

Agenda

Design, Procurement and Delivery Sub-Committee

Boardroom

16 January 2006 – 10am to 12pm

Attendees:

Willie Gallagher (DPD Chair)
Damian Sharp
Duncan Fraser
Neil Renilson
Matthew Crosse
Bill Campbell
Graeme Bissett
Stewart McGarrity

Alastair Richards
Geoff Gilbert
Susan Clark
Trudi Craggs
Jim Harries
James Papps
Miriam Thorne
Mark Bourke (Secretary)

Agenda Items

1. Actions from Previous Meeting
2. Project Director's Monthly Progress Report for December *
 - Safety report - *Appendix A*
 - Programme and Progress – *Appendix B*
 - Key issues and concerns
 - Financial and Change Control - *Progress Report*
 - Updated Change Control Paper *
 - Risk and Opportunities Overview – Primary Risk Register (*see Separate Report*)*
3. Design (SDS)
 - c) Traffic Management - Update on Progress *
4. Preparation for Infraco & Tramco
 - a) Advance Infraco and Tramco works *
 - b) MUDFA sequencing Paper*
6. Matters for Tram Project Board
7. Network Rail Support Paper*
8. AOB

Next Meeting: Mini January DPD: 19 January 2007 – 3:30 – 4:30pm

*Papers Attached



**tie Limited
DPD Sub-committee
December Report
Papers for Meeting
16th January 2007**

10:00am – 12:00pm

Distribution:-

Willie Gallagher (Chair)
Damian Sharp
Matthew Crosse
Neil Renilson
Stewart McGarrity
Bill Campbell
Graeme Bissett
Geoff Gilbert
Steven Bell

Alastair Richards
Jim Harries
James Papps
Mark Bourke (Secretary)
Duncan Fraser
Susan Clark
Trudi Craggs
Miriam Thorne



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tie Limited
Edinburgh Tram Network

Minutes

Design, Procurement and Delivery Sub-Committee

14 December 2006

tie offices - Verity House, Boardroom

Directors Present:	In Attendance:
Willie Gallagher (DPD Chair) - WG Bill Campbell – BC	Graeme Bissett –GB Steven Bell – SB Lesley McCourt – LM (partial) Keith Rimmer - KR Duncan Fraser – DF Andie Harper – AH Geoff Gilbert - GG Alastair Richards - AR Trudi Craggs – TC (partial) Susan Clark – SC (partial) Carl Williams - CW James Papps – JP Miriam Thorne - MT Mark Bourke – MB

Apologies: Damian Sharp and Neil Renilson

Agenda items:

1	ACTIONS FROM PREVIOUS MEETING	Action
1.1	The actions of the previous meeting were reviewed and outstanding actions discussed. Outstanding actions are noted below.	
1.2	AH noted that a grant letter was now not anticipated from TS until early next year.	DS
1.3	GG to finalise alignment review of SDS/TSS contracts and report to next DPD.	GG
1.4	GG to obtain written confirmation that Amec had withdrawn from the Infraco bid.	GG
1.5	TC to provide fuller briefing to TS on necessary legislative amendments in relation to greenways and TROs.	TC
1.6	Meet and discuss land issues at Sighthill in relation to ease planned gas main diversions.	SC/DF
2	PROJECT DIRECTOR'S MONTHLY PROGRESS REPORT	

2.1	The progress paper was taken as read and not discussed in detail. JP requested clarification of phasing, OCIP evaluation and DPOFA re-negotiation. GG confirmed that the Infraco bidders had been informed and that currently in progress of informing Tramco bidders. MB outlined the evaluation methodology for prequalification submissions. MB to document proposed evaluation methodology for tender returns. SB to review governance arrangements to ensure sign-off key documents. AR advised that meetings are progressing well with lawyers.	MB SB
3	PROJECT DEVELOPMENT AND APPROVALS	
3.1	Traffic Management Update	
3.1.1	TC outlined the paper and recent QC advice regarding the need for TROs to be in place prior to commencement of works. AH summarised the decision of reasonableness when considering the risk in proceeding. TC emphasised need to have CEC Legal supportive of this. DF observed that the programme was very ambitious and based on single pass success. WG requested a fall back plan to be developed. TC to seek confirmation of legal position and discuss with CEC Legal.	TC
3.1.2	TC noted that now have SDS design for TTROs affecting MUDFA works and that this was currently under review by AMIS.	
3.1.3	WG requested a short paper on the current AMIS issues.	SC
3.1.4	BC confirmed that TEL were generally happy with proposals but that there was a need to review TTRO arrangements to consider practical amendment of Lothian Bus operations e.g. South St. David Street.	
3.2	SDS Update	
3.2.1	AH noted concern of recent lack of senior level representation from SDS. AH remarked that there had been some senior level changes at SDS. AH highlighted that tie were currently withholding significant amounts of payment from SDS. AH/WG to meet and discuss SDS performance early next week.	AH/WG
3.2.2	WG requested review of the adequacy of internal expertise in current tie personnel to manage SDS deliverables. SC to review.	SC
3.2.3	AR highlighted that there was need to additionally update the employer's requirements when updating the specifications. GG to review.	GG
3.3	CEC Resource	
3.3.1	DF tabled a paper that outlined the additional and backfilling resource implications of the tram in 2007. DF highlighted the need for new staff including Planning, Transport, Property/Legal, Communications and Admin Support. DF noted that this would be less in following years.	
3.3.2	DF noted that one assumption is that no correspondence will come from CEC. SW to check.	SW
3.3.3	WG requested that the paper be brought to the next Project Board as a change control. GB highlighted that this was an omission from next year's budget.	DF/GG
3.3.4	GB requested clarification of the activities around raising developer contributions including Forth Ports.	DF
3.4	Network Rail Issues	
3.4.1	TC presented a paper outlining options for the delivery of NR	

	immunisation and associated works that included TS delivery. JP/SB noted that the preferred option would be one where tie retain responsibility for delivery and utilise TS leverage when necessary.	
3.4.2	AH highlighted concern regarding scope creep to current £6.5m budget e.g. immunisation works for Phase 3.	
3.4.3	TC/SB to meet with TS (Matthew Spence) to discuss update of paper for next DPD.	TC/SB
4	DELIVERY	
4.1	MUDFA Programme	
4.1.1	SC talked to the paper on programme of MUDFA works and highlighted current constraints with intention to commence at Crewe Toll. Communications protocols are being developed with AMIS.	
4.1.2	BC noted the preference for fewer changes from a disruption to operations. AH highlighted the intention to work through the implications with MUDFA and Infracore to arterial and feeder roads. BC confirmed TEL were broadly happy but that further discussion was necessary with CEC on planned and mandatory road/utility diversion works.	
4.1.3	SC highlighted the relatively short-term planning approach to road/utility maintenance works and requested that this was developed to periods greater than 3-months. DF agreed that there was a need for greater integrated planning. KR highlighted the importance of planned steel gas pipe replacement.	DF
4.1.4	SC confirmed that the number of workfaces was being refined and that the issue regarding quality of reinstatement was recognised. SC to clarify programme contingencies included in paper.	
4.1.5	WG requested a meeting be convened with Utility and MUDFA Directors to bring the focus to the scrutiny that the team will be under and bring exemplar performance.	SC
4.1.6	SC to update paper to include sign-off table for TEL, CEC and LB other operators. BC confirmed that he would take the lead in discussion with other operators. GG noted that there would be ongoing liaison with TS and CEC.	SC BC
4.1.7	GB to review the governance arrangements for MUDFA including potential options for MUDFA Board, revised DPD arrangements and assessment of needs moving forward with BPIC. This will include a meetings schedule to account for move to period reporting in FY07/08.	GB
4.2	Recruitment Plan	
4.2.1	SC introduced a paper outlining the forward resource plan requirements and intended approach for tram and highlighted reviews previously undertaken including TSS and from SB. SC noted intent to develop a recruitment statement and intention for care and thought in exit and re-deployment management.	
4.2.2	JP suggested that discussion with Dublin was held to review the resource levels and their issues for resource development.	SC
4.2.3	WG confirmed that now that the budget was set and plan prepared that the DPD sub-committee would recommend moving forward at end of March 2007 after newly appointed Project Director has time to consider	SC

	and plan updated.	
4.2.4	WG confirmed 'green light' to proceeding with key appointments.	
5	COMMERCIAL	
5.1	Revised Infraco/Tramco Process	
5.1.1	GG discussed paper outlining revised tender process and strategy to seek commitment from bidders and maximum investment prior to key decision making e.g. Tramco selection.	
5.1.2	AH noted need for protection to team following receipt of returns is essential. GG confirmed that this time would be necessary to and effort required 'equalising' bids and evaluating risks.	
5.1.3	WG observed that process may require to be further modified following receipt of bids.	
5.1.4	LM queried bidder's response to SDS novation. GG noted that this was not an issue. SB noted that there could still be issues to emerge.	
5.1.5	GG confirmed that there may be needs for extraordinary meetings to gain approvals.	
5.1.6	AH confirmed that information on returns provided to TS would not include numbers as could jeopardise the commercial position.	
5.1.7	GG noted that Phase 1B costs would be based on returned information plus consideration of rates/productivity due to prioritisation of SDS effort to Phase 1A. GG noted that SDS performance in delivery was critical.	
5.1.8	AR recommended making affordability everyone's problem as applied in other schemes to create a mind set of effort in value engineering. GG to develop Value Engineering approach with bidders.	GG
5.2	Infraco Evaluation Methodology	
5.2.1	GG introduced evaluation paper. GG to obtain approvals from TS, CEC, TEL and PUK. MB to set-up meeting for 9am Thursday 21 Dec 2006 for WG/GG to provide sign-off to overall methodology.	GG MB
5.2.2	SB recommended that experience be considered in evaluation of quality of resource to identify where teams have worked together.	
5.2.3	LM recommended meeting with consortia at their offices.	
5.2.4	GG preparing negotiation plan with review of gaps in negotiation skills. GG to consult with PUK on this.	GG
5.2.5	WG re-iterated confirmation to proceed with plans to strengthen team.	SC/GG
5.2.6	GG confirmed that there was no conflict of interest with Transdev involvement and that evaluators would be partitioned in involvement and required to sign confidentiality agreements.	
5.3	Changes in Infraco/Tramco Risk Balance	
5.3.1	GG noted that bidders were seeking Payment Indemnity from TS/CEC. GG to discuss and develop with DS/DF.	GG
5.3.2	GG noted that attention would be required to assess proposed caps in liability and dovetailing of agreements.	
5.3.3	MB to develop risk register with emerging commercial risks.	MB
5.4	Scottish Gateway 2	
5.4.1	GG confirmed that the Report from TS was yet to be provided and was unaware of any outstanding issues to address. DS to provide final Report.	DS

