Tram Project Board

Monday 11th December 10:00am - 12:00pm

Agenda

- 1) Apologies
- 2) Matters Arising
- 3) Review of previous minutes
- 4) Feed-back from Presentations to Elected Councillors and Media
- 5) Project Director's Monthly Progress Report

Appendix A - Safety

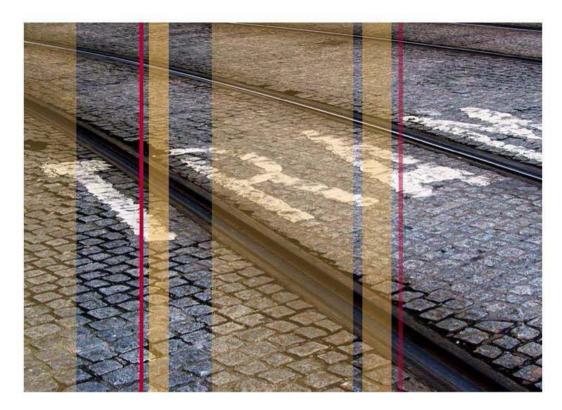
Appendix B - Milestone Schedule

Appendix C - Risk

Appendix D - Opportunities

Appendix E – Financial

- 6) Ingliston Park and Ride Phase 2 Change Control Paper
- 7) Draft Final Business Case/TEL Business Plan
 - Summary of changes from Documents reviewed on 20/11
- 8) Other Business Case related documentation
 - I. Letters from the Chairmen of TEL and tie to CEC
 - II. Documentary support for funding
- 9) AOB





tie Limited Tram Project Board November Report Papers for Meeting 11th December

10:00am - 12:00pm

Distribution:-

David Mackay (Chair) Bill Reeve Neil Renilson Andie Harper Bill Campbell Graeme Bissett Stewart McGarrity Willie Gallagher Jim Harries James Stewart Norman Strachen (Secretary) Andrew Holmes Alastair Richards



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TRAM PROJECT BOARD

Minutes of Meeting of Members

Meeting Number 4: 20 November 2006 at Verity House

Members Present		Participants	
Bill Campbell	(WC)	Graeme Bissett	(GB)
Willie Gallagher	(WG)	Jim Harries	(JH)
David Mackay (Chair) (DM)	Andie Harper	(JHp)
Neil Renilson	(NR)	Stewart McGarrity	(SM)
		Alistair Richards	(AR)
		Keith Rimmer	(KR)
		Damian Sharp	(DS)
		James Stewart	(JS)
		Norman Strachan	(NS)
		Trudi Craggs – Part	meeting

ACTION

06.18 APOLOGIES

Apologies were received from Andrew Holmes and Bill Reeve. Keith Rimmer attended for Mr Holmes and Damian Sharp for Mr Reeve.

06.19 **REVIEW OF PREVIOUS MINUTES**

The minutes of meeting Number 3 were reviewed and no matters were raised.

06.20 PROJECT DIRECTORS' MONTHLY PROGRESS REPORT

O6.20.01 The Project Director tabled his progress report which the Board noted. He highlighted a likely change in approach for delivery of the project where construction of line 1a will commence 2007 and line 1b will follow in 2009 (if funds are available). AHp confirmed that a paper explaining this staged approach in more detail would be available prior to the next meeting.

AHp

06.20.02 A summary paper was issued at the meeting explaining the options regarding the SDS contractor who was still causing concern due to their poor delivery.

It was agreed that WG and AHp will monitor the performance with fortnightly progress meetings with the contractor.

A progress report would be issued to Board Members after the first meeting.

It was also agreed that performance audits will be undertaken by tie.

AHp

O6.20.03 An update on Infraco and Tramco bids was given and JS requested a paper reviewing the contracts for next meeting. He also offered assistance with "methodology". AHp to follow up with James Papps.

AHp

O6.20.04 Risk Management Paper for Primary Risk Register
The Board noted the paper. JS was concerned about the quality of bid information for inclusion in the DFBC. AHp said that there would be a high percentage of certainty from Infraco bid (possibly circa 70%) due to the fixed cost element, and MUDFA had fixed rates. Any risk of cost overrun has been assessed and quantified. DS was concerned about the multiple critical path items however WG assured him that the project was being very closely managed and the position was largely inevitable given the Political theatre.

06.20.05 Update on TRO Process

Trudi Craggs, Development and Approvals Director presented a paper updating the Board on the progress with the Traffic Regulation Order (TRO) process which the Board noted. The Board were happy to endorse the recommendations in the paper subject to the deletion of recommendation 5.1.2 and the outcome of a high level meeting planned for later on Monday between CEC and tie. The outcome of this meeting would be reported at the next Board meeting.

AHp

6.20.06 Evaluation Methodology

The Board noted the report and accepted the evaluation process. It was confirmed that TEL's representation would be added to the Tramco Group and Tramco Evaluation Panel. AHp confirmed that weightings were used but that they were not to be disclosed. He would forward details to JS. JS suggested Paragraph 1.2 is redrafted to clarify possible confusion and challenge regarding bidders for Infraco offering discounts if their Tramco bid was successful. AHp confirmed this would be addressed.

AHp

06.20.07 Functional Specification Paper

The Board noted the final draft of the functional specification and accepted that it was very much still work-in-progress.

06.20.08 Funding Grant Requirement

The Board noted the report's recommendations and granted the approvals requested.

06.20.09 Risk Management Development Plan

The Board noted and approved the proposed Risk Management Development Plan. It was noted that the safety plan was still to be developed.

AHp

06.20.10 Preliminary Design Estimate

The Board noted the report.

06.20.11 <u>Executive Draft Summary of Final Business Case</u> SM presented the summary paper which was noted

SM presented the summary paper which was noted by the Board.

DS requested SM brief him on the key issues which had driven the BCR changes – SM confirmed he would.

The Chairman expressed appreciation to SM and everyone involved in producing the first class report. DS on behalf of Transport Scotland affirmed this.

JS suggested that clear support from SDG should be clearly stated in the report, or in the Chairman's letter. Also, Transdev's endorsement should be highlighted.

SM

06.20.12 Executive Summary of TEL Business Plan

The Board noted the report.

06.20.13 Draft Recommendation Letter from Chairman

The draft letter was noted by the Board. Transport Scotland gave their endorsement to the letter. Feedback from CEC on the draft letter was awaited.

06.20.14 Corporate Governance

The final agreed Project Governance structure was noted and approved.

06.21 ANY OTHER BUSINESS

The Chairman confirmed that the previously circulated meeting dates for 2007 were now agreed.

DATE OF NEXT MEETING

Monday, 11 December 2006, Verity House at 1000hrs.



EDINBURGH TRAM PROJECT MONTHLY PROGRESS REPORT - NOVEMBER 2006

1. Safety

HSQE objectives are being developed for the project from which the Key Performance Indicators shall have targets set.

A total of four Non-Conformance Reports (NCR's) (cumulatively) to date have been issued to SDS. Two number Non-Conformances remain open as detailed in the summary table below.

Issue date	Number issued	Open/Closed	Action
March 2006	1	Closed	Complete
October 2006	1	Closed	Complete
	2	Open	Response required from SDS for all – Currently being chased by Team
Total	4		

Further details are contained within the HSQE Performance Report in Appendix A. Key Performance Indicators (KPI's) have been identified and are contained within this report, section 3.4 of the report contains detailed information on NCR's.

2. Programme and Progress

2.1 Current status of key project milestones planned for November:-

- The Draft Final Business Case was submitted on the 16th of November 2006 to TEL/CEC/TS.
- The Project Estimate Update was finalised on the 16th November 2006, reviewed by Stakeholders and noted for inclusion in the DFBC by the Tram Project Board on 20th November.
- Scottish Gateway 2 follow up review was undertaken on the scheduled dates.
 Although the report has not been formally issued to the Project there are not thought to be any significant issues arising from the review.
- Mid-Bid Infraco meetings undertaken as planned on the 7th 8th and 9th of November 2006.

Tramco

- Tramco Evaluation Panel meeting held on 29th of November 2006 to consider Preliminary Evaluation Report. This concluded that no bidders should be eliminated at this stage.
- Supplementary Information Release to bidders due for 24th November 2006. This milestone has been deferred until the 14th of December 2006 after the briefing meetings to explain the change to a staged delivery of

Phase 1b. This will not impact on the overall programme. Deferral will also permit a more comprehensive Supplementary Information package to be issued to the bidders. This package will now include the following:

- Information on the amended phasing options(Phase 1a and phase 1b)
- Interior Specification for the train saloon to be incorporated.
- Clarifications on minor technical issues.

2.2 Future key project milestones in December to achieve project funding are:-

- 21st December 2006 CEC full Council meeting to approve DFBC stage 1
- 22nd December 2006 Completion of Infraco Price Summary Evaluation Methodology, this being the process for extracting the information from the Infraco bids returned in January and the updating of our Project Estimate. This will in turn be used to confirm the Business Case figures.

2.3 Programme for delivery into revenue service

- The Master Project programme has been updated. This shows
 - delivery of Phase 1a into revenue service by December 2010 assuming Infraco contract award in October 2007
 - delivery of Phase 1b into revenue service in December 2011 assuming a start date of late June 2009.
 - and commencement of MUDFA works in March 2007.
- There are a number of assumptions inherent in this programme including the need to commence the piled wall adjacent the A8 and site clearance (part of Infraco contract) works at the depot early. A scope of works, procurement plan and estimated cost is being produced for project team approval by end of Dec 2006.
- Assumptions around the TRO process are also inherent in the programme.
 These are principally:-
 - no on street works until after the TRO has been granted in July 2008 and
 - assumes that there is no judicial review of the TRO process.

The updated Key Milestone Schedule up to approval of the DFBC is shown in Appendix B.

2.4 Other achievements in November

- The meeting to present the Phase 2 Infraco ITN information to stakeholders has been deferred to December 2006 to suit stakeholder diaries.
- A recruitment plan has been developed by the Tram Project to secure the resources required by its draft construction phase organisation chart. This paper will be presented to DPD in December 2006.
- Given the concerns in respect of the potentially unaffordable level of Capex costs the Project will undertake a further value engineering exercise in the third week of December 2006 - this exercise has been deferred from November in order to permit the Team to respond to Transport Scotland's comments on the Project Estimate.
- The consistency review of the Infraco/Tramco/MUDFA/DPOFA contracts is ongoing and is scheduled to be completed by 15th January for issue to Infraco and Tramco bidders.
- The Project is currently drafting a protocol which will set out how the necessary TTRO will be arranged and managed on a section by section basis. This

Protocol will include traffic modelling based on SDS's Traffic Modelling Plan. The Protocol will be provided to DPD in December 2006.

- Further Comms activities are:
 - A further visit to Nottingham was completed on 14th November 2006 to take stakeholders to view the network, understand the benefits and speak to the company that delivered the system.
 - The tram DVD was delivered on 1st November 2006. The tram/bus was delivered on 27th November 2006 and will be operational by 14 December
 - A public tram event was held in the new Telford College on 29th November 2006.
 - Four new photo visual images of areas of the network are to be used in publications, news and events. Photo visuals being developed and being progressed.
- Land Purchase Supporting materials ("deposit documents") delivered to the city chambers and the 6 partner libraries. Documents delivered were:
 - TL1 Act
 - TL1 Parliamentary Plans
 - TL2 Act
 - TL2 Parliamentary Plans
 - Compulsory Purchase Regulations (2003)

Notice letters were issued 28th November 2006 to coincide with publication of the Notices and Schedules in The Scotsman. Omissions were evident in the Scotsman Notice and reprinted on 30th November.

