subsequent reporting process.
10.7	A schedule QRA requires to be undertaken and findings shared with Transport Scotland as a matter of urgency.	See comments against item 9.4 above.
<b>11.0</b>	<b>Communications Strategy</b>	
11.1	Spell-check the document.	Noted
11.2	Include the Mission Statement at the beginning (Introduction Section) of the document in addition to appearing at the end.	Noted
11.3	We would prefer to have no abbreviations.	Noted
11.4	Include team details, protocol and procedures section. Crisis management could also be	Noted



	incorporated within this section.	
11.5	Remove the "New" title at the end of the work plan tables and have these "new" items" fully integrated with the previous entries.	Noted
11.6	Include a list of who the key stakeholders are within the 'Stakeholders' Section.	Noted
11.7	The plan must also include details of how contractors and sub-contractors will integrate into communications strategy.	Noted
11.8	Reference needs to be made to the TEL ownership, TEL business plan and Communications strategy.	Noted
11.9	The author of the strategy, the draft number and the last date of revision should also be stated at both ends of the document.	Noted