5.5	TS Quarterly Review	
5.5.1	AH confirmed awaiting TS minutes and actions.	
5.5.2	AH highlighted that budget was not in place for next year. SMcG to progress with DS.	SMcG/DS
5.6	Alignment of Contracts	
5.6.1	GG noted DLA Piper were heavily involved in alignment process that will address Tramco/Infraco conditions and will result in variation to SDS conditions as necessary.	
5.7	Changes	
5.7.1	GG presented changes to scheme and confirmed that all of these had been included in the £592m estimate. GG confirmed that now that the Functional Specification was defined, estimates fixed and baseline programme established that the project was in better position to measure change. AH outlined the history of drivers for changes and noted design development to be the big issue.	
5.7.2	WG requested that in future significant changes receive greater detail in the papers submitted.	GG
5.7.3	AH confirmed that there was no more to catch up with other than relatively minor changes that could be picked up delegated authority and some that require further validation.	
5.7.4	AH confirmed scope of capex investment as a result of conductors.	
5.7.5	GB requested that a close monitoring of costs expended on changes to provide assurance that agreed changes are delivered within budget.	GG
6	AOB	
6.1	WG passed on thanks and appreciation to Andie for his efforts and noted that AH would step down as Project Director at the end of the year. WG outlined intention to retain AH on a part-time basis with aim to examine increased opportunities for savings in the scheme.	
6.2	GB emphasised that there is a need that the commercial/technical review process from tender returns examines areas for savings. GG to emphasise to evaluation team.	GG
6.3	SMcG confirmed that MT would takeover reporting on the project to bring increased scrutiny and certainty to cost reporting. The exact scope of this role is currently being refined.	SMcG/GG
6.4	GB confirmed that the next Tram Board meeting is planned for the 23 rd January 2007 and that the next DPD is scheduled for the 16 th January 2007.	
6.5	GB requested clarification for the weighting being applied to assess disruption compensation to businesses. GG highlighted key areas of focus were Foot of Walk and Shandwick Place. Further discussion is planned with Scott May (SDS).	SC

Prepared by: Mark Bourke

Date: 15 December 2006



DRAFT

EDINBURGH TRAM PROJECT MONTHLY PROGRESS REPORT – DECEMBER 2006

1. Safety

- The Tram HSQE Performance Report is attached for Period 10 in appendix A. In summary from this report the following should be noted:
 - There was one minor accident in the office reported during the period. Another late reported minor accident has also been reported this period. Further details are contained in the report.
 - One audit was planned and executed. No non-conformance reports (NCR's) were raised but five observations and three comments were recorded.
 - There are no open NCR's.
 - There are no environmental issues to report.
 - The key performance indicators are contained in the report.
- The Tram HSQ and Environmental Management draft Plans have both been issued internally and are awaiting comment and approval. The planned date for approval of these plans is the 26th of January 2007.

2. Programme and Progress

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

- Tramco - Supplementary Information Release (SIR) to bidders – a series of meetings and conference call with bidders were held to outline to the reason for the SIR (SIR actual release date was the 5th of January 2007).
- 21st December 2006 - CEC full Council meeting approved DFBC.
- 22nd December 2006 – Completed Infraco Price Summary Evaluation Methodology, this being the process for extracting the information from the Infraco bids returned in January and updating our Project Estimate. This will in turn be used to update cost estimates for Phase 1 for the DFBC.

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

- 12th January 2007 – due date for Infraco bidders return of first proposals. This reflects the phased return of tender information as set out in the agreed evaluation methodology.
- 22nd January 2007 - Tram team to provide Transport Scotland with update on the costs estimates for Phase 1 reflecting any adjustments with regard to the returned Infraco tenders, if required.

2.3 Programme for delivery into revenue service

- The Master Project programme dates for delivery into revenue service remain the same. 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.

- There are a number of assumptions inherent in this programme, in particular the following:
 - The requirement to undertake certain works in advance of signing the Infraco Contract (programme for Depot commencing prior to Infraco award –see support paper on Advance Works Strategy)
 - Commencement of MUDFA works in March 2007(trial utility diversion)
 - TRO process is approved (see updated paper attached)
 - CEC will undertake eradication of invasive species on their land.
 - Land and Property – second GVD notices are issued on the 16th of February 2007.

The updated Key Milestone Schedule up to the end of March 2007 is shown in Appendix B.

2.4 Other achievements in December

- A recruitment plan to secure the resources required by the TRAM project was presented to DPD in December 2006.
- Value Engineering exercise undertaken in the third week of December 2006. This activity is now assumed into the exercise being led by Andie Harper. His objective is to deliver £50 million of savings out of the current estimate. The first two meeting in this exercise have been held and the principles of this process have been established.
- Mudfa Contractor –
 - Has delivered updated Risk management plan to tie in early November
 - Initial buildability report due on 15th December 2006.
- 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 were undertaken between 5th December 2006 and 15th December 2006.
- Infraco Contract - A number of Technical and Commercial Questions and Answers review meetings held in December 2006.
- Tramco – Detailed evaluation of tender submissions continued.
- SDS issued MUDFA TTRO schedule to tie on 4th December 2007.
- OCIP – Preliminary Qualification Questionnaire returns received 8th December 2006.
- Due diligence on JRC Transport Modelling Suite and methodology completed by TSS with no major issues noted.

- **Papers approved and actions arising from the last Board Meeting**
 - TS provided letter (dated 29th December 2006) confirming approval of increased funding (Grant) requirements to end of Financial Year 2006/2007.

2.5 Other actions for January

- The consistency review of the Infraco/Tramco/MUDFA/DPOFA contracts is ongoing. Verbal update to be provided at the meeting.
- Employer's Requirements – current update by the end of January 2007.
- Contractualise agreed changes to DPOFA. The Negotiation of the principles was concluded in December, the lawyers are drafting the actual contract amendments and the revised Agreement is expected by the end of February 2007.
- Define and agree scope of wider area impact transport modelling with JRC / SDS and CEC by end of January 2007.

3. Key Issues and Concerns

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

- System Design Services (SDS) –Monitoring of SDS continues at a high level. A commitment from SDS to deliver their design obligations to Programme Version 9 was agreed at the beginning of December. However certain dates on this programme were not achieved. SDS programme Versions 10 is currently being reviewed to determine revised dates for delivery of design.
- Scottish Power had requested 5 additional feasibility studies in the following areas:
 - Craigleith Drive
 - Roseburn Drive
 - Gogar/Gyle area
 - Haymarket Yards
 - Cultin RoadThe tie team believes that it may be able to “engineer out” the requirements and avoid the need to carry out these feasibility studies. This exercise will be complete by the end of January 2007.
- Assumptions around the TRO process continue to be challenged.
- Infraco – One bidder requested an extension on the tender submission return. The team closed out this issue by advising 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 (Keith Rimmer) to discuss their commitment to delivering the projects time requirements for this work.
- JRC – Variation requests were received to cover requests for additional works in connection with the development of the DFBC. These are currently being negotiated and finalised in value terms.
- SDS design – CEC asked that certain structures were the subject of a Charette ‘review’ and that a robust process for agreeing design solutions between CEC planning and the Project Team was established. A Charette took place but the required outputs were not delivered as anticipated during November - this continues to be an issue in December.
- 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 is tentatively scheduled for week commencing 5th of February 2007 to review this issue.

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

- SDS – since the last report, SDS has continued to progress the close-out of the Charetted Structures, the TRO's and TTRO's, and the close-out of comments on Outline Project Specifications for detailed design. The review of the SDS programme and tie's milestones has taken place and finally reached a point where tie and SDS have rebased and accepted the SDS V9 P3E programme. Improvements were seen during November 2006 with SDS providing additional Senior Management and commissioning at a high level review. However, in the last two weeks of December 2006 there was a general slowdown with some deliverables provided late. tie continues to progress discussions with SDS including making recommendations for improvements. A response from SDS is due the week commencing 8th January 2007 on these.
- Tramco – the project team is reviewing the decision to remove the mock-up from the pre-works services in the Tramco contract. The inclusion and retention of a mock-up may assist risk mitigation.
- SDS - Confirmation of decision on Change Orders presented to CEC (see support paper named Updated Change Request Paper for information).
- JRC – tie to address queries arising from Due Diligence report on JRC Transport Model prior to use in support of TTRO / TRO process.
- Once the TTRO/TRO processes and the levels of detailed model and design input are established and agreed by all parties involved, a cost and resource programme will be required.
- Ingliston Park and ride Phase 2 – An estimate for temporary Car Park works from the MUDFA contractor is under review. It is noted that SDS have not provided a scope comparison, including an estimate of cost (if different) to what was in their original contract scope in relation to this workstream.
- Land and property purchases – landowners may apply for a Certificate of Alternative Development that may affect our current budget. Land owners may also contest the District Valuers estimate of their land. DV commencing discussion with owners to address this matter.
- MUDFA – SDS the first two tranches of detailed design for utilities were delivered late. tie continues to support SDS by facilitating discussions with Statutory Utilities, the provision of a Design Project Manager and recommendations to improve the design Management process and management.
- CEC resource requirements – tie do not have visibility of CEC's detailed resource requirements and it is not known if these costs are within estimate in the DFBC. A fully cost-loaded resource programme required from CEC to check this issue.

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 is now in use by all Project Managers and those who are termed risk Owners. All risk owners have been requested to have

mitigation actions in place for their top 5 risks by the end of January 2007. Subsequently risk owners are required to have mitigation actions in place for all open risks by the end of February 2007. In addition to this Opportunities are also to be captured on ARM.

5. Matters for Approval or Support

The following draft papers were submitted separately to DPD (November) as the Board meeting was prior to the DPD in December 2006

- 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

5.1 Decisions required from Tram Project Board.

Of the above papers the following have been updated and are to be submitted to the Board

- Approval of updated TRO process as detailed in attached paper
- Approval of MUDFA construction programme as detailed in attached paper
- Decision required on which Network Rail immunisation option is to be adopted, as detailed in attached paper
- Approval of changes detailed in the Project Change Paper attached.

5.2 Decision /support required from TS

- Approval to commence phase 1b utility diversions concurrently with 1a is required in advance of TS approval of the DFBC.

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

- Confirmation of commitment by CEC of the eradication/treatment of Invasive species on their land.
- A robust process for agreeing design solutions for structures between CEC planning and the Project Team.
- Confirmation of decision on Change Orders presented to CEC.
- Confirmation of how CE wishes to work out an appropriate methodology for delivery of traffic models.
- CEC to provide Change request (including fully cost-loaded resource programme) for their increased resource levels requirements.

5.4 Decision /support required from others

- None

6. Financial and Change Control Position

6.1 Financial Status

- The current financial year end VOWD forecast is maintained at £44.04m.
- The current AFC for the scheme is £592.4m as detailed in the Draft Final Business Case (DFBC) submission
- The VOWD to the end of December is £84k lower than the corresponding forecast last month. The reason for the variance is contained in the attached Appendix E.

Current Year Position

B - VOWD in current month 06/07				
Month £k (Incremental)	Current Actual £k (Cumulative)	Previous Forecast £k (Cumulative)	Variance £k (Current minus Previous)	Comment
£2,657	£22,789	£22, 872	(£84)	For reasons for variance refer to Appendix E

C – AFC - Current Financial Year position - To March 07				
Approved Budget £k	Current Forecast £k	Previous Forecast £k	Variance £k (Current minus Previous)	Comments
£44,041*	£44,041	£44,041	0	Refer Appendix E for individual budget line variances.

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

D – AFC - Anticipated Final Cost				
Budget £k	Current Forecast £k	Previous Forecast £k	Variance £k (Current minus Previous)	Comments
£545,000	£592,400	£592,400	0	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 November DPD meeting.
- The paper from Duncan Fraser on CEC resource requirements is currently being reviewed with a view to submitting a Change Request to the February 2007 Tram Project Board

7. Early Warning Claims

No change from previous month.

Submitted by:- Matthew Crosse
Project Director

Date:- 11/01/07



**Edinburgh Tram Network
HSQE Performance Report**
Period 10 2006/2007
10th December 2006 – 6th January 2007

Prepared by



Tom Condie, HSQE Manager - Tram



Authorised by

Susan Clark, Delivery Director - Tram

Date Prepared 09/01/2007

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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 Incidents and Accidents

2.3.1 RIDDOR Reportable Events

There were 0 RIDDOR Events reported this period.

2.3.2 Non-RIDDOR Events

There were two minor accidents in the period.