- · Papers approved and actions arising from the last Board Meeting
 - Update on TRO process –not approved, to be resubmitted with a revised programme (DPD Paper).
 - Evaluation Methodology for Submissions Approved subject to Neil Renilson being added to the Tramco Evaluation Panel and method of dealing with Infraco discounts clarified.
 - Funding Grant Requirements Approved
 - Risk Management Development Plan Approved
 - Functional Specification Paper further meeting held with Transport Scotland and comments due back from them by 1st Dec 2006.
 - Preliminary Design Stage Project Estimate Report noted
 - Executive Summary of DFBC -noted
 - Executive summary of TEL Business Plan noted

2.5 Other actions for December

- Mudfa Contractor
 - Has delivered updated Risk management plan to tie in early November
 - Initial buildability report due on 15th December
- Presentations of revised tender and evaluation process and programme to Infraco and Tramco to explain the changes arising from the staged delivery of Phase 1b to commence on the 5th December 2006 until the 15th December 2006.
- Infraco Contract
 - 5th December 2006 -Technical and Commercial Questions and Answers review meeting.
 - o 12th December 2006 Bid Progress review meeting
 - 19th December 2006 -Technical and Commercial Questions and Answers
 - Meeting with Siemens in Berlin week commencing 11th December to explain revised tender and evaluation plan.

- Tramco Detailed evaluation of tender submissions continues.
- SDS to reissue MUDFA TTRO and schedule to tie on 4th Dec.
- OCIP Preliminary Qualification Questionnaire returns due 8th December 2006

3. Key Issues and Concerns

3.1 Resolution of issues and concerns arising last month (October)

- System Design Services (SDS) Numerous meetings have been held with SDS senior management in an attempt to address issues associated with:
 - Progress of design
 - Prioritisation of the detailed design programme
 - Quality of product
 - Resourcing to meet the programme
 - Non-compliance issues

Monitoring of SDS progress in relation to issues ongoing together with close liaison with Parsons Brinkerhoff project team and Parsons Brinkerhoff senior Management.

- TSS are preparing a report on the Preliminary Design, which was due to be complete by end of November 2006. This will now be delivered during week commencing 4th December 2006.
- Progress has been made with SDS in phasing the utility diversion plan to meet
 with the construction requirements. In addition, tie has appointed a Project
 Manager, on a short term basis, to manage the design of utility diversions to
 ensure that momentum is maintained. Co-location of teams has been ruled
 out as an option to improve the delivery of design but the series of design
 Partnership Meetings involving SDS, AMIS and the Project's MUDFA team
 along with the statutory utility companies to fast track design have
 commenced. The tie workstream Project Manager has received positive
 feedback from Amis & SDS Management regarding Partnership meetings.
- Scottish Power had requested 5 additional feasibility studies in the following areas:
 - Craigleith Drive
 - Roseburn Drive
 - Gogar/Gyle area
 - Haymarket Yards
 - Cultin Road

Progression of these is on hold until design of the abutment structures is progressed – this may avoid the need to carry out these studies.

3.2 Current key issues and concerns arising in the November are:-

- Assumptions around the TRO process are also inherent in the programme.
 These are principally:-
 - no on street works until after the TRO has been granted in July 2008 and
 - assumes that there is no judicial review of the TRO process.
- Infraco One bidder requested an extension on the tender submission return date of 9th of January 2007. This has been discussed with the stakeholders and the project team believe that they can accommodate this and still provide required costing information to support the DFBC update. The team will consequently advise all bidders that the tender submission return information will now be returned in phases commencing the 12th of January 2007 with return of final bids on 4th of April 2007.

- The team highlighted in the DFBC that there are no costs contained in the
 estimate for the eradication/treatment of invasive species. Eradication is
 required by landowners, including CEC, under statutory legislation and
 treatment is a prerequisite prior to commencing construction of works for the
 Tram System. A meeting is being arranged with CEC to discuss their
 commitment to delivering the projects time requirements for this work.
- JRC Variation requests have been received to cover requests for additional
 works in connection with the development of the DFBC by stakeholders in
 connection with the JRC. These are currently being negotiated and finalised in
 value terms. It should be noted that any future variations will be required to
 follow the appropriate change control process.
- SDS design CEC have asked that certain structures are subject to a charette 'review' and a robust process for agreeing design solutions between CEC planning and the Project Team needs to be established with appropriate timescales to ensure no delay affects the project.
- Immunisation works (Network Rail interfaces) a meeting with Transport
 Scotland and Network Rail concluded in agreement on actions required to firm
 up a plan to co-ordinate immunisation works between Tram and the Airdrie –
 Bathgate projects. A workshop will be held in December 2006 to review this
 issue (date to be agreed)
- DPOFA Negotiations are ongoing with Development Operating Framework Agreement (DPOFA) and a revised contract is to be agreed before the end of the calendar year.

4. Risks and Opportunities

- **4.1 See separate Risk Management Paper** See separate Risk Management Paper (Appendix C)
- 4.2 Principal Opportunities See appendix D for current status on Opportunities.
- **4.3 Risk Management System** The Active Risk Management system has been installed onto tie's IT system and is currently being deployed across the Tram project as a tool to manage risk/opportunities, issues, assumptions and concerns. The tool is deployed on an enterprise basis and allows many people to manage risk/opportunity through a single easily available data source. Configuration of the system is ongoing and full deployment and use of the tool is expected to be achieved during January. Basic training sessions have been undertaken with Project/Functional Managers and this will be backed up by detailed training from the Tram Project Risk Manager on a one-to-one basis. The main priority for all Project Managers will be to detail Mitigation actions for all risk items detailed.

5. Matters for Approval or Support

5.1 Decisions required from Tram Project Board.

The following paper is submitted to the Board.

 Draft recommendation letters supporting DFBC from Chairmen of TEL and tie to CEC

The following draft papers are to be submitted separately to DPD and subsequently for Board approval where necessary.

- MUDFA Programme
- Recruitment Plan
- Paper on the Contract Consistency and Alignment
- Protocols for TTRO/TRO and update on TRO progress
- SDS update
- Verbal report on risk 282 (Changes in Infraco and Tramco risk balance)
- Scottish Gateway 2 update
- 2007 Reporting cycle
- · Network Rail interface works update
- Infraco evaluation methodology
- Revised Infraco/Tramco tender process
- Change register and approvals

5.2 Decision /support required from TS

 The Project team have amended the Financial Year end budget as stated in the "Funding (grant) Requirements to end of Financial Year 2006/2007" Paper approved to the October Board Report on 3rd November 2006. Confirmation in writing of the increased amount (from £32.7 to £44.04 million, a difference of £11.04million) required to end of Financial Year 2006/2007 is requested.

5.3 Decision /support required from City of Edinburgh Council (CEC)

- Confirmation of commitment by CEC of the eradication/treatment of invasive species.
- A robust process for agreeing design solutions for structures between CEC planning and the Project Team.

5.4 Decision /support required from others

None

6. Financial and Change Control Position

6.1 Financial Status

The increase in forecast for the current financial year from £40.02m (October) to £44.04m is primarily due to bringing forward Phase 1a land acquisition. This increase excludes the value of CEC owned and gifted (Section 75) land. The Total VOWD amount included in financial year 2006/2007 for land is £10.7 million.

First formal notices have been issued with GVD notices taking title planned before the end of March 2007, enabling realisation of the value of the new forecasted commitment to year end.

The current AFC for the scheme has been reduced to £592.4m to reflect the Draft Final Business Case (DFBC) submission amount and updated Preliminary Design Stage Project Estimate.

The VOWD to November is £60k higher than the corresponding forecast last month. Increased Scottish Gas Networks costs for long lead materials and a review of the MUDFA pre-construction costs to financial year end have contributed significantly to this variance.

Current Year Position

Month £k (Incremental)	Current Actual £k (Cumulative)	Previous Forecast £k (Cumulative)	Variance £k (Current minus Previous)	Comment
£3,329	£20,132	£20,072	£60	For reasons for variance refer to Appendix C

Approved Budget £k	Current Forecast £k	Previous Forecast £k	Variance £k (Current minus Previous)	Comments
£44,041*	£44,041	£40,022	4,019	Refer Appendix C for individual budget line variances.

^{*}Budget to end March 2007 reflecting new Approved Funding Paper (Nov 06)

Budget £k	Current Forecast £k	Previous Forecast £k	Variance £k (Current minus Previous)	Comments
£545,000	£592,400	£623,000	(£30,600)	As Approved Preliminary Design Stage Project Estimate

(Fuller financial details and notes on variances are provided in Appendix E)

6.2 Change Control Summary

The costs and other impacts of these changes will be reviewed with the relevant stakeholders prior to the DPD meeting.

7. Early Warning Claims

No change from previous month.

Submitted by:- Andie Harper

Project Director

Date:- 05/12/06



Edinburgh Tram Project Appendix A



Edinburgh Tram Network **HSQE** Performance Report

Period 8 2006/2007

15th October 2006 – 11th November 2006

Prepared by	**********
	Tom Condie, HSQE Manager - Tram
Authorised by	
	Susan Clark, Delivery Director - Tram

Date Prepared 17/11/2006

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1 Briefing Summary

1.1 Health and Safety

General

There was 0 RIDDOR reportable accident(s) during the period.

The tram AFR is 0.00.

The total Contractor hours AFR is 0.00.

The total number of injuries reported for the period is 0.

The total Project hours worked in the period were 19,320.

The total Contractor hours worked in the period were **14,820** of which **750** were site hours.

1.2 Quality

Audit

There were 0 audits in period 8.

There was 1 monitoring exercise undertaken in the period.

There were **0** Non-conformances raised in the period.

There was 1 Non-conformance closed out.

There are 2 Non-conformances open both of which are overdue.

1.3 Environment

There were **0** minor and **0** major environmental incident reported in the period.

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2 Safety

2.1 Safety Performance

Graphs and tables to monitor and measure events that the programme has tried to minimise or eliminate (e.g. accidents / incidents), but which have occurred due to some failing in the Safety Management System will be introduced in this report as data is gathered.

They are important in determining the active measures that need to be put in place to prevent similar events occurring in the future.

2.2 Body Count Injury Summary



2.3 RIDDOR Reportable Events

There were 0 RIDDOR Events reported this period.

2.4 Management Safety Tours

There have been 0 Safety Tours this period. A schedule of Safety Tours will be prepared by 20th December 2006.

2.5 CDM

Three CDM workshops covering utilities, structures and the depot were held to identify the key issues that had been identified during the preliminary design stage.

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2.6 Review

A site visit to Alfred McAlpine Infrastructure Services office at Blantyre to review corporate Alfred McAlpine management systems was undertaken on 17th October. Outcomes as follows:

- · Satisfactory presentation of management system.
- AMIS induction presented it was agreed that this was very through and with the addition of tie project induction, wholly appropriate for tram/MUDFA works.

3 Quality

3.1 Quality Management System Update

A Working Group has been convened to ensure that Project Plans and Procedures are drafted and progressed to implementation.

Project Safety and Quality Interface Document, relating to the implementation of quality management on the MUDFA contract, was issued to Alfred McAlpine Infrastructure Services.

3.2 Audit

There were 0 audits planned and 0 completed during the period.

3.3 Monitoring

There was 1 monitoring exercise undertaken during the period. The SDS Interdisciplinary Check procedure for the Preliminary Design was checked. A score of 46% was obtained. The reasons for the low score are SDS procedure was not followed and the lack of traceability between records.

3.4 Non-conformance Reports

At period end:

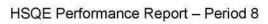
2 NCRs were open from incidents with 2 of these overdue.

NCR No. 003 Date of Close Out: 13/10/06 Number of cores taken at Coltbridge Viaduct.

NCR no. 004 Date of Close Out: 09/10/06 Anchorage points for abseilers were not as identified in method statement

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Closure of NCR's is being progressed with SDS.

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4 Environment

4.1 Pollution Prevention and Control

There were 0 minor and 0 major environment incidents reported in the period.

4.2 Audit

No audits undertaken in the period.

4.3 Site Inspections

No site inspections undertaken in the period.

4.4 Continual Improvement

A liaison meeting with MUDFA contractor, Alfred McAlpine Infrastructure Services (AMIS) was undertaken following the site visit of line one of the tram. The main topic of discussion was the approach taken by the contractors site specific and generic Environmental Management Plans. It is clear they have carefully considered the recommendations within the TRAM EMP and we have confidence that the approach that has been taken is robust.

A further site visit with the AMIS Environmental Management team was undertaken to highlight the "hot spots" for the MUDFA works and results were as follows:

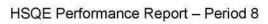
- No concerns in Roseburn corridor as there were only lamp standards to deal with.
- Invasive species were highlighted but did not cause concern as appropriate best practice would be applied
- Constitution St highlighted that archaeological issues may result in utilities diversions but appropriate method statements will be in place.
- Landscape issues highlighted at St Andrew Square and close liaison with CEC required in formulating design plans.

4.5 Legal compliance

No legislation breaches reported this period.

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5 Appendices

Tram Consolidated KPI Reporting Spreadsheet (as attached)

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Statut	orton Notices open tory Reporting RIDDORs				1 2										-	- 3					3 2						
Fatal Major	tolunes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+
	ime Reportables	0	0	- 6	8	- 0	0	- 8	0	0	0.	0	8	0	- 8	0	- 0	- 8	. 8	- 0	0	0	.0	0	0.	0	7
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Other	L non-RIDDOR events	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	. 0	0	0	0	0	0	0	0	4
Accide	ents - Lost Time ents - Other	0	0	0.		0	.0	- 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	- 0	0	0.	7
inciden	rits .	0	8	0	0	0	0	0	. 0	-0	0	0	ő	0	0	0	0	0	0	0	0	0	0	0	. 0	0	4
TOTA	n-RIDDOR Accidents	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	+
Hours	s Worked hours worked - SITE	732	732	726		850				1.7	2.662			1,824	-	760	8,161	-	8,161	- A	8,161	- 6	8,161	-	8,161		4
Total r	hours worked - NON-SITE	12,450	12,450	12,450	24,900	13,050	2,287 37,950	12,450	60,400	12,450	62,850	12,750	5,587 75,600	13,236	88,836	14,070	102,906	0	102,906	0	102,906	0	102,906	0	102,906	0	
		4,500 17,682	12,450 4,500 17,682	4,500 17,676	24,900 9,000 35,358	4,500 18,379	13,500 63,737	0 12,450 4,500 16,960	18,000 70,687	4,500 17,250	22,500 87,937	4,500 20,250	27,000 108,187	4,500 19,560	86,636 31,500 127,747	4,500 19,320	36,000 147,067	0	147,067	0	36,000 147,067	0	36,000 147,067	0	36,000	0	
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Report	rtable injuries / Lost time accidents to date	0	0	0	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00	0	0	0	0	0	. 0	0	1
	erous Occurrences to date ours worked to date	732	732 16,950	726	0 1,458 33,900	0 829 17,550	2,287	0	0 2,287 68,400	300	0 2,587 85,350	3,000	5,587 102,600	1,824	7,411 120,336	750	0 8,161 138,906	0	8,161	0	8,161 138,906	0	8,161	0	8,161 108,906	0	
Non-Sit	Site Hours Worked to Date	16,950	16,950	16,960	33,900	17,550	51,450	16,960	68,400	16,950	85,350	17,250	102,600	17,736	120,006	18,570	138,906	0	128,906	0	108,906	0	138,906	0	108,906	0	
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Site ho	ours worked Rolling Site Hours Worked Rolling																										4
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compli to other	Naints/Enquiries from statutory bodies relating er environmental issues	0	.0	0	0	0	.0	0	0.	0	0	0	8	0	0	0	0	0	0	0	0	.0	.0	.0	0.	0	
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Materia	rials & Waste Management							- 2	- 10				-		0.00							38)(20	1 192	
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Scrap r	metal	0	0	0	0	0	0	0.0	0	0	0	0	0	0	0	0	.0	9	. 0	0	0	0	0	0	0	0	4
Concre	goard/paper	0	0	0	0	.0	0	0	0	0	0	0	0	0	ő	0	0	0	0	0 0	0	0	.0	0	. 9	0	_
Wood	(including waste pallets, cable drums)	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0.0	0	0	0	0	0	0	4
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Month	Day	Sale	Key tie / I rain Meeting Dates	Yours Project Dates			PROCUREMENT			AC.	Business Case Development	Cupes Estánuto Deselopment	Traffic Management / Land Assembly / PR / Co.
200	Ung	044	Neg or: Dannesoning Orders	The Property of the State of th	MODEA	HERACIC	TRAMCO	SDS Migratores	OGC REVEW	- 7	additions case desired their	Ochoc Comment Committee	Traile reassignment / Carlo Associacy (14 / Co.
CO August	Tue	22/06/2006	Trans-Project Buard/TEL Broard					0	178-2000000			Control of the Contro	
=	ried	23/58/2000					3						
_	Fit	25/59/2000 25/59/2000	Se Cheo Dilakis	PM Reports Due									
	SW	26/60/2006	Nog vier sternenning under fram Project Buard EL Downs										
	Sian	278002006	-		V			Property Design Foreign Flores				7	
	Mon	28/08/2006	Se thans					Presentality Creeting Places Finances					
	Wed	28/08/2006 28/08/2006 30/08/2006		Pro: Controls Collate Reports									
	The		- CATALON CONTRACTOR IV	BOR Fapers Dise						Delinacy of draft STAD2 report (excluding a accepting outputs)			
	The	31/09/2006	SAK Opening Story	BCIR Rapers Due-			- 35			mosking outstu		0.1	
- Commercia	1	and the same of	Quantity & State - Trans							CALL STORY I PRACT AND STREET			
pepender	Sai	02/09/2006						-		Marian Charleson	A CONTRACTOR OF THE PARTY OF TH		<u> </u>
	Sun	03/09/2006										1.	
-	Mon	04/09/2006	Quality & Risk - Train							THE RESERVE OF THE PERSON NAMED IN COLUMN 1	_		
	Tue	05/09/2008		Pag Directors Review		10						3	
-	res	0669/2006		DPO Papers: Due		,				Property of the English State of the Control of	100		
\top			Tran BPIC Sub-Committee							CONTRACTOR CONTRACTOR OF THE PERSON NAMED IN			
-				-	-					THE PERSON NAMED AND POSSOR OF THE	-		
1	7500	SAMMAN								tradigio di Caraman di Sanga di Sanga	and the second		A
+	Fit.	19692006								St DATE SHIP	Name and Address of the Owner o	COMMERCIAL PROPERTY AND ADDRESS.	
	San	10/09/2006									and the same and the same and	4	
1	Mon	11/09/2006 12/09/2008		Control programs							The second of the second of		1
	Med	1309/2006		DPD els Meeting . se 2 or CP aptirs due -	2 9			0					
_	126	1569/2006 1569/2004	See Cree 1996.	He 1 ord Papers due - Trans Board Papers due	4			0				\$.	I
	54	16/09/0006		WWW.ENTERSONS TO THE PROPERTY OF THE PROPERTY									
	Sun	1809000		Arreety Repot Due - Fragress Meeting									1
	Tue	19690000										(HE WOLDS)	
	Wes	20/09/2009	Sin Exist District		Control of the contro		- 0					*	-
					Martin Miles				CO. Calment Communication				
	70	20000000		4.Weekly Report Due - Progress Meeting	MANAGEMENT AND THE PARTY NAMED IN				CONTROL OF THE PARTY OF	The second of the second of			
	59	23/09/2006	fram Project Osovall EL Grand	errore caped Due - Progress mortality						The state of the s			
=	Sen	2409/2006	Trans Ecology (Support File Strans	Se BC Papers due - FM Reports Due			- 3						1
	Tue	26/09/2506	THE PARTY OF THE P	The state of the s	COLOR SERVICE	PERSONAL PROPERTY.							
=	Med	27/09/2000		BCP Papers Due - Fris Controls College Reports	BUDGA Lydnik Since								
_	Fil	2909/200		BUSP Pagert DOI - PTG COMPOS CONSIL REDORS			3				FLOTE THE BUILDING AND COLOR BY		
	Sat	30/09/2005			(- 2						
October	Sun	01/10/2006											1
		02/10/2006							DOMESTIC STREET, STREE				
-					COPA- 1990 Automotivation			-	SIALIA				
	Tue	03/10/2006		Proj. Directors Review	County Free No. Co. No. of Str. of Str. of	PRESENTATION CO.						45.5	_
	West	04400000	Country & Rose - Trans	DPD Papers Dive	LIST AND PROPERTY AND ADDRESS.						The Road of the Person Name of Street,		
				80100/00x30,000	Detail tereogrammani og Discontain storige Outstand Administration								
	The	05/10/2006			Company Assets The Walley		Charles Section 5 (Accesses 9000) 15 to						
1								the material reporter in Contract					<u> </u>
+	Fir	078.05506			they described to			ELECTRIC CONTRACTOR CO					
	Sim	36/10/2006 07/10/2006 08/10/2006	_	-			(11 mm - 11 mm - 11)						
		-954440040020			Constitution (Constitution)		Contract of the second of					CONT. CA STORY	
	Mon	09/10/2006					Marketon Tal					Contract and Contract of the C	
		1030000			Apparent Stay of Stay of Stay of Stay		The state of the s						T'
\pm	Villed	11/10/2006		DFD ski Ministrig . se Exic Papers due	desired processing					Consecutive and the second	AT VALUE OF SAME	Lagrania	
-	The	12/10/2006		Re Exer Popera due Trans Board Papera, due	HOW WORK SHIPE					CARTRIDIAN SERVICE ACRES			
	Set	14/10/2006		crass board agent use						The second second second		2.11	
	Sun	10/10/2008 11/10/2008 12/10/2008 13/10/2008 14/10/2008						9				B. II	
1				VA			Control of the Control of States	SECTION CONTRACTOR		2	May Very Soft County From	The last through the second	A
+	Mon	16/10/2000		4 Weekly Report Due - Progress Meeting		DEC. NOOM anadamie XV III/R IACO	Sells	O Martine Address of the Control of				in it.	
	Top	17/10/0006	Train 1974 Sub-Coherentee		(U.S.)	hicianicioniwania;							San Street view of the CAM II
	West	184.00006			-						AC Sparridgle bound	Debrasile.	
	FII.	20/10/2006	THE DE NO SHELL WE WINDOW	4-Weekly Report Duar - Progress Meeting						Free Participation Planters		1	
	Sal	21/10/2006											
1	plan	G01800 CN			BOTH THE REAL PROPERTY.								
-	Mon	20/10/2006	Cash Project Board: Tean Project Board: He Cash Chaird	tie 30 Papels due - PM Reports Due	Union 1	THE RESIDENCE OF THE PARTY OF				feetils Seine wine Mill then	SCENICASED BURGO	SEA Front Woman Council	
	Wed	26/10/2006	tie Exec-Board								Of the latest terminal termina	×	
	Thu	26/10/2006		BCIP Pagers Due - Proj. Controls Cotate Reports									EXTERNATION OF THE REAL PROPERTY.
1	54	28/10/09/06 28/10/09/06		-									CONTRACTOR OF THE PARTY OF THE
=	Sun	29/10/2000										1	
	Mon	50±00006	se board				NAME OF TAXABLE PARTY.						1
1	1	100000	WARE TO THE PARTY OF THE PARTY	Constant		THE RESERVE OF THE PERSON NAMED IN STREET							
	Tue	. 31/40/2006	Suarty & Risk - Trem	Prop Directors Review		PROPERTY AND ADDRESS OF THE PARTY OF T							1
November	Wed	01/41/2006	Suelty & Rosi - Tren	DPD Papers Due	W			0					
1	This	02/1/2006	Carlo Architectura		Parliment		Parameter State of the State of						
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	Set	06/1/2006			4							è	+
		See Topol			Streets								•
-	Mon	05/11/05/05			The second secon								
	Tie	07/11/2006				Committee and the							
	dese	0001000	BBB X sec Board	NOT AN INCOME.	and Allerman and Arthurs	Market Street, Street, St.	100				hallow the second control and		
	Year	09/1/2006		OFD st: Mainting Be Trec Papers due Tran Board Papers due		HV Street Section	13	1			CONCURSOR STATE AND INCOME.		t
	Fit	10/11/2006		Tom Board Papers Give						MIDHER HUDOC South	XC session tiffic stores		
1	San	12/11/2006											
	Mon	1351/2006		44Neekly Report Due - Progress Meeting	3							3	
-	Tue	1501/2006				THE RESERVE THE PARTY OF THE PA							1
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	70.	17/11/2006		4-Weekly Report Due - Progress Meeting			Francisco Company of the second	man Determine Descript the Control					I .
1	Sai	18/11/2006 19/11/2006		77277									0
		19/11/2006			D 3					MINE CONTRACTOR OF THE PARTY OF			-
=			Train Project Board										