Accident 1, 28/11/06 –

A member of SDS was holding a cup of tea in the kitchen area when a colleague bumped into them. The contents of the cup spilt scalding their upper arm. No time lost.

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Accident 2, 03/01/07 –

A tie employee re-heated a paper cup of coffee in the microwave oven. On removing the cup from the microwave it disintegrated causing burns to their right hand. No time lost.

2.4 Management Safety Tours

There have been 0 Safety Tours this period.

A schedule of Safety Tours has been agreed and will be implemented from January 2007.

2.5 CDM

Health and Safety Plan for GI works issued to Network Rail for review has been accepted.

Five method statement submissions were expected in the period.

One method statement submitted, reviewed and accepted.

One method statement submitted and is under review.

2.6 Review

A follow-up site inspection of Alfred McAlpine Infrastructure Services office accommodation at Chancelot Mills was undertaken on 21st December. This coincided with AMIS staff moving into the offices. Six minor findings reported and dates for closure agreed. All the findings had been previously identified internally by AMIS.

3 Quality

3.1 Quality Management System Update

The Project Management Plans and Procedures Working Group met in the period. Current status of management plans;

Project Management Plan – comments returned and being considered.

Project Controls Management Plan is drafted ready for review.

Risk Management Plan is ready for approval.

Information Management Plan is drafted ready for review.

Design Management Plan is being drafted.

Utilities Management Plan is being drafted.

Construction Management Plan is being drafted.

Procurement and Contracts management Plan is being drafted.

Communications Management Plan is being drafted.

Stakeholder Management Plan is being drafted.

Land Assembly Management Plan – completed and approved.

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HSQ Management Plan is drafted at review.
Environmental Management Plan is drafted at review.
Tram Management plan is being drafted.

3.2 Audit

There was 1 audit planned and 1 completed during the period.

Audit Ref; T/001

The audit covered SDS management systems and processes for utility design at Halcrow’s Edinburgh office. No NCR’s were raised during the audit. Five observations and three comments were noted. The observations mainly centred on the programming of activities within the process and the comments were on technical issues which could impact on the subsequent design process within the utilities work stream.

3.3 Monitoring

There were no monitoring activities in the period.

3.4 Non-conformance Reports

One NCR (no. 005) raised in period.
Raised against SDS for not submitting Site Visit Pre-Notification forms as per procedure ULE90130-SW-SW-PRE-00006. This allows the review of method statements to be planned. This has coincided with method statements being submitted to tie with an expectation of review and acceptance within 24 hours. The submission of the form has been reinstated.

At period end:

0 NCRs were open.

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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

Work is continuing on the environmental section which is to be included within the Project Induction. The revised induction is planned to be introduced at the end of January 2007.

4.5 Legal compliance

No legislation breaches reported this period.

5 Appendices

Tram Consolidated KPI Data

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Appendix One – Tram Consolidated KPI Data

v2 01	SAFETY DATA	Period	Year to date
	Statutory Reporting RIDDORs		
	Fatal	0	0
	Major Injuries	0	0
	Lost Time Reportables	0	0
	Notifiable Dangerous Occurrences	0	0
	tie RIDDORs	0	0
	TOTAL	0	0
	Other non-RIDDOR events		
	Accidents - Lost Time	0	0
	Accidents - Other	1	1
	Incidents	0	0
	tie Non-RIDDOR Accidents	1	1
	TOTAL	2	2
	Hours Worked		
	Total hours worked - SITE	882	10,073
	Total hours worked - NON-SITE	10,198	127,780
	tie hours worked	2,925	43,425
	TOTAL	11,080	137,853
	Accident Performance YTD		
	AFR to date	0.00	0.00
	Reportable Injuries / Lost time accidents to date	0	0
	Dangerous Occurrences to date	0	0
	Site hours worked to date	882	10,073
	Non-Site Hours Worked to Date	10,198	127,780
	COMPLIANCE		
	MONITORING DATA		
	Contractor Internal and Sub-contractor Audits		
	Monitoring planned	0	0
	Monitoring conducted	0	0
	Monitoring kpi for the month	0	0
	% Achieved		
	NONCONFORMANCE REPORTS		
	Contractor and Sub-contractor		
	NCRs raised	1	4
	NCRs closed out	1	4
	NCRs overdue	0	
	NCRs open	0	
	% Achieved		
	AUDIT DATA		
	Contractor Internal and Sub-contractor Audits		
	Audits planned	1	1
	Audits conducted	1	1
	Audit findings / NCRs raised	0	0
	Audit findings / NCRs closed out	0	0
	Audit findings / NCRs overdue	0	
	Audit findings / NCRs open	0	
	% Achieved		

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Edinburgh Tram Project Key Milestone Schedule

Month	Day	Date	Key / Tram Meeting Dates	Tram Project Dates	MUDFA	INF	PROCUREMENT TRAMCO	SDS Milestones	OGC REVIEW	JRC	Business Case Development	Capex Estimate Development	Traffic Management / Land Assembly / PRT Comms Events
December	Fri	11/12/2006		Tram Board Pauses									
	Sat	12/12/2006											
	Sun	13/12/2006											
	Mon	04/01/2007		DP Pallets due	Final MUDFA	Technical & Commercial O&A's							
	Tue	05/01/2007											
	Wed	06/01/2007		DP Pallets Due									
	Thu	07/01/2007	Tram EPIC Sub-Committee			Employers Requirements available							OGC Insurance Companies POB documentation
	Fri	08/01/2007											
	Sat	10/01/2007											
	Mon	11/01/2007	Tram Board / EL / Tram Project Board	4 Week Report Due - Progress Meeting									
	Tue	12/01/2007											
	Wed	13/01/2007		DP Site Meeting								Value Engineering Workshop	
	Thu	14/01/2007	Tram Board	4 Week Report Due - Progress Meeting - PM Report Due	Initial Evaluation Report			From 20/01/07 - Issue final Order & Schedules to be issued SDS UPDATE				Value Engineering Workshop	
	Fri	15/01/2007											
	Sat	16/01/2007											
	Sun	17/01/2007											
	Mon	18/01/2007											
	Tue	19/01/2007											
	Wed	20/01/2007											
	Thu	21/01/2007											
	Fri	22/01/2007											
	Sat	23/01/2007											
	Sun	24/01/2007											
2007 January	Mon	01/01/2007											
	Tue	02/01/2007											
	Wed	03/01/2007											
	Thu	04/01/2007		Proj Directors Review with PM's									
	Fri	05/01/2007											
	Sat	06/01/2007											
	Sun	07/01/2007											
	Mon	08/01/2007											
	Tue	09/01/2007											
	Wed	10/01/2007											
	Thu	11/01/2007											
	Fri	12/01/2007											
	Sat	13/01/2007											
	Sun	14/01/2007											
	Mon	15/01/2007		DP Pallets due - Tram Board Pallets due									
	Tue	16/01/2007		DP Site Meeting	Receive 1st 25% of SDS AFC drawings								
	Wed	17/01/2007											
	Thu	18/01/2007		Exec Board									
	Fri	19/01/2007											
	Sat	20/01/2007											
	Sun	21/01/2007											
	Mon	22/01/2007											
	Tue	23/01/2007											
	Wed	24/01/2007											
	Thu	25/01/2007											
	Fri	26/01/2007											
	Sat	27/01/2007											
	Sun	28/01/2007											
	Mon	29/01/2007											
	Tue	30/01/2007											
	Wed	31/01/2007											
February	Thu	01/02/2007											
	Fri	02/02/2007											
	Sat	03/02/2007											
	Sun	04/02/2007											
	Mon	05/02/2007											
	Tue	06/02/2007											
	Wed	07/02/2007											
	Thu	08/02/2007											
	Fri	09/02/2007											
	Sat	10/02/2007											
	Sun	11/02/2007											
	Mon	12/02/2007											
	Tue	13/02/2007											
	Wed	14/02/2007											
	Thu	15/02/2007											
	Fri	16/02/2007											
	Sat	17/02/2007											
	Sun	18/02/2007											
	Mon	19/02/2007											
	Tue	20/02/2007											
	Wed	21/02/2007											
	Thu	22/02/2007											
	Fri	23/02/2007											
	Sat	24/02/2007											
	Sun	25/02/2007											
	Mon	26/02/2007											
	Tue	27/02/2007											
	Wed	28/02/2007											
March	Thu	01/03/2007											
	Fri	02/03/2007											
	Sat	03/03/2007											
	Sun	04/03/2007											
	Mon	05/03/2007											
	Tue	06/03/2007											
	Wed	07/03/2007											
	Thu	08/03/2007											
	Fri	09/03/2007											
	Sat	10/03/2007											
	Sun	11/03/2007											
	Mon	12/03/2007											
	Tue	13/03/2007											
	Wed	14/03/2007											
	Thu	15/03/2007											
	Fri	16/03/2007											
	Sat	17/03/2007											
	Sun	18/03/2007											
	Mon	19/03/2007											
	Tue	20/03/2007											
	Wed	21/03/2007											
	Thu	22/03/2007											
	Fri	23/03/2007											
	Sat	24/03/2007											
	Sun	25/03/2007											
	Mon	26/03/2007											
	Tue	27/03/2007											
	Wed	28/03/2007											
	Thu	29/03/2007											
	Fri	30/03/2007											
	Sat	31/03/2007											



Edinburgh Tram Project Key Milestone Schedule

Month	Day	Date	Key tie / Tram Meeting Dates	Tram Project Dates	MUDFA	INF	PROCUREMENT TRAMCO	SDS Milestones	OGC REVIEW	JRC	Business Case Development	Capex Estimate Development	Traffic Management / Land Assembly / PRT / Comms Events
	Thu	22/09/2007											
	Fri	23/09/2007											
	Sat	24/09/2007						Submit Objections Report to CEC For Instructions On Public Hearing					
	Sun	26/09/2007											
	Mon	26/09/2007	Be Board (09:30 - 14:00)										
	Tue	27/09/2007					Preparation for Franco/Prisco Facilitate Negotiations						
	Wed	28/09/2007											
	Thu	29/09/2007											
	Fri	30/09/2007											
	Sat	30/09/2007											
			Met - ACTION COMPLETE										
			MILESTONE NOT COMPLETED TO SCHEDULE / ONGOING										

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tie Limited

Edinburgh TRAM Project (Commercial In Confidence)

Paper to : Tram Project Board

Subject : Risk Management Paper for Primary Risk Register

Date: 16th January 2007

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 During December the Primary Risk Register was consolidated to accommodate the numerous changes recommended.

Overall the significance of individual risks on the Primary Register has not changed.

- 8 risks were removed and none were added.
- The following are recommended for closure or removal from the Primary Risk Register:

Risk 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) to close as actions are complete with regard to the development of the Business Case. The one remaining action of “identifying an optimal position for a combined tram/bus position” is complete in terms of preliminary design. However, it will require continual review and a new risk should perhaps be opened within the Project Risk Register relating to stop location and interchange design.

Risk 269 (Agreement on financial over-run risks sharing has not been reached between CEC and TS) was anticipated for closure during December however, feedback has not been received on the status of the remaining action. If the one remaining action was completed during December, it is recommended that this risk is closed.

Risk 282 (Procurement strategy has a high level of risk transfer to contractors which results in a failure to sustain suitable interest

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from the market throughout the bid process) was closing during December and it has been confirmed that this should now be closed.

- 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 five risk treatments were showing red status. Four of these have remained red and one treatment is recommended for closure as it is no longer appropriate for the risk. One treatment has now fallen behind programme and one new treatment has been added with a red status because it is felt that it is of high importance and will not be complete by the required end date.