Traffic Management / Lan						THE RESERVE OF THE PERSON NAMED IN						OCIF - Insupance Conceives P																	Sea								-20							CEC to confirm and agnost 0	CF C to m skin Consent Vertical	Linked to Approve (of FBC)						COL	200				
Capex E dánado Developinant		E 7 E 7 E 7					200							TO THE PROPERTY OF THE PARTY OF	Value Engineering Viola shop	value Engineering Visit shop					V.159		50.00						riged procedures to be in parce				Reviewintable estimate range à conami tyr DFBC blage 2	Codes inhoco estimate range 8 continu tor OFBC stage 2		746									3400							5227.60	27/03				
Business Case Development		•				25000		3 2	1380			300							1 add 50 for the separate of DFBC Stage 1	INFRACO Proe Summary Evaluation		8				00.00					300			Applies ES ortistace tender price impact on Ortic. Update OFEC Steps. 2.8, rubm t.paper 10 CEC.				Update DFBC Stape 2.8 submit pages to CBC							3 900	Transport Scolansi Approval of OF BC - Stage 2						An other accesses of from Buchang Cam-			200	- 3- 3	
380																										13																				CEC (Nit council) approve of Diffic Stage 2											
OGC REVIEW	Constant formation		Coc contract name (age)	200														2000	25 (2)	Advance Mons - Súfr Testa-Bets* TRS Operational	2.60		0.0			800									200	0.00	200		10040								dies			egi. S	000	92.00		2.376		0100	
SDS Milestones	West Control of the C						Sent Selbated to seath Ret Badget with			Revisione Mutof A TTRO Order 8 Schooldes To Se				nos 2310.6 - Issue MUDFA TIRO	Order & Schedules To te											\$2000000000000000000000000000000000000	structure of Read of the Control of Schedules To Se			trove Consultation Report & Frail Dra	Deserto CE.C. Handover Traffic Management	Requirements to MUDEA (In Accordance 19th Contead) (Detail Design Priorities - DD1				Pros 7807 fb. Al Collettedron	Protestingly Datas Recibed															Recissue INFRACO TTRO Order & Schedules To Se					
PROCUREARRY	Manual Street Line Street Street											- 13								2						8 6		Deballed evaluation of Trans.co Implies	Methodogo and a second	Updated bids refurned incorporating Supplementary littors abon 8 deases	Everation stre-submitted bids					Dupplementary information release		Properties of carsache Bridges		Further Tram-co responsitions treque ats	•																Further Transco regonations teque da torits automated bids as required.
MPRACO	ertrans Commission (1989)					Safety of the same of the same		2			SOFICES & COMMITTED OFFICE TO SERVICE STATES AND SERVICES	malable			Bis Progress Review Meeting			Fedinical & Conmercial GEA's				6	300			Federical & Commercial OSA's						NTRACO refum of stage 1 bid (Phase a and 1b - Core bid)	NFRACO tender evaluation. Omsterioes		200	see contractained verson of the SR's	3303	rikal analysis of BVFRACO bindse oon of the							2.50		F 150					00.00	Defined eventation of INFRACO tender rubilitations complete				
SAUDEA									1000	Submit updated his management plan. In Ne.						nikal Buldsciffy Report																					Receive 1.d. 25% of 2D 5.AFC drawings												Frei Budgetity subsision								
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Edinburgh TRAM Project (Commercial In Confidence)

Paper to: Tram Project Board

Subject: Risk Management Paper for Primary Risk Register

Date: 1st November 2006

1.0 Introduction

1.1 The purpose of this document is to provide the monthly update to the Board with regard to the Primary Risk Register and the top risks facing the project.

1.2 The risks on the Primary Risk Register have been extracted from the Project Master Risk Register and are those that have a high risk significance but which also require treatment in the near future.

2.0 Risk Significance and Treatment Status Summary.

- 2.1 Overall the significance of individual risks on the Primary Register has not changed.
 - 1 risk of red significance has been added. This is:
 <u>Risk 349</u> (Diversion of gas main at Gogar Depot depends on construction of Turnhouse Pressure Reducing Station land is not in LoD and there are no alternatives). The treatment of this risk relies on the performance of Scottish Gas Networks.
 - The following are recommended for closure or removal from the Primary Risk Register:

Risk 263 (Failure to demonstrate robust business case for scheme) is closed and removed from the Primary Risk Register as actions are complete and the risk converts to an affordability issue.

Risk 265 (Poor project governance) to close as risk treatments are complete.

Risk 266 (JRC model is insufficiently robust to support the Business Case) as treatment is complete.

<u>Risk 272</u> (Delay in land acquisition due to uncertainty of political commitment to scheme) as approval has been given to acquire land on an accelerated basis and the risk no longer applies.

<u>Risk 275</u> (Negative PR coverage due to perceived mistakes or problems in project becoming public) because treatment is part of the day-to-day corporate processes within tie and the risk is not project specific.

Risk 276 (Unacceptable or inaccurate assumptions are used during JRC modelling and SDS design is based on the model)

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because treatment is complete.

Risk 282 (Procurement strategy has a high level of risk transfer to contractors which resits in a failure to sustain suitable interest from the market throughout the bid process) because treatment is complete and the risk has converted to become Risks 278 and 344.

Risk 187 (Poor relationships with stakeholders including political, Network Rail, other major organisations, businesses, frontages, special interest groups etc) because the treatment is part of day-to-day project and tie corporate activity and its status will not change throughout the project.

- Risk 271 (Failure to reach a suitable agreement with CEC on various aspects) has been removed from the Stakeholder Risk Register and placed in the Project Risk Register as it is felt that the risk is better managed from a project perspective.
- Risks 279, 280 and 271 are regarded as summary risks. These
 will be split into their component parts and reported separately
 as appropriate. In particular, it should be noted that the TRO
 aspect of Risk 279 is thought to be of high significance on its
 own and a detailed strategy to address this is currently being
 developed.
- 2.2 Last month six risk treatments were showing red status. One of these has remained red, four have improved to green and one treatment is now not applicable as the nature of the required treatment has changed. Three treatments have now fallen behind schedule after having been on or ahead of schedule and one new treatment has been identified immediately at red status. Therefore, there are currently five treatments at red status. These are as follows:-
 - Risk 267 Identify optimal position for a combined tram/bus position.
 - Risk 284 Gain TS agreement for early commencement of works including earthworks.
 - Risk 344 Develop Fallback Plan to cover the eventuality of only one bid being returned.
 - <u>Risk 139/164</u> Review design information and re-measure during design workshops with Utility Companies and MUDFA. Develop PC sums into quantified estimates.
 - Risk 271 Final alignments in place.

On the whole, the treatment status of the primary risks has remained neutral or positive with only four treatments moving in a negative status direction. The vast majority of risk treatments are on or ahead of programme.

2.3 The Primary Register is attached as Appendix (i). This document contains a risk status summary showing the changes from last month.

3.0 Consultation

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3.1	The DPD Su will be incorp	b Committee will review this regist porated.	ter and their comments
4.0	Recommend	dation.	
4.1	The Board is	asked to note this paper.	
Propo	sed	Geoff Gilbert Project Commercial Director	Date 03/11/2006
Recon	nmended	Andie Harper Project Director	Date 03/11/2006
Appro	ved	David Mackay on behalf of the Tr	Date 03/11/2006 am Project Board

PRIMARY RISK STATUS SUI	MMARY		V.		
Risk Significance (No of Risl	ks)	*	Treatment Status (No of Treat	tments)	*
	October	November		October	November
Black	7	6	-	*	24
Red	17	19	Red	6	4
Amber	2	2	Amber	37	30
Green	0	0	Green	25	29
Risks Added	3 (red)	1 (red)	Treatments Added	8	4 for new risk (2 amber, 2 green) 8 for existing risks (1 red, 4 amber, 3 green)
TOTAL	29	28	TOTAL	76	75
Risks Removed and No Longer on Register	0	2 (1 black; 1 red)	Treatments Removed and No Longer on Register	1	5 from active risks 6 from closed risks

TREATMENT STATUS
RED – Treatment Strategy behind programme
AMBER – Treatment Strategy on programme
GREEN – Treatment Strategy ahead of programme or complete

Tram - Stakeholder Risks

Master	Risk Description	Effect(s)	Risk	Treatment Strategy	Treat	ment	Due	Risk
Risk ID			Sig		end Oct	end Nov	Date	Owner*
263	Failure to demonstrate robust case for scheme against required tests of Affordability, Financial	Business case is not acceptable Approvals delayed		Regular engagement with stakeholders to ensure clarity of requirements			Aug- Nov 06	Stewart McGarrity A&B

Master	Risk Description	Effect(s)	Risk	Treatment Strategy	Treat	tment	Due	Risk
Risk ID			Sig		end Oct	end Nov	Date	Owner*
	Viability, Economic Viability and Modal Shift ACTIONS COMPLETE – RISK CONVERTS TO AFFORDABILITY AND APPROVAL ISSUE. CLOSE THIS RISK.	Slips into purdah period		Progressive development of draft business case Updated Project estimate				
264	Long term political risk to continued commitment of TS/CEC support for the Tram scheme	Protracted decision making and unnecessary debate during consideration of Business Case Project becomes key political issue during election campaign Reversal of decisions by incoming administrations in either or both of CEC and Holyrood		Monitor likely outcomes and do our best to brief all relevant parties about the project in a balanced way 'Hearts and minds' campaign including Senior Executive Officer meetings with Councillors and MSPs and utilising the tram sounding board meeting with CEC and selected elected transport leads Regular briefings and discussions with senior CEC and TS officers particularly in relation to Full Council presentations Provide confidence on Infraco costs in Business Case ensuring that 70% costs are	NEW		21 Dec 06 Jan 07	Willie Gallagher A Andie Harper B
				firm Make contact and engage with Senior SNP Leaders (effect 2) Continue to provide accurate information on	NEW	- I 07	Dec 07 – May 07 From	
265	Poor project governance RISK TREATMENT COMPLETE - CLOSE RISK.	Insufficient information flow to decision makers Slow or overturned decision making Failure to grasp or create opportunities		status of project (effect 3) Seek clarity of Delegated Authorities of TS and CEC representatives attending Board meetings			May 07 Aug 06	Graeme Bissett A Geoff Gilbert B
266	JRC model is insufficiently robust to support the Business Case. RISK TREATMENT COMPLETE	Business case not approved. Time delay and resultant		Intense engagement of TS, CEC and TEL in the development and delivery of patronage, revenue and BCR projections during August and September.			End Oct 06	Stewart McGarrity A&B

Master	Risk Description	Effect(s)	Risk	Treatment Strategy	Treat	ment	Due	Risk
Risk ID			Sig		end Oct	end Nov	Date	Owner*
	- CLOSE RISK	costs caused by redesign and remodelling.		Hold meeting with JRC and stakeholders to discuss results to gain confidence in performance. Encourage approval for tram to be given appropriate priority at junctions during operation. Scenario modelling of JRC cost estimate			e e	
267	If there is inadequate progress on the operational system including bus/tram integration, development of network service pattern and TEL Business Plan may not be sufficiently robust.	 Delay to JRC programme. Reworking of Plans or poorly developed Infraco arrangements with consequential delays due to re-working/change. Increased operating costs and loss of potential revenue. 		Develop clarity on the role and planned deliverables of TEL to bring about integration including development of ticketing strategies and bus/tram service patterns. Model integration plans through JRC with rigorous review process using LB knowledge. Identify optimal position for a combined tram/bus position. Prepare TEL Business Plan (incorporating business case tram for system) with development of necessary policies to cover			Aug 06 Nov 06	Neil Renilson/ Bill Campbell (TEL) A Stewart McGarrity B
268	Funding not secured or agreements not finalised regarding the total aggregate funding including £45m CEC contribution; developer contributions; cashflow/funding profile; financial covenant; and public sector risk allocation e.g. inflation. RISK IS SUB-RISK OF BUSINESS CASE APPROVAL.	Possible showstopper. Delays and increase in out-turn cost may affect affordability.		operations. Ensure close and continual interactions with TS and CEC to establish funding delivery confidence and agreement. Confidence required in contingency figures. CLOSE ACTION – P90 ADOPTED FOR FUNDING APPLICATION. Address risk allocation with bidders through negotiation ACTION RELATED TO GETTING BEST PRICE NOT FUNDING – INAPPRORIATE ACTION FOR RISK, CLOSE. Develop and implement strategy for additional contributions		N/A N/A	Sep 07	Graeme Bissett A Geoff Gilbert B

Master	•	Effect(s)	Risk Treatment Strategy	Treatment		Due	Risk	
Risk ID			Sig		end Oct	end Nov	Date	Owner*
269	Agreement on financial over-run risks sharing has not been reached between CEC and TS due to doubts over costs staying in budget. CLOSE OUT OF RISK ANTICIPATED NEXT MONTH	Potential showstopper to project if agreement is not reached. AGREEMENT REACHED, TEXT TO BE SIGNED		Hold discussions with CEC & TS to ensure adequate release of funds at appropriate periods of time. Understand commitments by TS and CEC re: 1A and 1B Facilitate agreement between CEC and TS.			Dec 06	John Ramsay (TS) A
270	Uncertainty about requirements for wider area modelling and need and extent of construction works required on road network	Increased construction cost. Delay while additional funding is found.		Clarify and agree boundaries of scope and funding provision between TS and CEC Provision of £500k in Draft Final Business Case estimate to deal with WAM requirements Employ further Traffic Management expertise			Feb 07	Willie Gallagher A Trudi Craggs B
272	Delay in land acquisition due to uncertainty of political commitment to scheme. APPROVAL HAS BEEN GIVEN TO ACQUIRE LAND – RISK CLOSED.	Delays to Infraco and the overall Tram project.		Achieve approval as part of the Draft Final Business Case 1 Develop alternative programme scenarios and commentary. Manage the political risk and enfranchise all political stakeholders in the benefits of Tram.		N/A N/A N/A	Dec 06- Feb 07	Willie Gallagher A Trudi Craggs B
273	Business case is not approved during February 2007 due to Infraco tender returns not adequately informing the business case.	 Delay until Summer 2007 due to lack of political commitment due to impending elections. Resultant cost impacts (inflation) on total cost. Political support may evaporate. Leads to Risk 264 		Maintain procurement programme to deliver critical business case inputs Managing expectations on the part of TS and CEC as to the certainty with respect to costs which are reflected in the business case. Ongoing fortnightly reviews with bidders and mid term contractual mark up to inform above treatment			Jan 07	Stewart McGarrity A Bob Dawson B

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Master	The State of the Control of the Cont	Effect(s)		Treatment Strategy	Treatment		Due	Risk
Risk ID			Sig		end Oct	end Nov	Date	Owner*
274	Failure to engage with Transdev in order to adjust DPOFA in line with the development of the Infraco and Tramco procurements. This includes negotiation to secure Transdev acceptance of a subcontract to support system commissioning responsibilities. RISK CLOSING – EXPECT COMPLETION IN DECEMBER.	Failure to achieve most effective commercial solution Delay in resolution of Agreements		Engage with Transdev to ensure adjustment to DPOFA and negotiate requirements.			Dec 06	Alasdair Richards A & B
275	Negative PR coverage due to perceived mistakes or problems in project becoming public RISK RELATES TO CORPORATE PROCESS – REMOVE TO CORPORATE RISK REGISTER	Damage to tie's reputation Loss in confidence of tie's delivery Funder/promoter dissatisfaction		Control confidential information and closely monitor Fol(S)A requests Develop relationship with press with support for PR advisors to control stories Communications Strategy being followed with Partners to ensure any problems are flagged up early and dealt with appropriately via the media or other stakeholders.			On- going	Suzanne Waugh A Mike Connnelly B

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Tram - Project Risks

Master					Treat	tment		G
Risk ID	Risk Description	Effect(s)	Risk Sig	Treatment Strategy	end Oct	end Nov	Due Date	Risk Owner
276	Unacceptable or inaccurate assumptions are used during JRC modelling and SDS design is based on the model. TREATMENT COMPLETE – CLOSE RISK.	 Runtime performance requirements are not achieved. Business case is not approved due to doubts over model. Delay during remodelling and redesign resulting in cost and time impacts. 		Continually monitor JRC output through close interaction and progress meetings. Assumptions Approvals process. Ensure regular interaction with stakeholders to keep them informed of progress and expected model results.			End Oct 06	Stewart McGarrity
278	Infraco tenderers seek extensions of time during tender period	Delay to market pricing and confirmation of business case capex requirements		Agree bid programme with bidders – programme has been agreed Manage bid process to ensure bidders deliver to agreed dates			Aug- Sep 06 9 Jan 07	Bob Dawson
279	Third party consents including Network Rail, CEC Planning, CEC Roads Department, Historic Scotland, Building Fixing owner consent is denied or delayed. SUMMARY RISK – RISK TO BE SPLIT TO DETAIL LEVEL	 Delay to programme. Risk transfer response by bidders is to return risk to tie Increased out-turn cost if transferred and also as a result of any delay due to inflation 		Engagement with third parties to discuss and obtain prior approvals to traffic management plans, landscape and habitat plans, TTROs, TROs and construction methodologies in relation to archaeological and ancient monuments Identify fallback options CEC Planning – Mock application by SDS [APPLICATION SUBMITTED; APPROVAL			Dec 06	Trudi Craggs
280	SDS critical deliverables are considered to be below quality levels required or late in production SUMMARY RISK – RISK TO BE SPLIT TO DETAIL LEVEL	 Delay in submission of information to Infraco Delay in achieving consents and approvals Dilution of effort to de-risk Infraco pricing 		NOT YET ACHIEVED] Identification of key areas requiring SDS attention. Re-focus SDS effort. Apply micromanagement to SDS delivery. Weekly reviews to press for deliverables.			Jul 07	Geoff Gilbert
281	Insufficient planning of procurements and controls on management and contract	Weak procurement plan Scope/cost creep		Improve robustness of procurement plan. Finalise project estimate and functional specification and apply change control.	NEW NEW		Dec 06 Dec 06	Geoff Gilbert

Master					Treat	ment		s-
Risk ID	Risk Description	Effect(s)	Risk Sig	Treatment Strategy	end Oct	end Nov	Due Date	Risk Owner
	costs.	Damage to reputation		Undertake further Value Engineering Closely manage expenditure including examination of opportunities for value engineering, influence of change and optimisation of value for money TREATMENT CLOSED AND REPLACED ABOVE	NEW	N/A	Jan 07 Sep 06	
282	Procurement strategy has high level of risk transfer to contractors which results in a failure to sustain suitable interest from the market throughout bid process. RISK CLOSING AND CONVERTS TO RISKS 278 AND 344	Increased price of bids Withdrawal of bidders during bid process		Identify feasible alternatives to risk allocation and allow negotiation of risk allocation			Oct 07	Bob Dawson
283	Infraco tender returns are outside forecast estimates and business case capex limit	Draft Final Business Case requires major change and update Business case not		Identify feasible options to enable scheme to proceed Conduct review of scenarios and approach to			Oct 06- Jan 07	Stewart McGarrity
		 sustainable Confidence is lost by Funders and politicians 		be taken for business case Discuss contingency options with Funders and politicians			ŝ	
284	If programme requires to be accelerated, early commencement of depot works is required (current programme has no contingency and shows depot works commencement Nov 07)	Potential delay and increased cost should longer timescale		Develop procurement strategy, including scope and cost, to obtain funding. Gain TS agreement for early commencement of works including earthworks. [TREATMENT STATUS RED AS ACTION BEHIND PROGRAMME TO ACHIEVE TARGET END DATE.]	NEW		End Dec 06	Susan Clark

Master					Treat	tment			
Risk ID	Risk Description	Effect(s)	Risk Sig	Treatment Strategy	end Oct	end Nov	Due Date	Risk Owner	
285	tie fails to secure sufficient resource to manage all relevant processes. Especially evaluation of Infraco tenders by required time.	Failure to advance processes at required rate resulting in programme delays and missing of milestones		Flexible approach to resourcing including drawing on TSS support, support from other contract services providers e.g. Nicols, Dearle & Henderson etc ACTION COMPLETE – APPROCH HAS BEEN DEVELOPED, CLOSE			On- going	Colin McLauchla n	
	RISK TREATMENT COMPLETE – CLOSE RISK SUBJECT TO BOARD APPROVAL OF RSOURCING STRATEGY.			Develop Long Term Resoucing Strategy			Mid Oct 06		
187	Poor relationships with stakeholders including political, Network Rail and other major	Project loses political and public support Loss of funding support		Regular involvement with stakeholders to keep them informed and to better understand their concerns			On- going	Andie Harper	
	organisations, businesses,	Delays due to protests		Develop strategies through Mike Connelly to			On-		
	frontages, special interest groups (including Spokes, SNH			counteract any negative comments			going	-	
	etc, Equalities Transport (DDA),			Seek support from pro tram lobby groups to promote positive views			On- going		
	medial, community councils and residents associations.			Continue with Hearts and Minds campaign			On- going	-	
	THIS RISK IS TREATED THROUGH DAY-TO-DAY ACTIVITY – IT'S STATUS WILL NOT MOVE DURING THE PROJECT. RECOMMENDATION IS TO REMOVE FROM PRIMARY.								
286	Infraco refuses to accept or fully engage in novation of SDS and as a consequence award is successfully challenged	 Significant delay to delivery of Tram Loss of Reputation Significant extra costs 		Consult with legal on options relating to due diligence to be carried out on design and, availability of consents (esp building fixings) Introduce and engage Infraco bidders to SDS as early as possible			Feb 07	Bob Dawson	
344	Withdrawal of bidders or submission of non-compliant bids due to non-project related issues	Less than 2 Infraco bids are submitted Less than 2 compliant		Develop approach to maintain confidence in delivery of value two-way procurement Ongoing liaison with bidders to maintain engagement			Jan 07	Bob Dawson	