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

3.1 The DPD Sub Committee will review this register and their comments will be incorporated.

4.0 Recommendation.








4.1 The Board is asked to note this paper.

Proposed Geoff Gilbert
Project Commercial Director Date 11/01/2007

Recommended Matthew Crosse
Project Director Date 11/01/2007

Approved _____ Date _____
David Mackay on behalf of the Tram Project Board

PRIMARY RISK STATUS SUMMARY					
Risk Significance (No of Risks)			Treatment Status (No of Treatments)		
	November	December		November	December
Black	6	4	-	-	-
Red	19	15	Red	4	5
Amber	2	1	Amber	30	25 (+1?)
Green	0	0	Green	29	22
Risks Added	1 (red)	0	Treatments Added	4 for new risk (2 amber, 2 green) 8 for existing risks (1 red, 4 amber, 3 green)	2 for existing risks (1 red, 1 amber)
TOTAL	28	20	TOTAL	75	55
Risks Removed and No Longer on Register	2 (1 black; 1 red)	8 (2 black; 5 red; 1 amber)	Treatments Removed and No Longer on Register	5 from active risks 6 from closed risks	4 from active risks 23 from closed risks
			N/A as risk closing or treatment no longer appropriate	6	2

RISK SIGNIFICANCE	TREATMENT STATUS
 BLACK – SHOWSTOPPER; difficult to quantify impacts	 RED – Treatment Strategy behind programme
 RED – High Risk	 AMBER – Treatment Strategy on programme
 AMBER – Medium Risk	 GREEN – Treatment Strategy ahead of programme or complete
 GREEN – Low Risk	

*Note: A – Stakeholder Risk Owner; B – Project Support to Stakeholder Risk Owner

Tram – Stakeholder Risks

Master Risk ID	Risk Description	Effect(s)	Risk Sig	Treatment Strategy	Treatment		Due Date	Risk Owner*	
					end Nov	end Dec			
264	Long term political risk to continued commitment of TS/CEC support for the Tram scheme	<ul style="list-style-type: none"> 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			21 Dec 06	Willie Gallagher A	
				'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					Andie Harper B
				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 firm			Jan 07		
				Make contact and engage with Senior SNP Leaders (effect 2)			Dec 07 – May 07		
				Continue to provide accurate information on status of project (effect 3)			From May 07		
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. EFFECT 3 RELATES TO STOP LOCATION AND INTERCHANGE DESIGN AS WELL AS SERVICE INTERFACE WHICH WILL BE	<ul style="list-style-type: none"> 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 		Develop clarity on the role and planned deliverables of TEL to bring about integration including development of ticketing strategies and bus/tram service patterns.			Aug 06	Neil Renilson/ Bill Campbell (TEL) A	
				Model integration plans through JRC with rigorous review process using LB knowledge.					
				Identify optimal position for a combined tram/bus position.					

*Note: A – Stakeholder Risk Owner; B – Project Support to Stakeholder Risk Owner

Master Risk ID	Risk Description	Effect(s)	Risk Sig	Treatment Strategy	Treatment		Due Date	Risk Owner*
					end Nov	end Dec		
	CONSTANTLY UNDER REVIEW. HOWEVER, RISK RELATES TO BUSINESS PLAN AND PROJECT BUSINESS CASE WHICH IS NOW COMPLETE BASED ON PRELIM DESIGN. RECOMMEND CLOSURE OF RISK AND, IF NECESSARY, OPENING OF NEW RISK RELATING TO STOP LOCATION AND INTERCHANGE DESIGN.	revenue.		Prepare TEL Business Plan (incorporating business case tram for system) with development of necessary policies to cover operations.			Nov 06	
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.	<ul style="list-style-type: none"> Possible showstopper. Delays and increase in out-turn cost may affect affordability. 		<p>Ensure close and continual interactions with TS and CEC to establish funding delivery confidence and agreement.</p> <p>Develop and implement strategy for additional contributions</p>			Sep 07	<p>Graeme Bissett A</p> <p>Geoff Gilbert B</p>
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 END DEC 06	<ul style="list-style-type: none"> Potential showstopper to project if agreement is not reached. <p>AGREEMENT REACHED, TEXT TO BE SIGNED</p>		<p>Hold discussions with CEC & TS to ensure adequate release of funds at appropriate periods of time.</p> <p>Understand commitments by TS and CEC re: 1A and 1B</p> <p>Facilitate agreement between CEC and TS.</p>			Dec 06	John Ramsay (TS) A
270	Uncertainty about requirements for wider area modelling and	<ul style="list-style-type: none"> Increased construction cost. 		Clarify and agree boundaries of scope and funding provision between TS and CEC			Feb 07	Willie Gallagher

*Note: A – Stakeholder Risk Owner; B – Project Support to Stakeholder Risk Owner

Master Risk ID	Risk Description	Effect(s)	Risk Sig	Treatment Strategy	Treatment		Due Date	Risk Owner*
					end Nov	end Dec		
	need and extent of construction works required on road network	<ul style="list-style-type: none"> Delay while additional funding is found. 		Provision of £500k in Draft Final Business Case estimate to deal with WAM requirements Employ further Traffic Management expertise				A Trudi Craggs B
273	Business case is not approved during February 2007 due to Infraco tender returns not adequately informing the business case.	<ul style="list-style-type: none"> 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
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.	<ul style="list-style-type: none"> Failure to achieve most effective commercial solution Delay in resolution of Agreements 		Engage with Transdev to ensure adjustment to DPOFA and negotiate requirements. [PRINCIPLES AGREED WITH DETAILED DRAFTED OF LEGAL AGREEMENT ONGOING – AS A RESULT OF ACTION RISK PROBABILITY HAS REDUCED SIGNIFICANTLY].			Feb 07	Alasdair Richards A & B

*Note: A – Stakeholder Risk Owner; B – Project Support to Stakeholder Risk Owner

Tram – Project Risks

Master Risk ID	Risk Description	Effect(s)	Risk Sig	Treatment Strategy	Treatment		Due Date	Risk Owner
					end Nov	end Dec		
278	Infraco tenderers seek extensions of time during tender period	<ul style="list-style-type: none"> Delay to market pricing and confirmation of business case capex requirements 		Agree bid programme with bidders – programme has been agreed			Aug-Sep 06	Bob Dawson
				Manage bid process to ensure bidders deliver to agreed dates			12 Jan 07	
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	<ul style="list-style-type: none"> 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			Aug 07	Trudi Craggs
				Identify fallback options				
				CEC Planning – Mock application by SDS [APPLICATION SUBMITTED; APPROVAL NOT YET ACHIEVED]			Jan 07	
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	<ul style="list-style-type: none"> Delay in submission of information to Infraco Delay in achieving consents and approvals Dilution of effort to de-risk Infraco pricing 		Identification of key areas requiring SDS attention. Re-focus SDS effort.			Jul 07	Geoff Gilbert
				Apply micromanagement to SDS delivery. Weekly reviews to press for deliverables. [ACTION IDENTIFIED IN MAIN REPORT. PROBLEMS REMAIN WITH SDS PERFORMANCE AND THIS HAS REQUIRED A REFOCUS ON MICROMANAGEMENT HENCE RED STATUS]				
281	Insufficient planning of procurements and controls on management and contract costs.	<ul style="list-style-type: none"> Weak procurement plan Scope/cost creep Damage to reputation 		Improve robustness of procurement plan.			Dec 06	Geoff Gilbert
				Finalise project estimate and functional specification and apply change control.			Dec 06	
				Undertake further Value Engineering			Mar 07	

*Note: A – Stakeholder Risk Owner; B – Project Support to Stakeholder Risk Owner

Master Risk ID	Risk Description	Effect(s)	Risk Sig	Treatment Strategy	Treatment		Due Date	Risk Owner
					end Nov	end Dec		
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 CLOSED AND CONVERTS TO RISKS 278 AND 344	<ul style="list-style-type: none"> Increased price of bids Withdrawal of bidders during bid process 		Identify feasible alternatives to risk allocation and allow negotiation of risk allocation		N/A	Oct 07	Bob Dawson
283	Infraco tender returns are outside forecast estimates and business case capex limit	<ul style="list-style-type: none"> Draft Final Business Case requires major change and update Business case not sustainable Confidence is lost by Funders and politicians 		Identify feasible options to enable scheme to proceed			Oct 06- Jan 07	Stewart McGarrity
				Conduct review of scenarios and approach to be taken for business case				
				Discuss contingency options with Funders and politicians				
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)	<ul style="list-style-type: none"> Potential critical delay and increased cost should longer timescale be required 		Develop procurement strategy to obtain funding [STRATEGY DEVELOPED AND TO BE PRESENTED TO DPD THIS MONTH].			End Dec 06	Susan Clark
				Gain TS agreement for early commencement of works including earthworks. [TREATMENT STATUS RED BECAUSE ACTION IS BEHIND PROGRAMME – EXPECT COMPLETION END JAN]				
286	Infraco refuses to accept or fully engage in novation of SDS and as a consequence award is successfully challenged	<ul style="list-style-type: none"> 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)			Feb 07	Bob Dawson
				Introduce and engage Infraco bidders to SDS as early as possible				
344	Withdrawal of bidders or submission of non-compliant bids due to non-project related issues	<ul style="list-style-type: none"> Less than 2 Infraco bids are submitted Less than 2 compliant 		Develop approach to maintain confidence in delivery of value two-way procurement			Jan 07	Bob Dawson
				Ongoing liaison with bidders to maintain engagement				

*Note: A – Stakeholder Risk Owner; B – Project Support to Stakeholder Risk Owner

Master Risk ID	Risk Description	Effect(s)	Risk Sig	Treatment Strategy	Treatment			Risk Owner
					end Nov	end Dec	Due Date	
		<ul style="list-style-type: none"> 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 [ACTION NOT NECESSARY AS HAS BEEN CONFIRMED THAT 2 BIDS WILL BE RECEIVED ON 12 JAN]		N/A	Dec 06	
139 & 164	Uncertainty of Utilities location and consequently required diversion work/ unforeseen utility services	<ul style="list-style-type: none"> 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. [ACTION COMPLETE]			End Nov 06	Alasdair Slessor
				In conjunction with MUDFA, create and implement schedule of trial excavations to confirm locations of Utilities [ACTION COMPLETE]			Mid Dec 06	
				In conjunction with MUDFA, undertake trial excavations to confirm locations of Utilities.	NEW		Mid Feb 07	
				Review design information and re-measure during design workshops with Utility Companies and MUDFA. Develop PC Sums into quantified estimates. [DESIGN NOT YET MATURE ENOUGH TO ACHIEVE ACTION]			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)	<ul style="list-style-type: none"> Out-turn cost higher than reported 		Update project estimate inflation allowance using TS methodology.			Jun 07	Geoff Gilbert
				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				
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	<ul style="list-style-type: none"> Turnhouse PRS not constructed or not completed on time resulting in critical delay 		Ensure Scottish Gas Networks understand the criticality of diversion programme			Jan 07	Phil Douglas
				Monitor SGN progress with regard to land acquisition and adjust Tram programme accordingly				