Master					Treat	tment		G-
Risk ID	Risk Description	Effect(s)	Risk Sig	Treatment Strategy	end Oct	end Nov	Due Date	Risk Owner
		Infraco bids are submitted Public sector procurement guidelines are not met resulting in significant delay		Develop Fallback Plan to cover the eventuality of only one bid being returned [TREATMENT STATUS NEW BUT RED DUE TO IMPORTANCE]	NEW		Dec 06	
139 & Uncertainty of Utilities location and consequently required diversion work/ unforeseen utility services • Increase in MUDFA costs or delays as a result of carrying out more diversions that estimated • Re-design and delay to Infraco works		Ground Penetration Radar surveys to confirm location of Utilities under Tramway. To be plotted onto drawings by SDS. In conjunction with MUDFA, create and implement schedule of trial excavations to confirm locations of Utilities			End Nov 06 Mid Dec 06	Alasdair Slessor		
				Review design information and re-measure during design workshops with Utility Companies and MUDFA. Develop PC Sums into quantified estimates.			End Nov 06	
				Identify increase in services diversions. MUDFA to resource/re-programme to meet required timescales			Dec 06-Aug 07	
1	Change in anticipated inflation rate from 5% (included in base estimate)	Out-turn cost higher than reported		Update project estimate inflation allowance using TS methodology. Monitor market and inflation indexes such as BCIS to ensure early identification and that correct adjustment is applied and further updated to project estimate and update project funder at regular intervals	NEW		Jun 07	Geoff Gilbert
349	Diversion of gas main at Gogar Depot depends on construction of Turnhouse Pressure Reducing Station – land is not in LoD and there are no Turnhouse PRS not constructed or not completed on time resulting in critical delay to construction of depot		Ensure Scottish Gas Networks understand the criticality of diversion programme Monitor SGN progress with regard to land acquisition and adjust Tram programme accordingly	NEW		Jan 07 Phil Douglas		
	alternatives	Land purchase cost may be above face value		Ensure Tram Project remains in background in order to prevent escalation of land price Develop strategy to allow commencement of Depot earthworks without prior diversion of Gas Main	NEW		Dec 06	

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Master					Treat	ment		
Risk ID	Risk Description	Effect(s)	Risk Sig	Treatment Strategy	end Oct	end Nov	Due Date	Risk Owner
271	Failure to reach a suitable agreement with CEC regarding: 1. Roads maintenance	Delay to project while agreement with CEC is reached.		Final agreement to be approved by Roads Authority, CEC Promoter, CEC in-house legal and tie			Dec 06	Trudi Craggs
	responsibility where the tram has been installed in CEC maintained roads; 2. What is and is not realistically within the scope of the tram infrastructure delivery contract; 3. The way in which tram UTC priorities are handled at key junctions. MOVED FROM STAKEHOLDER RISK REGISTER. SUMMARY RISK – TO BE SPLIT TO DETAIL LEVEL.	Sacrifices being made to ensure agreement is concluded.		Final alignments in place [CEC DISAGREES WITH FINAL ALIGNMENT] [TREATMENT STATUS RED AS ACTION BEHIND PROGRAMME TO ACHIEVE TARGET END DATE.]			End Dec 06	

Edinburgh TRAM Project Appendix D - Opportunities

	Opportunity	Status				
1	Relocation of Depot to Leith	On hold pending realisation of saving on Gogar depot excavation depth				
2	Bespoke to off shelf tram-stop shelters in locations that are not aesthetically critical	Potential for cost saving to be assessed				
3	Use of ballasted track where possible	Not being pursued further (currently ballasted track where line runs through open countryside on the Airport leg)				
4	Omission of Ocean Terminal To Newhaven Section	Not being pursued further				
5	Alternative depot solution at Gogar to reduce depth of excavation	This is being implemented and is taken into account in the Project Estimate				
6	Delay procurement of the 6 additional tram sets to deliver 8/16 service pattern to 2014	This is not being pursued further at this stage				
7	Deliver Network Rail Immunisation works concurrent with Network Rail Bathgate project	Being progressed				
8	Steel Bridge for Edinburgh Park viaduct	Benefit being progressed				

Cummulative Approved Budget
Cummulative Current Forecast Value to expend Budget

igu	res in £000s	Approved Budget	C	umulative Ap	proved Budge	t vs Forecast		
		Apr 06 - Mar 07	Spend/Bud to date (Nov)	Dec-06	Jan-07	Feb-07	Mar-07	07/08
MPL	_EMENTATION			į			Î	
	tie RESOURCES	5,706	3,763	4,241	4,698	5,155	5,706	
2	DPOF	389	3,768	4,246	4,703	5,160	5,711	
		6,090	268	298	328	358	389	
3	LEGALS	2,634	1,637 1,619	1,884] 1,866	2,160 2,142	2,416 2,398	2,634 2,616	
4	SDS	13,002	8,702 8,702	9,552 9,552	10,402 10,402	11,702 11,702	13,002 13,002	
5	JRC	902	604 604	634; 6341	672 672	702 702	902 902	
6	TSS	4,296	2,666	3,066	3,476	3,886	4,296	
			2,671	3,071	3,471	3,881	4,296	
7	UTILITIES		2,01.1	5,071	Special Control of the Control of th	_u,001	3,230	
8	DESIGN SUPPORT							
9	3RD PARTY NEGOT	280	158 118	209 169	232 232	255 260	280 280	
10	LAND & PROP	10,713	17 17	22 22	27 27	32 32	10,713 10,713	
11	TROS							
12	COMMS / MKTG	638	485 487	523 525	566 568	609 610	638 640	
13	TEL	620	420 420	470 470	520 520	570 570	620 620	
14	SERV INTEG PLANNING	58	58 58	58 58	58 58	58 58	58 58	
15	PUK	80	56 56	62 62	68 68	74 74	80 80	
16	FINANCIAL ADVISORS	38	38	38	38	38	38	
17	INSURANCE	1,024	38	38 35	1,018	1,021	38 1,024	
	CONSTRUCTION	(andes	37	43	995	1,001	1,007	
10	Utilities Incl MUDFA	3,235	1,065	1,260	1,550	1,850	3,235	
			1,165	1,684	1,840	1,938	3,463	
19	Infraco	282	0	21	41	262	282	
20			0	21	41	62	82	
	OTHER	145	105	115	125	135	145	
	CIFIED CONTINGENCY		105	1151	125	135	145	
				į			į	
	GET TOTAL	44,041	20,072	22,487	25,977	29,120	44,041	
CUR	RENT FORECAST		20,1321	22,873	26,229	28,978	44,041	

Value of Work Done (VOWD) in current Month			AFC - Current Financial Year Position to March 2007			
Previous	Variance (current minus previous)	Comment	Previous	Variance (current minus previous)	Comment	
3,763	5		5,706	5		
Personal			275900			
268	5		389			
1,637	(18)		2,634	(18)		
8,702	G		13,002			
604			902			
2,666	5		4,296			
158	(40)		280			
17	7		6,892	3,821	Increased to reflect land take per Nov. funding for 1a (cash items)	
485	1		638	2		
420	5		620			
58	S		58			
56			80			
38			38			
32	5		908	100	Increased to reflect DFBC construction cost estimate finalisation.	
		Label and the stands (AMIC) December 1				
1,065	101	Latest evaluation of Mudfa (AMIS) Pre construction costs to Dec 06 £750k (delivery dependent) and SGN advance payment for long lead items increased by £205k to £805k	3,235	228	Review of Mudfa/Utilitiy forecast undertaken Refer Infraco comment below.	
					Advance work item incorrectly labelled Infraco - moved to Mudfa/Utilities.	
			200	(118)	Badgers relocation added.	
105			145			
20,072	60		40,022	4,019		
			-			

CHANGE REQUEST





2										
Project:		Edinburgh Tram								
Date:		22 nd November 2006 Issue: 2								
Change Re	quest Number:	CRB016								
Change Re	equest Title:	Ingliston Park & Ride I	Phase 2 – Tem	porary Ca	ar Parking					
Originator		CEC								
Change Sp	onsor - TP Board	Neil Renilson								
Change Ty	pe:									
1. Scope Cl	hange: Inci	rease: ☑	Decrease:]	Transf	fer: 🔲				
2. Identified	Risk:									
3. Unforese	en Event:	☑								
4. Efficiency	y Change: Inci	rease:	Decrease:]						
Change No	otice Description:									
		g for the extension of l construction in 2007/8 a			PR2). Fundi	ng for this				
it is desirat anticipated will be con	However, due to faster than predicted increase in patronage of Phase 1 of Ingliston Park and Ride site it is desirable to provide temporary parking on land in advance of the main extension to cater for an anticipated demand for additional parking during the utility diversion works starting during 2007. This will be constructed on land set aside by agreement for the EARL project until such time as EAR requires the land to be reinstated and transferred and the land is already in the ownership of CEC.									
Scope										
Strip topsoi	l 600mm and replace	with compacted suitable	e material e.g.	Type 1						
Temporary	Lighting to be consid	ered dependent on Cos	t							
	site to ensure that t	lesigned in conjunction here is no conflict with the n conjunction with Phas	ne wider Tram	Project.	ition for phas	se 2 of the				
	Cost: Approximately £300,000.									
Expected Project	120m x120m x£21.00 = £302,400									
Impact	CEC have advised that this is to be added to MUDFA costs									
	HSQE, Design, C.	APEX, Risk, Function	ate here all other impacts estimated to affect the project such as: PEX, Risk, Functional, Operational, Maintenance, Organisational, nsents and Approvals, etc.							
	ect Board Authorisa and function below)	tion	Date:							
			Signature:							
		64.		1						
	Tram Project Recei	pτ	Date:							

CHANGE REQUEST





	Signature:	
Edinburgh Tram Project Change Owner Lindsay Murphy		

LETTER FROM TIE EXECUTIVE CHAIRMAN TO CEC CHIEF EXECUTIVE

11 December 2006

Dear Tom

EDINBURGH TRAM NETWORK

As you are aware, the Tram Business Case has now been formally reviewed by the Tram Project Board and by the TEL Board under the project's established governance arrangements. tie has played a prominent role in the compilation of the business case, and the Board also has specific responsibility to review and approve funding requests for the project. The business case constitutes such a request in relation to the period from 1 April 2007 onwards. Tie has further formal involvement as the prospective contracting party for the construction and vehicle contracts. These responsibilities require that the tie Board independently reviews the Tram Business Case and reports its conclusions to you.

The tie Board has monitored the development of the business case and has now had sight of the final draft of the business case and all supporting documentation. We have also seen the letter from David Mackay, Chairman of TEL, dated 11 December 2006, which sets out the TEL Board's very positive recommendation to the Council that Phase 1 of the project should proceed. I am delighted to report that the tie Board today unanimously endorsed the recommendation from the TEL Board.

The compelling arguments in favour of the project are fully set out in David's letter and in the business case itself. I would like to highlight two points in particular in this letter.

Firstly, the preparation of the business case has involved a lengthy and rigorous process. The business case sets out the benefits which will flow from the scheme and also the risks which require to be managed to ensure its success. The TEL Board recommendation is for a phased and controlled approach to contractual commitment and construction which we believe is in keeping with a prudent management approach to the project.

Secondly, tie is tasked with actual delivery of the project through design, procurement, construction and commissioning. Our Board have taken care to assess the deliverability of the project, as defined in the business case as to scope, cost and programme. We believe the assumptions contained in the business case are robust and that the project can be delivered on time and budget.

The tie Board looks forward to hearing of the Council's support for the project following the meeting on 21 December.

Willie Gallagher Executive Chairman, tie Limited

DRAFT LETTER FROM CHIEF EXECUTIVE TRANSPORT SCOTLAND TO CHIEF EXECUTIVE CITY OF EDINBURGH COUNCIL

Dear Tom

EDINBURGH TRAM NETWORK - BUSINESS CASE

CONDITIONAL FUNDING PROPOSAL

Background and status of letter

You have requested a letter of intent from Transport Scotland which sets out the funding support available to the project and the principal conditionality which attaches to that funding proposal, as part of the framework for the business case which will be placed before the Council on 21 December 2006.

As you will appreciate, this letter does not formally commit Transport Scotland or Scottish Ministers to any course of action nor to any specific level of funding for the project. The business case will be reviewed by Scottish Ministers in the early New Year and this letter will not fetter in any way the judgement which Scottish Ministers will bring to bear on the content of the business case.

I have taken account of the content of your letter of even date, a final draft of which I have seen and which addresses the same issues. It is clearly important that the Council and Transport Scotland have a good mutual understanding of the best means to fund and execute the project and I believe that our dialogue over recent months has enabled our organisations to reach that mutual understanding.

Scope of the tram network

Transport Scotland recognises the importance of the project to the delivery of critical economic and social policy objectives which will benefit the City of Edinburgh and Scotland as a whole over the medium and long term.

We understand that the Council's objective is to construct a tram network which includes the core Airport / Leith line and which will also support the regeneration of the North West Waterfront area ("the Granton waterfront"). We have seen and are considering further the Council's proposed approach to delivering the project which phases construction such that the Airport / Leith tram line will commence prior to the Roseburn / Granton tram line. We acknowledge the sense of this approach which enables construction of the core line to proceed whilst retaining discretion over the aggregate capital cost entailed by the addition of the Roseburn / Granton line.

Project funding

The Council's financial commitment discussed with Transport Scotland is £45m, which was approved by the full Council earlier this year. We welcome the Council's proposal to examine the means of providing further support to meeting capital costs on certain conditions.

The current estimated capital cost of the full network is £592m and the Council recognises that there are a number of critical variables which will require to be determined before the final aggregate funding requirement is clear. These include, but are not restricted to:

Receipt of acceptable final estimated costs including the negotiated outcome from the tender process for vehicles and infrastructure

Satisfaction that the property development community's contribution to the project's funding is commensurate with the benefits they will enjoy from the substantial public investment

In addition, we understand that the Council will assess carefully the anticipated pace of development at Granton to ensure that the risk of sustained operating losses is properly mitigated. We endorse the importance attached to this assessment.

Transport Scotland's current position

At this stage of the project's development, Transport Scotland can confirm its previously stated conditional commitment to project funding of £375m in 2003 price terms. The intention is that this grant will be indexed to allow for construction industry inflation and we anticipate that this sum, taken together with the Council's own contribution of £45m, will aggregate £545m and will be adequate to enable commitment to the construction of the core Airport / Leith tram line. It should be emphasised that this is not a binding commitment by Transport Scotland and any actual commitment will depend on the terms of a final business case to be prepared in support of the commitment to the contracts for construction of the infrastructure and delivery of tram vehicles, anticipated to be in late 2007.

We regard as critical that the contracts to deliver the tram network are structured such that the Council and Transport Scotland retain full control over the decision to proceed with the tram vehicle and infrastructure contracts relating to the Roseburn to Granton tram line. We also understand that the construction programme will be phased to achieve greater certainty of outturn capital costs before committing to the construction of the Granton line.

Any further financial contribution from Transport Scotland will be assessed strictly on the basis of value for money in the context of the final business case. At this stage it is not possible for Transport Scotland or Scottish Ministers to provide any specific guidance about additional capital funding which may be forthcoming. However, Transport Scotland recognises the strength of the Council's intent with respect to the Granton waterfront area. Accordingly, we encourage the Council to set out the financial requirements of the full network and to demonstrate their value for money in the final business case. Based on this, Scottish Ministers will be in a position to decide upon the final level of funding support for the project including the funding that may be required to complete the Roseburn to Granton tram line.

Malcolm Reed Chief Executive, Transport Scotland

DRAFT LETTER FROM CHIEF EXECUTIVE OF CITY OF EDINBURGH COUNCIL, TO CHAIRMAN OF TEL

Dear David

EDINBURGH TRAM NETWORK - BUSINESS CASE

CONDITIONAL FUNDING PROPOSAL

Background and status of letter

I am writing in connection with the tram project business case which will be placed before the Council on 21 December 2006.

You requested the Council to update its previously stated position on funding now that the updated business case is complete. As you will appreciate, this letter does not formally commit the Council to any course of action nor to any specific level of funding for the project. This letter must also be read in conjunction with the letter from Transport Scotland of even date which addresses the same issues. I also refer to the report to the Council from the Director of City Development which sets out comprehensively the Council's rationale for supporting the tram project.

Scope of the tram network

The conclusions in the business case firmly reinforce the rationale for a project which the Council has been driving for more than six years. The business case provides the financial, economic and social policy justification for the project and sets out the benefits to the City of Edinburgh and to Scotland as a whole over the medium and long term.

We believe that the regeneration of the North West Waterfront area ("the Granton waterfront") is a vital element of the City's economic future. Regeneration would also progress materially the Council's social policy objectives for a relatively deprived and strategically important area.

The Council's financial commitment discussed with Transport Scotland is £45m, which was approved by the full Council earlier this year. When added to our understanding of the contribution from Transport Scotland, the package comfortably accommodates the cost of delivering the Airport - Leith core section of the network. My report to the Council recommends that this section of the network be commenced as soon as is prudent and practical.

There is little doubt that the introduction of the Granton tram line would accelerate development and indeed we see the regeneration work and the enhancement of transport links as integrated processes. Equally we recognise that financial prudence must be applied to the decisions needed for the line to proceed. The addition of this line takes the total estimated capital cost to £592m.

Project funding

The Council is keen to support the construction of the full Airport – Leith – Granton network including the Granton tram line and will examine the means of providing further support to meeting capital costs, should that prove necessary and assuming also that there is a commitment from Transport Scotland to provide the support needed to reach the aggregate funding requirement. The letter from Transport Scotland sets out their proposed approach to the project's funding and contains similar critical conditions to those set out here.

In assessing an enhanced funding package, both the Council and Transport Scotland will retain full control over the decision to proceed with the tram vehicle and infrastructure contracts. In addition, the construction programme will be phased to achieve greater certainty of outturn capital costs before committing to the construction of the Granton line. We would expect that any such increased financial commitment will be placed before the full Council in late 2007 within a final business case for the project and that the decision at that time will be conditional upon inter alia:

- Receipt of acceptable final estimated costs including the negotiated outcome from the tender process for vehicles and infrastructure
- Satisfaction that the property development community's contribution to the project's funding is commensurate with the benefits they will enjoy from the substantial public investment
- Satisfaction that the anticipated pace of development at Granton is adequate to avoid sustained operating losses

Although this conditional funding proposal does not formally commit either the Council or Transport Scotland to construction of the full network I believe it should provide the TEL Board with a clear statement of the Council's intentions with regard to construction. There is much work to do between now and final contractual commitment, but the contractual and funding approach we are adopting is a rational and risk-controlled approach to maintaining momentum behind a project which is of vital importance to the City of Edinburgh and to Scotland as a whole.

Tom Aitchison
Chief Executive, City of Edinburgh Council

Cc Mr Malcolm Reed, Transport Scotland

EDINBURGH TRAM NETWORK - DRAFT FINAL BUSINESS CASE TEL BOARD RECOMMENDATION TO CITY OF EDINBURGH COUNCIL

DRAFT 5 December 2006

FOR DISCUSSION PURPOSES ONLY

INTRODUCTION AND BACKGROUND

The information presented in the business case represents the culmination of considerable effort by many parties over a long period to assess the merits of a tram system for Edinburgh. The Tram Project Board (TPB) comprises representatives of the key stakeholders in the project and was given the challenge by TEL of ensuring that a fair presentation is made in the Business Case of all the key criteria. The information on which the Business Case is based represents the best estimation available of all the key variables. We believe it is fit for the purpose of concluding on the future of the project.

In this recommendation letter, references to the "Business Case" relate to the set of inter-locking documents comprising the Tram Business Case and its appendices, notably the TEL Business Plan and the STAG Report. The content and purpose of these documents are described in the body of this letter.

The tram line configurations under assessment are described as :

Phase 1: The Airport / Leith / Granton tram network

Phase 1a: The Airport / Leith tram line
Phase 1b: The Roseburn / Granton tram line

The next section of this letter sets out our recommendations along with a brief summary of the key supporting reasons. We then provide more detail on our rationale and describe some of the key parameters, which themselves are more fully explained in the Business Case itself.

RECOMMENDATION

The TEL Board has concluded that there is a strong case in favour of proceeding with the Airport / Leith / Granton tram network to achieve the maximum benefit from the substantial investment involved. The Board also recognizes that a complex project such as this requires careful risk management, particularly to ensure that value for money is achieved and that costs are properly managed.

Accordingly our principal recommendations are as follows:

- 1) That the Council should approve the Business Case and proceed, in partnership with Transport Scotland, to work towards the delivery of the Airport / Leith / Granton tram network in a phased manner with work on Phase 1a Airport / Leith commencing first.
- 2) That the Council should ensure that the following actions are taken to maintain control over the capital cost of the project:
 - A. That the enabling works, including utility diversions should be authorized to proceed according to a timetable which will not disrupt the construction programme for the network itself
 - B. That the negotiations with the bidders for the infrastructure and vehicles should continue with a focus on achieving a high proportion of fixed cost in the final contracted capital cost so far as the public sector is concerned
 - C. That the Council should continue to work with property developers across the tram network to ensure that an equitable contribution to tram costs is received from those developers where the tram contributes to the value of development
- 3) That the Council should reinforce its efforts to catalyse the regeneration of the Granton waterfront area, with the tram project fully incorporated as a primary feature of a holistic land use, transport and economic regeneration project. By doing so, and by connecting the area by means of a tram line, the Council will ensure this relatively deprived and strategically important area of the city is given the best chance of economic improvement.
- 4) That the Council requires the contractual right to defer the construction of the Roseburn / Granton tram line, or to restrict construction to the Airport / Leith line, in the event that capital costs (net of additional developer contributions) do not ultimately fall within an acceptable affordability envelope.
- 5) That the Council should not commit to construction of Phase 1b until such time as there is confidence that the level of development at Granton Waterfront will reach that required to generate sufficient patronage for the Roseburn-Granton line to mitigate the risk of sustained operating losses.
- 6) That Council approval of the Business Case includes a condition that contractual commitment in due course will be conditional upon there being no significant adverse changes to the key criteria on which the Business Case is based.

The TEL Board believes that by following these six recommendations, the Council and Transport Scotland can reach an affordable contractual conclusion which will lead to the construction of the most desirable network of Airport / Leith / Granton.

Our Recommendation 3 is designed to enable the Council's overall vision for this first phase of the tram network to be achieved. Experience dictates prudence in the commitment to major capital projects, but there are a number of reasons why a strong commitment now to the full Airport / Leith / Granton network makes sense.

Firstly, we must recognize that delay has a direct and substantial effect on cost. A stop-start approach to construction will generate potentially significant additional costs.

In addition, there is ample evidence that the creation of high quality transport infrastructure drives economic development. We believe that the regeneration of the North West Waterfront area ("the Granton waterfront") is a vital element of the City's economic future. Regeneration would also progress materially the Council's social policy objectives for a relatively deprived area and there is a need to support the substantial investment in life-long learning capability represented by the new Telford College, which has a student population already approaching 20,000.

The emergence of a tram network across the whole city connecting the key employment, residential, retail and leisure locations can only add to the acceptance by our citizens of this new mode of travel and consequently accelerate patronage growth and mode shift from cars.

Renewed emphasis on the drivers of development at Granton including the tram system, coupled with actual progress to time and budget on the Airport / Leith tram line, will we believe create the conditions for commitment to funding and construction of the Roseburn / Granton line under the terms of a single contract.

With respect to Recommendations 4 and 5, our proposed approach is designed to ensure that control is retained over the ultimate capital cost while still delivering a transformation in the city's transport infrastructure through the construction of the Airport / Leith tram line which represents the spine of the network. The early commitment to construction of the Airport / Leith line alone in the first phase, while not in our view the optimum ultimate outcome, is considered to be a feasible and prudent approach in view of the fact that a large majority of the projected patronage on the Roseburn / Granton line is dependent upon the development of the Granton Waterfront. It will also deliver many of the strategic aspirations of the tram project, will be a powerful economic driver for the city and will be financially viable. An additional feature of this phased approach should be the earlier delivery of the Airport / Leith tram line than would be the case if the full Phase 1 network is delivered in one package.