*Note: A – Stakeholder Risk Owner; B – Project Support to Stakeholder Risk Owner

Master Risk ID	Risk Description	Effect(s)	Risk Sig	Treatment Strategy	Treatment			Risk Owner
					end Nov	end Dec	Due Date	
	alternatives	<ul style="list-style-type: none"> to construction of depot 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 [ACTION COMPLETE]			Dec 06	
				Develop additional strategy to account for other Utilities encountered. This relies on receipt of SDS design. [ACTION STATUS RED AS CURRENT PROGRESS DOES NOT INDICATE THAT ACTION WILL BE COMPLETE BY REQUIRED END DATE]	NEW		Jan 07	
271	Failure to reach a suitable agreement with CEC regarding: <ol style="list-style-type: none"> Roads maintenance responsibility where the tram has been installed in CEC maintained roads; What is and is not realistically within the scope of the tram infrastructure delivery contract; The way in which tram UTC priorities are handled at key junctions. SUMMARY RISK – TO BE SPLIT TO DETAIL LEVEL.	<ul style="list-style-type: none"> Delay to project while agreement with CEC is reached. Sacrifices being made to ensure agreement is concluded. 		Final agreement to be approved by Roads Authority, CEC Promoter, CEC in-house legal and tie Final alignments in place [CEC DISAGREES WITH FINAL ALIGNMENT] [TREATMENT STATUS RED AS CURRENT PREDICTIONS DO NOT EXPECT TREATMENT TO ACHIEVE REQUIRED END DATE]			Feb 07	Trudi Craggs
							End Dec 06	

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*Note: A – Stakeholder Risk Owner; B – Project Support to Stakeholder Risk Owner

**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

tie Limited
 ETN PROJECT PROGRESS REPORT FOR DEC 06 - PROJECT SPEND TO MAR 2007
 PHASING OF VALUE OF WORK DONE
 Date:- 31.12.06

Cumulative Approved Budget
 Cumulative Current Forecast Value to expend Budget

Figures in '£000s	Approved Budget	Cumulative Approved Budget vs Forecast					Value of Work Done (VOWD) Review			Apr - Mar 07 Review			
		Apr 06 - Mar 07	Spend/Bud to date (Dec)	Jan-07	Feb-07	Mar-07	07/08	Previous	Variance (current minus previous)	Comment	Previous	Variance (current minus previous)	Comment
IMPLEMENTATION													
1 tie RESOURCES	5,706	4,241	4,698	5,155	5,706								
		4,311	4,768	5,225	5,909		4,246	65		5,711	198	Resources to support Mudfa/Utilities brought forward to Mar 07	
2 DPOF	389	298	328	358	389								
		298	328	358	389		298			389			
3 LEGALS	2,634	1,884	2,160	2,416	2,634								
		1,703	1,979	2,234	2,453		1,866	(163)	reduction in general advice and TRO support pushed out	2,616	(163)	Reduction in general advice and TRO support pushed out. Forecast to Mar 07 under further review	
4 SDS	13,002	9,552	10,402	11,702	13,002								
		9,552	10,402	11,702	13,002		9,552			13,002		No variance this report. Cost Reporting under review with findings to be reflected in Jan 07 report.	
5 JRC	902	634	672	702	902								
		738	803	903	1,003		634	104	Work on 'Do Minimum Plus' CO to support DFBC.	902	101	Work on new CO's to support TRO & TTRO process partially brought forward to 06/07	
6 TSS	4,296	3,066	3,476	3,886	4,296								
		3,082	3,492	3,932	4,358		3,071	11		4,296	62		
7 UTILITIES													
8 DESIGN SUPPORT													
9 3RD PARTY NEGOT	280	209	232	255	280								
		113	136	205	280		169	(56)		280			
10 LAND & PROP	10,713	22	27	32	10,713								
		13	18	23	10,704		22	(8)		10,713	(8)	Phase 1a land take commitment dependent on issue of GVD on agreed programme dates. DV to provide monthly updates to monitor effect of re evaluation process.	
11 TROs													
12 COMMS / MKTG	638	523	566	609	638								
		525	568	610	640		525			640			
13 TEL	620	470	520	570	620								
		470	520	570	620		470			620			
14 SERV INTEG PLANNING	58	58	58	58	58								
		58	58	58	58		58			58			
15 PUK	80	62	68	74	80								
		62	68	74	80		62			80			
16 FINANCIAL ADVISORS	38	38	38	38	38								
		38	38	38	38		38			38			
17 INSURANCE	1,024	35	1,018	1,021	1,024								
		43	49	55	1,008		43			1,007	1		
18 CONSTRUCTION Utilities incl MUDFA	3,235	1,260	1,550	1,850	3,235								
		1,667	1,793	1,922	3,273		1,684	(17)		3,463	(190)	Utilities - forecasted BT advanced payment Nr 1 revised to match current funding approval. T&Cs for stage payments, in advance of works under review.	
19 Infraco	282	21	41	262	282								
		0	21	51	82		21	(21)		82			
20 Tramco													
99 OTHER	145	115	125	135	145								
		115	125	135	144		115			145	(1)		
SPECIFIED CONTINGENCY													
BUDGET TOTAL	44,041	22,487	25,977	29,120	44,041								
CURRENT FORECAST		22,789	25,166	28,097	44,041		22,873	(84)		44,041			

Note - Budget lines reflect November 2006 Transport Scotland Approval of £44m for the current financial year 2006/07.

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tie Limited

Paper to : Tram Project Board
Subject : Update on the TTRO and TRO processes
Date : 16th January 2007

1.0 Background

- 1.1 At the Tram Project Board meeting on 20 November 2006, a paper was presented on the traffic regulation orders (TRO). The paper set out the progress which had been made in relation to the assumptions behind the TRO programme and provided an update in relation to the TRO programme itself.
- 1.2 Since the Tram Project Board meeting, various meetings have taken place between tie (Willie Gallagher, Andie Harper and Trudi Craggs), The City of Edinburgh Council (CEC) (Andrew Holmes, Keith Rimmer and Duncan Fraser) and Dundas & Wilson CS LLP (Ann Faulds).

2.0 Progress since the last Tram Project Board

- 2.1 A consultation took place with Malcolm Thomson QC on Friday 8 December 2006 to discuss various aspects of the TRO programme including the following:-
- whether construction on-street can commence prior to the necessary TROs in respect of the permanent measures being in place;
 - if senior counsel's opinion is that the construction cannot commence until the necessary TROs (and TTROs to mirror the permanent measures are in place), whether off-street construction can commence ahead of the making of the TROs;
 - the categorisation of the necessary TRO measures into the following categories - core, direct consequential and indirect consequential measures and the implication of doing so;
 - if senior counsel endorses this categorisation, the nature and extent of the core measures; and whether CEC needs to hold a discretionary hearing in respect of the core measures.

An opinion addressed to CEC will be obtained and this is awaited. However at the consultation the following was discussed:-

- the differences between this project (authorised by an Act of Parliament), and a normal traffic management scheme and the fact that in some cases there is a legitimate expectation created by the STAG (which was made public in 2003/2004), and which showed some of the likely TRO measures which would be required, eg banned right turns, loss of

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parking. Both of these would strengthen the case for proceeding with the on-street works ahead of the TROs being in place.

- the definition of core measures was discussed in particular given the prejudice this may have to the public who are affected by the TRO measures. Views on what core measures should include ranged from everything which would be needed to make the tram work as per the business case to only those measures in the Limits of Deviation which are required to make the tram work. The importance of runtime was discussed and it was agreed that the run time is central to the tram working - the whole reason for tram instead of buses is that it is fast and reliable - "the turn up and go" philosophy - and that we shouldn't be defensive about that. This would need to be central in the statement of case justifying the measures.
- regarding possible prejudice if the core measures are not subject to a hearing or if the construction commences under TTROs, tie will need to build up a cost benefit analysis. tie will need to look at the use of public money and the real cost of delaying the project until the TROs are in place against the risk of progressing the construction under TTROs ahead of the final TROs being in place. Any delay should also be considered in light of potential blight on affected properties which could be extended if there is a delay to progressing the project due to the need to get TROs in place. The legitimate expectation argument is also valid here.
- it was agreed that there was merit in trying to change the law to avoid mandatory hearings.
- on the assumption that there is a need to split, and a benefit in splitting, the measures into core and consequential measures, it was thought that it would be best to promote both sets of orders at the same time however the core measures would be fast tracked while the consequential measures would be subject to a hearing - mandatory or discretionary.
- the commencement of the off street works ahead of the TROs was discussed and it was agreed these works could commence however there may be a small risk if the on street works were then delayed or prevented in some way.

2.2 A further meeting is scheduled with Mr Thomson QC on 12 January 2007.

2.3 A meeting is to be set up with the Scottish Executive in order to discuss further the regulation of traffic regulation orders on mandatory hearings and the possibility of amending the Local Authorities Traffic Orders (Procedure) (Scotland) Regulations 1999 in relation to major projects, bearing in mind the current programme. A representative from Transport Scotland will also attend this meeting to give support to the request to amend the legislation.

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3.0 Programme

3.1 Despite CEC's reaction to the programme presented to the last Tram Project Board, it is our understanding that their concerns are limited to the following:-

- the quality, robustness and appropriateness of the modelling and design information and the TRO schedules to be provided by SDS by 13 March 2007;
- the ability of SDS to meet this date bearing in mind their performance to date;
- the ability of CEC to review and approve the package received from SDS on 13 March 2007 within two weeks of receipt;
- the commencement of the statutory consultation prior to the election on May 2007; and
- the potential number of objections and the ability of CEC to review and report to the members on these in three weeks.

3.2 In order to address these concerns the following is proposed:-

- a meeting will be set up with SDS, JRC, tie and CEC in order to discuss the modelling, CEC's expectations, the requirements for the TRO process and any scope gaps between the contracts;
- SDS will be asked to provide a set of exemplar TRO submissions for review. This will be similar to the process which has been undertaken in relation to the prior approval submissions;
- a process will be agreed with SDS to ensure that the development of the TROs and the schedules are iterative processes;
- commencing the statutory consultation prior to the election will be revisited following the consultation with senior counsel;
- Once senior counsel's opinion has been received and considered, the programme and the number, content and geographical breakdown of the TROs will be considered further;
- Dundas & Wilson CS LLP has offered to review and report on the objections. A process will be developed with CEC in order to satisfy their requirements. This reflects the role undertaken by Dundas & Wilson CS LLP in relation to both the congestion charging scheme and the private Bills for both lines 1 and 2.

4.0 Temporary Traffic Regulation Orders (TTROs)

4.1 In respect of the TTROs, a strategy has been developed by tie and SDS to ensure that the necessary orders are in place for both the MUDFA and Infraco works.

4.2 The strategy aims to maximise flexibility during the construction period and to minimise the risk of public confusion given the scale of the works.

4.3 Given that the construction methodology to be adopted by the Infraco is unknown at this stage and that the detailed design for the utility diversions is

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not yet complete, if individual TTROs for specific works on specific roads at specific dates were obtained at this stage by SDS, it is likely that the TTROs would require to be significantly altered or even remade by CEC in order to cover, and be in place for, both MUDFA and Infraco at the necessary time.