In making these recommendations, we are mindful of the need to apply "reality checks" to the project, its aspirations and its costs. We have had the opportunity to meet with people involved in similar schemes elsewhere in the UK and in continental Europe. We have noted that the Edinburgh project reflects some of the best features of the most successful of those schemes. The rationale for a tram scheme has been tested and assessed many times in recent years and remains valid. Fundamentally, Edinburgh is a growing city which brings demand for transport infrastructure if it is to prosper and bring benefit to its citizens and to the country as a whole.

The TEL Board unanimously believes that "standing still" is not a credible option, that the proposed scheme will deliver sustainable long term transport and environmental benefits and that there is therefore every reason to proceed, but to do so in a risk-controlled and responsible manner as described in our recommendations above.

One further point should be noted.

Many people will be aware that plans have previously been developed for a tram line linking the city centre tram network to the developments in the South East of the city, including the University of Edinburgh, the New Edinburgh Royal Infirmary, the biomedical research park, the area of regeneration at Craigmillar, the retail and transport interchange facilities at Newcraighall and ultimately the new Queen Margaret College campus. We would recommend that the Council takes steps to prepare for the possible extention of the system to South East Edinburgh for the following reasons:

- 1. The work done previously on this tram line indicated a high likelihood of economic and financial viability.
- Evidence from other cities, most recently Nottingham and Dublin, has consistently been that the successful introduction of a tram system is rapidly followed by plans for extention.
- 3. There are long lead times involved in such projects

In this context, the tram line linking Granton to Leith and the extension to Newbridge should also be assessed.

The TEL Board has ensured that all the key players have been involved in the preparation of the Business Case. This includes Council officials from the Departments of City Development and Finance, Transport Scotland officials and their advisors, Lothian Buses plc, Transdev (the proposed operator of the tram network), expert advisors and tie Limited who have the task of developing and delivering the project to cost and programme specification.

So far as the Board of TEL is aware, all of these parties are supportive of the recommendations in this letter.

MORE DETAIL ON OUR RATIONALE

In assessing the economic, social and financial aspects of the project the methodology adopted has reflected:

- formal transport appraisal requirements established by the Scottish Executive
- the preparation of a completely new transport demand model reflecting the most up to date picture of Edinburgh's transport patterns
- > rigorous financial modelling of the revenue and cost implications of the transport demand patterns established and verified in the model
- a completely refreshed view of capital costs reflecting market tender activity, benchmarked comparator tram schemes and expert advice on critical features

The specific features of the Business Case which we believe are most significant are set out below.

Transport appraisal guidelines and economic assessment

A key element of this appraisal is the calculation of the economic benefit to cost ratio. The Phase 1 network produces a strong result at 1.63, indicating that every £1 of cost will produce £1.63 of benefit, a level which we understand is considerably higher than that generated by other comparable schemes. The net benefit is primarily driven by benefits to the users of public transport. In financial terms the aggregate value in today's prices of the net benefits driven by the Phase 1 network is £273m.

The Airport / Leith tram line creates the spine of a tram scheme through the city centre area that can be extended on an incremental cost basis and therefore bears a heavier burden of fixed costs. Despite this cost weighting, the Airport / Leith tram line produces a positive benefit to cost ratio in its own right of 1.10. This is lower than that of the full network because of the Roseburn / Granton tram line's relatively faster tram run-times, less congested road environment and the lower capital cost arising from economies of scale and relatively more off-road running.

The appraisal also encompasses:

- environment
- safety and reliability
- social inclusion and accessibility
- > the integration of transport and land use

The main transport appraisal measures have been assessed extensively in the last few years, not least in support of the Acts of Parliament passed in April 2006. The earlier conclusions were that the project met and exceeded the requirements of the appraisal and the recent work has reinforced those positive conclusions.

In addition, when fully operational, the Airport / Leith / Granton network is projected to carry some 20 million passengers annually, a mixture of transfers from buses (circa 83%) and cars and new trips (circa 17%). The number rises to more than 30 million within 20 years, representing a substantial shift from car and bus use with positive implications for congestion control and the environment.

The work on these various critical features has been extensive and has been performed over a lengthy period. It is instructive that the conclusions have been broadly consistent over that period and this provides a strong degree of comfort as to their validity. Equally critical, however, are the financial constraints rightly imposed by the Promoter and Ministers.

Capital costs and affordability

Tenders are awaited on the "Infraco" infrastructure construction contract and tender returns are under assessment for the vehicle supply contract. This is a complex process and best value for the public sector will be achieved only with diligence and professional negotiation during the period to contractual commitment which is expected to be in October 2007.

The Business Case cannot disclose detailed internal cost estimates for reasons of commercial confidentiality, but our assessment is that those internal estimates have been performed with rigour, incorporate those tender returns and other known market costs available have been assessed by peer professionals and have been analysed and reviewed by representatives of the principal funding stakeholders. The TEL Board is satisfied that they have been properly and prudently compiled and contain a rigorously developed level of risk contingency and therefore provide a robust basis for concluding on the Business Case.

The aggregate funding and costs of the project will provide the financial framework for a decision on next steps. The funding available for the project has previously been discussed between the Council and Transport Scotland. The Council are committed to providing £45m toward the gross capital cost and Transport Scotland will provide a grant of £375m indexed to reflect an appropriate measure of inflation. This has previously been estimated at up to £500m providing a benchmark for affordability of up to £545m. Negotiations continue with property developers on contributions to the project based on the uplift in development value which arises when high quality transport infrastructure is provided

The current capital cost estimate for the Airport / Leith / Granton network is £592m, including a sum of £92m for the incremental cost of delivering the Roseburn / Granton tram line. The work scrutinised by the TEL Board and the information and statements of intent it has received from the Council and Transport Scotland provide us with reasonable confidence that appropriate contingency has been reflected and that these principal funders will assess constructively a case brought to them in the future for additional funding to support Phase 1b. The variables include the finalisation of negotiated tender prices, the extent of developer contributions and the extent to which the benchmark affordability measure of £545m may be extended by the Council and Transport Scotland, on evidence that value for money continues to be demonstrated. These factors cannot be determined in the short term but will be determined prior to contractual commitment.

The estimates confirm that the capital cost of the Airport / Leith line is comfortably within the benchmark affordability measure. Accordingly, there is considerably more confidence at this stage in the affordability of this line but it should not be presumed that construction will proceed until such time as an acceptable contractual position has been reached with a preferred bidder. However, assuming acceptable contract terms can be reached, this is the spine of the Edinburgh Tram Network and should be commenced as soon as possible. The contractual structure we propose, with the Roseburn / Granton line reserved to the Council's discretion, enables the Airport / Leith tram line to proceed early. The Granton line can then follow if the Council and Transport Scotland are satisfied on the issues of affordability and the financial viability of the extension to Granton.

In the TEL Board's view, the willingness of developers to contribute to the tram cost is a key confidence-building feature in justifying construction of the tram to the major development areas in the city. This feature must be given due attention in making a final decision to proceed to contractual commitment and the logic applies to all phases of the tram network.

Financial viability - operational cash flow

Edinburgh has an opportunity, virtually unique in the UK, to achieve effective service integration between its Council-owned bus company and the tram operations. The Business Case sets out how this will be achieved and also demonstrates the operational cash flow characteristics of the integrated bus and tram system.

It should be recalled that the modelling requires estimation of economic activity, property development, demographics and transport demand patterns which commence in some 5 years' time and run through a period of 30 years. The resulting projections can only ever be regarded as that – projections – and there can be no guarantee of their delivery. That feature however is common to any major capital infrastructure project and cannot of itself be a barrier to progress.

To provide as reliable a basis for the projections as possible, a completely new and highly sophisticated transport model has been built to reflect the specifics of Edinburgh's projected transport demand. The work was carried out by independent experts, messrs Steer Davies Gleave, who are recognised as experts in this field and who have reported comprehensively on their work and their conclusions. As with the capital cost estimates, extensive and rigorous consultation has taken place with officials of the primary funding stakeholders. Officials of Lothian Buses, Edinburgh's award-winning Council-owned bus operator, and Transdev have worked together to provide essential input to the integrated bus and tram service pattern. Transdev operate and maintain many tram systems worldwide and are advising us under a contract which should lead in due course to their appointment as tram operators. We believe that their insights further underpin the credibility of the business case.

Economic development assumptions are a critical influence on the model's output. The growth assumptions in the transport model are consistent with the Council's existing development models.

The projections incorporate the patronage and revenue estimates from the transport modelling and the operational and maintenance costs of bus and tram operations. The overall profile is that the operational cash flows will be positive once the tram and bus service patterns have settled down after a normal "ramp-up" period of around 3 years and in later years significant surpluses can be demonstrated. On this basis the TEL Board believes that subject to the projected levels of development taking place as planned the requirement to demonstrate that, over time, the integrated service will not require subsidy has been fulfilled.

There are two other key features affecting operational viability.

Property of the tram project was related to the regeneration of the North West and North East of the city. The Roseburn / Granton tram line attracts relatively lower patronage than more heavily populated areas of the City such as Leith Walk. However, it is an objective of the tram project that it will reinforce the regeneration of North West Edinburgh and help fulfil specific social policy aspirations such as accessibility of relatively poorer areas to areas where employment prospects are brighter. The modelled results reflect this backdrop with substantial dependence on the scope and pace of development. This represents a significant risk to financial viability with 32% of total revenues dependent on planned development occurring at the time and to the extent projected. Although the underlying economic development plans are now reasonably well-advanced and the creation of the tram network should in itself reinforce the pace of development, this risk factor cannot be ignored and is another influence in recommending the phased approach to construction.

The ramp-up period brings particular challenges as travellers adapt to new patterns of public transport provision. This is a common feature of any new tram system and the evidence from many other cities is that patterns stabilise some 2-3 years after introduction. Cash flow is invariably negative in this early period, but the Board believe that limited borrowing facilities will support this period, to be repaid from subsequent positive cash flows. The projections take account of the interest costs incurred. Longer term dividend planning will be necessary to take account of this ramp-up period.

CONCLUSION

The TEL Board was given the responsibility of overseeing the work required to produce a Business Case and supporting documents which describe the facts, judgements and forecasts relating to the proposed Airport / Leith / Granton tram network and to make recommendations to the City of Edinburgh Council on the appropriate way forward.

Taking all of the relevant factors into account, the TEL Board recommends approval by the Council of the Business Case for the Airport / Leith / Granton tram network. We also recommend that the Council and Scottish Ministers, should they accept the Board's recommendation to approve the Business Case, incorporate in their approval some key conditions which will assist their agents to retain control over costs and funding and ensure that value for money is manifested in the final contractual documentation.

This phased approach will serve to minimise risk and ensure appropriate pressure is maintained on contractor's prices and developer's contributions in the run up to the point of contractual commitment. This will serve to maximise the opportunity to develop the full Phase 1 network on an affordable basis and could result in an earlier delivery of the Airport/Leith tram line.

We believe this approach is a responsible, risk controlled approach but one which promotes efficient execution of a high-quality improvement to the transport infrastructure of Edinburgh, with substantial economic and social benefit to the City and to the Scottish economy.

We would also emphasise that efficient execution of the project from this stage depends on allowing the scheme Promoter and its agents to move matters forward without undue interference, all the while remaining within the conditionality agreed at this stage. Any other approach will inevitably lead to delay and increasing cost.

DAVID MACKAY CHAIRMAN NEIL RENILSON CHIEF EXECUTIVE

TRANSPORT EDINBURGH LIMITED On behalf of the Board of Directors 11 December 2006