- 4.4 For this reason, it is intended that one master TTRO is made for all the utility diversion works and one master TTRO for the Infraco works. That order would specify:
- all of the roads likely to be affected;
 - all of the measures likely to be imposed;
 - that any particular measure will be in force when signed on street; and
 - the date on which the order will come into force and that it will remain in force for more than 18 months i.e. it will cover both the MUDFA and Infraco works.
- 4.5 This master TTRO would go through the statutory process once rather than having a series of street specific orders going through the process over several months or even years. It is anticipated that the master order would cover the vast majority of the measures (see paragraph 4.10 below). This approach has already been used in Edinburgh by major utilities' companies.
- 4.6 However this approach would have to be underpinned by effective lines of communication between MUDFA, Infraco, **tie** and the roads authority. This would allow a rolling programme of works to be agreed in advance within the terms of the master order and taking account of current circumstances, especially other competing demands for road occupation or other utility works.
- 4.7 As the rolling programme is agreed between the parties, details of the proposed works/measures would be publicised in accordance with pre-agreed communication and publication protocols to ensure that the public had reasonable advance notice of all measures and diversions. That is, not too late, nor too far in advance to be useful. For instance, measures may be agreed in one month slots, two months in advance so that the public could be given one month's notice.
- 4.8 An effective communication and publication process is an essential prerequisite of this approach to ensure that road users are given adequate and reasonable notice of temporary road works and diversion measures in the interests of procedural propriety and road safety. Accordingly there will need to be a protocol developed as part of the tender process to deal with the communication strategy. This is currently being developed. A draft has been circulated between all of the parties for comment and will be finalised in accordance with the following programme.
- 4.9 At present the programme for making the TTRO is as follows:-

Description of Milestone	Date
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Draft schedule of roads to be submitted by SDS to tie for Approval Note: this was delivered ahead of schedule	15 December 2006
Statutory package to be drafted and submitted to tie for approval (to include the order, the schedules and the supporting statement) Note: this was delivered on time	15 December 2006
Consultation with AMIS in order to finalise the draft schedules Note: this is ongoing – the delay in providing the detailed utilities design to AMIS may impact on this programme.	Ongoing until end of January
Protocol to be finalised	By the end of January
Receipt of traffic management plans from AMIS for review Note: this is ongoing – the delay in providing the detailed utilities design to AMIS may impact on this programme.	Mid – end of January
Submission of the statutory package to CEC	By 9 February 2007
Presentation to Council members/sounding board	10 – 15 February 2007
Ministerial Approval	15 February 2007
Making of the TTRO	By end of February 2007

- 4.10 It should be noted that there may need to be further TTROs made during the utilities works as the traffic management plans are further developed. In addition the TTRO does not cover the following, which, in accordance with the legislation, will require to be dealt with in separate TTROs:-

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- blue badge holders – there may be two or three disabled bays which are affected in addition to the bays at St Andrew Square;
- taxi ranks – these are dealt with by a licence and not a TTRO;
- loading bays – these will require to be dealt with as the master TTRO is pulled down as these need to be referenced to precise measurements;
- cycle tracks – there is a cycle track at St Andrew Square on the west side. Given the decision to locate the tram tracks down the west side there may be no need to affect this area;
- footpaths – there are a potentially a couple of affected areas.

4.11 There will need to be considerable buy-in from both the members of CEC and MSPs especially as there may be adverse impacts on the road network and on particular wards. Both CEC and MSPs will require to regularly brief the members and MSPs in order to keep them informed.

5.0 Recommendation

5.1 The Board is asked to note this paper and in particular:-

- 5.1.1 the progress outlined at paragraph 2;
- 5.1.2 the concerns in respect to the programme; and
- 5.1.2 the current status and progress in relation to the TTROs.

Prepared by: Trudi Craggs, Development and Approvals Director

Recommended by: Matthew Crosse, Project Director

Date: 10 January 2007

Approved Date:-
David Mackay on behalf of the Tram Project Board

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Edinburgh TRAM Project
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tie Limited

Paper to : Tram Project Board

Subject : Immunisation of Network Rail equipment for the effects of the DC traction system and associated Network Rail possession strategy

Date : 16th January 2007

1.0 Background

1.1 At the Tram Project Board meeting on 25 September, a paper was presented on the options for taking forward the works required to modify some of Network Rail's (NR) signalling equipment, namely track circuits, in order to immunise it against the effects of the tram DC traction system.

1.2 The immunisation of NR track circuits will be necessary mainly due to stray current interference and electromagnetic compatibility (EMC) reasons. In rail systems such as the Edinburgh Tram, where DC current is drawn from OLE, then travels through the running rails as part of the traction return circuit to the substation, some of this current leaks into the surrounding area in order to find it's way back via the path of least resistance. This is known as stray current. When in close proximity to NR's DC track signalling circuits, this stray current can "trick" the circuits into thinking a train is on the line and turn the signals to red, resulting in chaos trying to maintain safe passage of trains. This is clearly a situation to avoid and hence the need for the immunisation works.

1.3 Three options were presented for the delivery of the works:-

- Option 1 – the NR works are procured as part of the Infraco works ie they are designed by SDS, delivered by the Infraco and funded by Transport Scotland (TS) and The City of Edinburgh Council (CEC) on a pro-rata basis to reflect the funding they are providing to the project.
- Option 2 – the NR works are procured as part of the tram project but designed and delivered by NR through a direct contract between tie and NR. Again this option would be funded by TS and CEC on a pro-rata basis.
- Option 3 – the NR works are removed from the scope of the project and are designed, constructed and delivered by NR. There would be a direct contract between TS and NR. These works would be funded from funds from the project budget.

1.4 The preferred option of the tie team was that TS should contract directly with NR as it had the most influence on NR and would be in the best position to ensure that the works were delivered on time and within budget. However the Tram Project Board decided that, while NR was the party best placed to design and carry out the works tie should be the party to contract direct with NR.

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1.5 Since the Tram Project Board meeting various meetings have taken to place with both NR and TS.

1.6 This paper provides the Tram Project Board with an update in relation to both the immunisation works and the possession strategy.

2.0 Immunisation Works

2.1 It was agreed between all of the representatives of the various parties that NR is best placed to carry out the design and construction of the immunisation works.

2.2 The roles of **tie** and TS were discussed and considered further. The immunisation works are critical to ensure that the tram can operate and require to be delivered in accordance with the project programme - the project cannot afford for this part of the project to be delayed. For that reason it is recommended that option 2 be taken forward ie that **tie**, rather than TS, should contract with NR (using a standard form of contract) and manage these works as it is perceived that **tie** is best placed to drive the works forward to ensure timeous completion. However any perceived benefit of this approach should be considered against the risk allocation.

2.3 That said, it is important that TS buy in to this approach and are prepared to put pressure on NR work on **tie**'s behalf should that be necessary to ensure the delivery of these works in accordance with the programme.

2.4 The timing of the works is crucial. While it would be mutually beneficial to all parties to try to tag the immunisation works on to a Network Rail project to take advantage of possessions and to ensure a more cost effective solution, it is recognised that if this is not possible **tie** may have to proceed with a tram only solution. It should be noted that this is essential that a way forward is agreed between all parties as soon as possible and in any event by the time the Transport Minister approved the DFBC on 15 February 2007, to ensure that there is sufficient time and resources to complete the works in order to commission and open the tram by Christmas 2010.

2.5 The extent of the works was discussed bearing in mind both the possible future extension to the tram network (ie Phase 3) and the proposed works to the Edinburgh to Glasgow mainline in relation to the EARL project, the Airdrie to Bathgate project and the electrification of the mainline. It is recognised that Phase 3 is outwith the scope of the project and that while **tie** may want to consider the cost of immunising the heavy rail network against the section of the tram network from Ingliston to Newbridge as part of the works required in relation to Phase 1a (as this may provide a more cost effective option although this has not yet been explored further and is at present unquantified), such works would require to be brought back within the scope of the project and any necessary change sponsor and funding would require to be identified.

2.6 The technical solution was discussed especially the merits of a solution that provided immunisation from both AC and DC currents. NR, **tie** and TS have agreed to review the scoping report prepared by SDS (a copy has been provided to TS) and to participate in a workshop to discuss and agree the

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works, the technology required, to ensure that both the heavy rail infrastructure and the tram infrastructure is protected, and the programme.

2.2 The workshop has been arranged for week commencing 5 February 2007.

3.0 Possessions

3.1 Tram currently has an application in for seven possessions beginning Christmas 2007, through to December 2008. These are primarily to be used in construction of structures. NR also has an application for twenty one possessions in relation to the Airdrie to Bathgate project, through the same period, some of which may be available to piggyback onto. The final access plan will be published in January 2007 whereupon potential piggyback opportunities can be discussed.

3.2 Applications for possessions from Christmas 2008 through 2009 need to be applied for in June 2007. SDS will continue to apply for these on behalf of and in consultation with preferred Infraco bidder.

3.3 Similarly, any possessions required between Christmas 2009 and 2010 will need to be applied for in June 2008. Infraco would apply for these.

4.0 Programme

4.1 The key programme dependency of these works is System Energisation ("Power On"). That is, the tram system cannot be energised until these works have been completed. The first "Power On" date is currently scheduled for 5 October 2009, to energise the Test Track.

4.2 SDS is presently undertaking a series of surveys and modelling tests to establish an accepted zone of influence, which in turn, will define the scope of works required. These surveys/tests will take up to 6 months to produce the desired results, by which time there should be sufficient detail to allow NR to provide a quotation for the works. Until this detail is developed it is difficult to quantify the timescales accurately.

4.3 The Testing & Commissioning phase of works is likely to require multiple possessions. What, at this stage, is again unclear is the possession durations and total number required. A reasonable assumption would be that both disruptive and non-disruptive possessions will be required; however, if NR is to be the delivery agent for these works, they will make the necessary applications themselves.

5.0 Recommendation

5.1 The Board is asked to:-

5.1.1 agree that NR should design and construct the necessary works;

5.1.2 note the options for the roles of tie and TS in relation to these works and agree that option 2 should be pursued with both TS and NR;

5.1.3 instruct TS to confirm that they agree that option 2 should be pursued and that TS will support tie in ensuring the delivery of the works by NR;

5.1.4 note that the works to immunise against Phase 3 works are outwith the scope of the project;

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- 5.1.5 note that a workshop is taking place to discuss the technical solution and the programme;
- 5.1.6 note the possession strategy; and
- 5.1.7 note the programme.

Prepared by: Trudi Craggs, Development and Approvals Director

Recommended by: Matthew Crosse, Project Director

Date: 9 January 2007

Approved Date:-
David Mackay on behalf of the Tram Project Board

DRAFT
Edinburgh TRAM Project

Paper to : Tram Project Board (DPD)
Subject : MUDFA Construction Programme
Date : 16th January 2007

1.0 Background

- 1.1 The MUDFA construction programme was presented to the December DPD. This is an update to that paper.
- 1.2 The programme has been created in conjunction with two major stakeholders, namely CEC and TEL. It was considered that most major political and public transport constraints would be covered by these two stakeholders.
- 1.3 A joint CEC/TEL/tie review was held 30th October 06. Subsequent programme reviews were held separately. (CEC meeting held 20/11/06 and TEL meeting held 12/12/06). A further joint review is scheduled for Wednesday 10/01/07).

2.0 Major Constraints

- 2.1 The original starting location of Haymarket Terrace, (moving towards Princes Street) was considered unacceptable for two reasons :
- An anticipated level of congestion and complaints prior to Local Government Elections was considered too high a risk.
 - There is also a desire from CEC to investigate a “public transport only” corridor operating from the start of the MUDFA Contract, and if practical, continuing through the INFRACO Contract, remaining as a TRO when tram is operational
- 2.2 Princes Street - Available only outwith festival and Christmas holiday embargo periods.
- 2.3 South St. Andrew Street/St. Andrew Street - Considered to be a separate project due to the complex nature of the telecommunications network supporting the banks and other financial institutions situated in the vicinity.
- 2.4 Leith Walk - an area where a large amount of small businesses are sensitive to disruption. Considered to be high profile and difficult during run up to the local election. Considered start date of April may move to May 2007 for that reason.
- 2.5 Foot of the Walk/Constitution Street - No political or logistical constraints, however complexity of design forces this area back in the programme.
- 2.6 Major junctions should be carried out under a series of weekend closures – these junctions are Lothian Road to Princes Street, Broughton Street to York Place and possibly Haymarket Junction.
- 2.7 All proposals are subject to traffic management modelling.

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3.0 Trial Areas

3.1 There is a desire to conduct a trial works area principally to confirm the works order process and construction protocols, but also to confirm design assumptions, traffic management plans and the communication plan.

3.2 The preferred area, Lindsay Road, Newhaven offers a number of advantages:

- Traffic management will not cause excessive congestion and will allow public transport to function as normal.
- Will provide continuity of work beyond the trial period.
- Is within Phase 1a of the project.

3.3 Previously proposed trial areas of Crewe Toll & Haymarket Yards were rejected for the following reasons:

- Crewe Toll in Phase 1b
- Haymarket Yards would require realignment of the design programme
- Haymarket Yards would not provide continuity of work due to traffic constraints at Haymarket Terrace

4.0 SDS Utility Design Programme

4.1 The delivery of the detailed utility design is being undertaken by SDS. This task is now on the critical path for the delivery of the MUDFA construction works and, unfortunately, SDS delivery dates for the first three design sections were not met. The programme allows a period of 5 weeks between delivery of detailed design and approval by SU's and finalisation of for construction design. There is then a 5 week period between this and start of construction on the ground. During this 10 week period AMIS will be undertaking traffic management planning, final programming and traffic modelling is also required.

Design Section	Date Due	Date Received
3b Crewe Toll – Caroline Park	15/12/06	27/12/06 (no document transmittal)
6 Gogar Depot	15/12/06	27/12/06 (no document transmittal)
1a Newhaven – Foot of the Walk (excluding Constitution Street area)	03/01/07	Not yet received (clarification from SDS by 12/01/07)

The forward delivery programme for detailed design is as follows:

Section	Date Due
1b Foot of the Walk – McDonald Road	07/02/07
1c McDonald Road – Princes St	08/02/07
3c Caroline Park – Granton Sq	22/02/07
5b Balgreen Road – Edinburgh Park	02/03/07

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5a Murrayfield - Balgreen	12/03/07
1a Newhaven – Foot of the Walk (Constitution Street)	18/05/07
2a Haymarket - Roseburn	23/03/07
5c Edinburgh Park - Gogar	10/04/07
7a Gogar - Airport	23/07/07
3a Roseburn – Crewe Toll	24/04/07
1d Princes St - Haymarket	17/05/07

4.2 As a risk mitigation measure, **tie** have placed a Project Manager within the MUDFA team to work with SDS to assist in the management of the delivery of future design sections. In addition to this, **tie** have made recommendations to SDS for improvements to their delivery structure and process which should improve their delivery of this critical work package.

5.0 AMIS Pre Construction Services

5.1 The MUDFA contract was awarded to AMIS in early October and there then commenced a series of pre-construction services. These included:

- HSQE management plans
- Communications plan
- Traffic management planning
- Mobilisation of the delivery team
- Set up of office accommodation
- Programming
- Detailed cost work and preparation of anticipated final account

5.2 Progress on these activities has been delivered to time and is of good quality.

5.3 During this period, AMIS has expressed concerns about the detailed design delivery and have assisted in this by taking part in workshops with statutory utility companies (SU's). There were also concerns about the level of design being presented to them for construction purposes. **tie** have undertaken an independent audit of this which has concluded that the “for construction” design is of a standard that SU's would provide to construction companies and is therefore sufficient.

6.0 MUDFA Construction Programme

6.1 The construction programme has been developed around the requirements of the key stakeholders and the constraints identified by them. In turn, the design programme has been realigned to fit with this programme. Currently this programme is based on both Phases 1a & 1 b being carried out during 2007 and 2008. The impacts of delaying 1b can be found later in this paper. The current programme is :

Tower Road, Newhaven	Mar 07
Newhaven Road- Ocean Drive;	April 07-Nov 07
Crew toll- Granton Square; Δ	May 07-Oct 07

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St Andrew Street *	Jun 07-Oct 07
50m North London Road–Foot of the Walk $\Delta \Delta$	Jun 07-Mar 08
Gogar- Airport ***	3 rd Qtr.07-Feb 08
Princes Street	Sep 07-Nov 07
Crewe Toll- Roseburn	Oct 07-Jan 08
Roseburn –Gogar **	Oct 07-Mar 08
Constitution Street ****	Nov 07-May 08
Gogar Depot *****	Nov 07-Feb 08
Lothian Road Junction	Jan 08-Feb 08
Lothian Road – Haymarket	Jan 08-May 08
North St. Andrew Street- 50m N London Road	Apr 08-Jun 08

- * Further negotiation required to secure this area as a “stand alone” project, which would require support for works continuing through festival and xmas periods (if necessary).
- ** Programme contingency area. May be programmed earlier if existing programme jeopardised by current unknowns.
- *** In conjunction with EARL works
- **** To accommodate preliminary BT Cabling Programme.
- ***** May be moved forward in conjunction with Advanced Works Contract
- Δ Moved out one month in anticipation of possible political resistance to pre-election work in phase 1b.
- $\Delta\Delta$ Moved back two months in anticipation of delays in design delivery.

- 6.2 The typical length of a road opening will be between 20m and 200m and will last between 1 and 6 weeks.
- 6.3 A review of the impacts of delaying Phase 1b utility diversions has identified impacts on both cost and programme. Additional capital costs of approximately £1.2m (a 16% increase in base cost of £7.92m (excluding risk)) plus additional risk allowance on the delivery of works to 1a of £1m. (fixed overhead and risk spread over a smaller volume)
- 6.4 The accrued knowledge within the contractor team is likely to be lost if works for 1b is deferred as it is unlikely that the contractor will be able to mobilise the same management team at such a later stage.
- 6.5 Undertaking utility diversion works on 1b (essentially limited enabling works) concurrent with 1a underscores to developer contributors that there is a will to undertake the works at some point in the future but to make this happen within the near future significant contributions are required from them.
- 6.6 Finally, in undertaking both 1a & 1b together there is more opportunity to maintain work fronts which optimises use of labour and materials.
- 6.7 Impact of utility diversion works not started until June 2009:
- Demobilisation and remobilisation of MUDFA contractor.
 - Possible procurement requirement if contractor not available for small volume of work.

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- Potential issues with SU re: engagement.
- Impact on end delivery date of 1b moving from Dec 2011 to Dec 2012

6.8 To maintain the end delivery date of Dec 2011 for 1b requires utility diversions to start no later than Sept 2008.

7.0 Post MUDFA, (Pre INFRACO) Utility Programme

7.1 A programme is currently being created in conjunction with the Communications Companies, (most noticeably BT) regarding their cabling activities.

7.2 The activities, (cabling, splicing, jointing and recovery) can only be executed after MUDFA, and must be completed before INFRACO track laying can commence. (The ducts and cable can only be considered abandoned after BT have re-routed).

7.3 Initial discussions with BT indicate reasonable programme float, except Foot of the Walk / Constitution Street, hence the proposed move in the MUDFA Programme.

7.4 It will be necessary to finalise the BT cable programme to help create a meaningful INFRACO programme. The BT cable programme will be matched with the MUDFA programme.

8.0 Stakeholders

8.1 The MUDFA Programme is being presented to all interested parties on Thursday 11th January 2007.

8.2 The immediate requirement following this is to gain sign off by CEC, TEL and other operators via TEL to this programme.

9.0 Communications

9.1 The AMIS communications team have been working closely with tie to develop a real time communications system for the works. This is being presented to stakeholders on 11/01/07.

9.2 The key elements of this include:

- Tram helpers at each worksite.
- Stakeholder Management Team provided by AMIS including out of hours and on call facility.
- Single telephone number for all stakeholder communication and contact.

10.0 Recommendations

DPD is requested to :

- Note the contents of this paper
- Endorse the work being done to finalise the programme and obtain approval from the key stakeholders

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- Obtain approval from key stakeholders to undertake 1b utility diversions concurrent with 1a
- Recommend that this paper be presented to TPB for approval

Proposed Alasdair Slessor Date 16/01/07
 MUDFA Utility Project Manager

Recommended Susan Clark Date 16/01/07
 Delivery Director

Approved Date: -
 David Mackay on behalf of the Tram Project Board

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Paper to : Tram DPD Sub Committee
Subject : Advance Works Strategy
Date : 16th January 2007

1.0 Background

- 1.1 The current headline programme for construction of Phase 1a is:
- Contract award in early October 2007 with commencement of construction in mid October.
 - Completion of construction July 2010
 - Commencement of revenue service December 2010
- 1.2 From discussions with bidders during the bid process it is evident that they believe this to be an extremely challenging programme.
- 1.3 Therefore, it will be necessary to implement measures to assist the successful Infraco contractor in achieving tie's programme and achieve delivery into revenue service by December 2010.

2.0 Advanced Infraco and Tramco Works

- 2.1 The measures proposed are to plan for undertaking certain specified Infraco and Tramco preparatory activities and physical works in advance of the award of contracts to Infraco and Tramco in October 2007. The activities proposed are to:
- Put in place mobilisation agreements with Tramco & Infraco to allow them to:
 - ✓ Make limited procurement commitments for specified programme critical sub contract and supply work. For example to place orders for materials with long lead times required for works early in the programme e.g. steel work for bridges
 - ✓ Prepare detailed working drawing for construction works and production design for the tram vehicle.
 - ✓ Mobilise Infraco and Tramco contractor's project management teams.
 - ✓ Set up site offices and production compounds and other activities to prepare for construction.
 - Undertake certain works scheduled early on in the construction programme in advance of contract award, namely the depot excavation and construction of piled walls at depot adjacent to A8. This would be undertaken by specialist contractor's procured separately from, but in consultation with, the recommended Infraco contractor.

3.0 Benefits

- 3.1 There are a number of benefits in following this strategy as follows:

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- Undertaking works at the depot in advance reduces the Infraco contractor's construction duration by an estimated 10 weeks as shown graphically in Appendix A.
- Enabling Infraco to maintain commencement of physical construction works immediately after contract award.
- Enabling Tramco to achieve delivery dates for the tram vehicle.
- Reduction in programme risk generally.

4.0 Schedule of Activities

4.1 To validate and further develop this plan the following activities are scheduled:

- Obtain clarifications from bidders on the activities necessary to be undertaken in advance which are necessary to secure the tie programme : end of Jan 07
- Agree principles of strategy with Infraco and Tramco bidders : end of Jan 07
- Prepare detailed programme of the activities necessary to deliver the strategy : end Jan 07
- Prepare draft mobilisation agreements and agree them with Infraco and Tramco bidders : end Feb 07
- Undertake market consultation, planning & procurement activities for depot works : Feb – June 07
- Award contracts to specialist contractors and suppliers for works at Depot : July 07
- Commence works at Depot : end July 07
- Place mobilisation agreements with Infraco & Tramco : Aug 07

5.0 Transport Scotland and CEC Liaison

5.1 It is understood that it is unlikely that Transport Scotland and CEC will be able to allow the Project to commit to physical works at this stage. Therefore subject to agreement of this strategy it is proposed that the Project is authorised to commence planning and procurement for Infraco and Tramco Advance Works now. Once the final contract deals are concluded with Infraco and Tramco in mid July the Project will seek separate authority to:-

- Award of mobilisation agreements to Infraco and Tramco
- Award contracts to specialist contractors and suppliers for advance works at the Depot

These 'hold points' in the process will provide both CEC and TS with control to ensure that any commitments made are within the overall project affordability and programme envelope at a point in time when it should be clear that there is minimal risk in awarding such agreements.

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6.0 Budget

6.1 The current budget for financial year 06/07 and the forecast for spend up to the award of contracts to Infraco and Tramco in October 07 include allowances for undertaking the planning and preparatory works and the Advance Infraco and Tramco Works.

7.0 Consultation

7.1 The following have been consulted in the preparation of this paper:-

- Transport Scotland – John Ramsey/Lorna Davis
- CEC – Andrew Holmes

8.0 Recommendation

8.1 The Board is requested to approve the recommendations made in this paper and authorises the Project to undertake the activities listed above up to but excluding the award of mobilisation agreements and contracts to specialist contractors and suppliers.

Proposed Geoff Gilbert Date:- 10/01/07
Project Commercial Director

Recommended Matthew Crosse Date:- 10/01/07
Project Director

Approved Date:-
David Mackay on behalf of the Tram Project Board

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Paper to : **Tram Project Board**
Subject : **Tram Project Changes**
Date : **16th January 2007**

Background

- 1 **tie** has issued 37 Change Notices on the SDS Contract and 5 Change Notices on the JRC contract.
- 2 In respect of the SDS contract, 15 changes are Client Changes as a result of Tram/Bus Integration and Charette Workshops held by The City of Edinburgh Council (CEC), 18 are changes associated with the terms of the SDS contract and 5 are Change Notices issued by SDS to **tie** (SDS Changes).
- 3 **tie** developed a programme with SDS to agree these changes over the period September and October 2006.
- 4 **tie** has agreed that the SDS changes are based on the contract rates included in Schedule 3 of the SDS contract and the principles set out in the contract.

Update on the status of the various changes

Client Changes

tie has agreed the scope and quantum of the Client Changes CNB001 to CNB015, on behalf of the Board, with SDS and these are indicated on the attached Table 1.

The original value of the Client Changes Estimates from SDS was £1,694,817. The **tie** / SDS agreed commercial settlement value is £776,172. The Charette Changes CNB008, CNB010, CNB010A to CNB015 were agreed at a commercial settlement of £600,000.

CNB001 for tram / bus interchanges at Crewe Toll, Haymarket, St Andrew Square and Foot of Leith Walk was agreed at a value of £108,576. CNB007 for review of all stop locations was agreed at a value of £67,596. Two Changes, CNB009 for Branding and CNB011 for Shandwick Place tram stop change were withdrawn and deleted.

The five Client Changes CNB002 to CNB006 which relate to value of £333,034 for citywide CCTV linkage, passenger information system integration, back office systems and common ticketing for trams and buses have been transferred to Infraco or specialist subcontractor, thus alleviating tie from the additional design fees associated with the SDS design elements and is now included in the Infraco ITN.

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SDS Contract Changes

tie has agreed eleven of the fourteen SDS Contract Changes and is currently evaluating three for the design fees, resource impact, the Capex and programme impacts and the associated risks. The current status is as follows:

Agreed Changes:

Eleven of the fourteen SDS Contract Change Notices are agreed:

- CNS 001: Phasing of the construction of the project commercial settlement agreement at a saving £800,000
- CNS 002: the instruction to SDS to set up project office for SDS/tie/TSS - No cost Impact, change withdrawn;
- CNS 003: Traffic Regulation Orders agreed to be withdrawn, legal services by D&W
- CNS 004: Temporary Traffic Regulation Orders agreed to be withdrawn legal services by D&W
- CNS 005: Omission of Provisional Additional Work – Design Fee saving of £1,664,550
- CNS 007: Airport Link interface with EARL - No cost Impact
- CNS 008: SDS co-location at City point - Saving of £8565/month
- CNS 009: Provision of CEC resource – Not required / Cancelled
- CNS 012: Provision of a licence for third party software – Fee £625
- CNS 013: Earl Ground Investigations agreed at £6,000
- CNS 014: Mudfa Estimate agreed at £38,006

Agreed in Principle

three of the fourteen SDS Contract Change Notices are agreed in principle with current work in progress (WIP) on the evaluation of the design fees, Capex and programme impacts on the Tram project for undertaking EARL works:

- CNS 006: EARL Utilities Diversion - WIP
- CNS 010: EARL and tram interfaces – Depot and stabling arrangements - WIP.
- CNS 011: EARL and tram interfaces – Bridge structure – WIP.

tie has agreed 3 of the 5 SDS Changes and two are rejected. The details are as follows:

- CRS 003: Procurement Support - agreed in principle; value to be finalised when procurement support ends;
- CRS 004 /CRS005: Transport Modelling commercial settlement for scope gap between SDG and SDS for £240,000
- CRS 001: New Bridge over Tramway at Depot rejected included in contract
- CRS 002: High Level Option rejected included in contract.

CAPEX Impact

The overall impact on capital costs is £9.76m. This includes the changes affecting the SDS contract as referred to above. Allowance is included within the Preliminary Design Stage Project Estimate for these changes and they are also taken account of in the Functional Specification.

In particular the following should be noted in relation to changes in excess of five hundred thousand pounds total impact.

- CNB002 Passenger Information Arrangements – CAPEX estimate impact is based on the range of costs originally advised by TEL. **tie** have agreed with TEL to develop proposal requirements and update costs accordingly.
- CNB013 Picardy Place Tram/Road Re-alignment – This change will require the complete remodelling of Picardy Place Roundabout, a significant reduced level excavation over a large area, re-routing of traffic and associated upgrading of signalised junctions, construction of retaining wall with iron railings and relocation of bespoke street furniture and public art works. Increase in evaluation due to allowance made for impact on un-surveyed utilities which may be extensive (£3m) and allowance for retaining wall at west of plaza (£0.48m) dictated by reduced level excavation.
- CNB014 Leith Walk Alignment Confirmation – Allows for the creation of 18 nr parking/loading bays along length of Leith Walk to accommodate existing commercial businesses. Includes all excavation/disposal, new kerbs/foundations, drainage and surfacing. Note: tram stop at Balfour Street appears to be relocated approx 25m further south than originally shown. However this is not considered a significant cost impact within the total cost estimate.
- CNB015 Foot of Walk Stop locations – This Change allows for the introduction of side platforms in lieu of an island platform and relocation of the platforms to the north of Great Junction Street/Duke Street. The main reason for this was the safety of passengers and improved interchange opportunities. OLE support arrangements have changed significantly.

These estimates are based on the limited outline design information available and will be developed further based on the emerging, more detailed, design information.

Overall Impact

The impact overall of these changes on the project is summarised in the appended Schedule.

Consultation

These changes have been reviewed with CEC and TEL and presented and agreed at the DPD meeting.

Recommendation

It is recommended that the Tram Project Board:

- 1. Notes and approves the contents of this paper;
- 2. Provides Matthew Crosse with the delegated authority to issue the change instructions to reflect the terms of this paper which will be countersigned by the Chairman on behalf of the Board;

Prepared by: Geoff Gilbert, Project Commercial Director: 11/01/07

Recommended by: Matthew Crosse, Project Director; 11/01/07

Date: 11 January 2007

Approved Date: -
David Mackay on behalf of the Tram Project Board



CHANGE SUMMARY
TRAM PROJECT BOARD CHANGES - STATUS AS OF 11 DEC 2006

Change Description	Originator / tie Owner	Change Request							Change Estimate										Tram Project Board		Remarks / Actions		
		CR Number	Issue		Status				CEX Number	Detailed CE needed?	Issue			Value				TP Board Status	Funding Value				
			Date	No.	Change Team	Change Owner	Change Review Team	Change Sponsor			Planned Date	Actual Date	No.	Change Team	Change Owner	Change Review Team	Change Estimate			CAPEX Impact		TSS Cost Impact	TOTAL Impact
Interchange Design and Cost / Benefit	TEL A. McGregor	CNB001	19-May-06	Issue 1	Registered and revised	Revised	Approved	Notified	CEB001	Yes	06-Jun-06	04-Jul-06	1	Revised	To be Approved	Revised	£108,576	£306,858	£15,982	£431,416	Not received	£0	
CCTV Arrangements	TEL A. McGregor	CNB002	06-Jun-06	Issue 1	Registered and revised	Revised	Approved	Notified	CEB002	Yes	24-Jun-06	04-Jul-06	1	Revised	To be Approved	Revised	£0	£300,000	£2,426	£302,426	Not received	£0	No added design costs
PI Arrangements	TEL A. McGregor	CNB003	07-Jun-06	Issue 1	Registered and revised	Revised	Approved	Notified	CEB003	Yes	25-Jun-06	04-Jul-06	1	Revised	To be Approved	Revised	£0	£1,000,000	£2,439	£1,002,439	Not received	£0	No added design costs
Back-Office Systems	TEL A. McGregor	CNB004	07-Jun-06	Issue 1	Registered and revised	Revised	Approved	Notified															No added design costs
Inspectors / Conductors - on board security	TEL A. McGregor	CNB005	08-Jun-06	Issue 1	Registered and revised	Revised	Approved	Notified	CEB005	Yes	26-Jun-06	04-Jul-06	1	Revised	To be Approved	Revised	£0	£450,000	£2,335	£452,335	Not received	£0	No added design costs
Common Ticketing	TEL A. McGregor	CNB006	08-Jun-06	Issue 1	Registered and revised	Revised	Approved	Notified	CEB006	Yes	26-Jun-06	04-Jul-06	1	Revised	To be Approved	Revised	£0	£0	£3,187	£3,187	Not received	£0	No added design costs
Stop Locations (if any changes proposed)	TEL A. McGregor	CNB007	19-May-06	Issue 1	Registered and revised	Revised	Approved	Notified	CEB007	Yes	06-Jun-06	04-Jul-06	1	Revised	To be Approved	Revised	£67,596	£80,864	£3,316	£151,776	Not received	£0	
Princes St. & Leith Walk Tramway Alignment	TEL A. McGregor	CNB008	09-Jun-06	Issue 1	Registered and revised	Revised	Approved	Notified															Withdrawn, included in CNB014
Branding		CNB009																					No information received from TEL therefore change was closed.
St Andrews Square Alignment	TEL A. McGregor	CNB010	09-Jun-06	Issue 1	Registered and revised	Revised	Approved	Notified															Superseded by 10A
St Andrews Square Alignment	CEC A. McGregor	CNB010A	03-Jul-06	Issue 1	Registered and revised	Revised	Approved	Notified	CEB010A	Yes	21-Jul-06	31-Jul-06	1	Revised	To be Approved	Revised		-£733,484	£3,711	-£729,773	Not received	£0	
Shandwick Place Stop Location	CEC A. McGregor	CNB011	03-Jul-06	Issue 1	Registered and revised	Revised	Approved	Notified															
Princes St. Alignment Confirmation	CEC A. McGregor	CNB012	03-Jul-06	Issue 1	Registered and revised	Revised	Approved	Notified	CEB012	Yes	21-Jul-06	31-Jul-06	1	Revised	To be Approved	Revised		-£77,220	£5,217	-£72,003	Not received	£0	
Picardy Place Tram / Road Realignment	CEC A. McGregor	CNB013	03-Jul-06	Issue 1	Registered and revised	Revised	Approved	Notified	CEB013	Yes	21-Jul-06	31-Jul-06	1	Revised	To be Approved	Revised		£6,452,017	£6,507	£6,458,524	Not received	£0	
Leith Walk Alignment Confirmation	CEC A. McGregor	CNB014	03-Jul-06	Issue 1	Registered and revised	Revised	Approved	Notified	CEB014	Yes	21-Jul-06	31-Jul-06	1	Revised	To be Approved	Revised		£545,891	£9,667	£555,558	Not received	£0	
Foot of Leith Walk Stop Location	CEC A. McGregor	CNB015	03-Jul-06	Issue 1	Registered and revised	Revised	Approved	Notified	CEB015	Yes	21-Jul-06	31-Jul-06	1	Revised	To be Approved	Revised		£602,747	£1,590	£604,337	Not received	£0	
Agreed sum for Design Services(SDS) Changes 10A, 12, 13, 14, 15 Inclusive																	£600,000		£600,000				
Total Changes - TEL Board																	£776,172	£8,927,672	£56,377	£9,760,221		£0	