EDINBURGH TRAM PROJECT

REPORT AND PAPERS

FOR

TRAM PROJECT BOARD

AUGUST 2006

Contents

EDINBURGH TRAM PROJECT MONTHLY PROGRESS REPORT –AUGUST 2006

1. Safety

No safety incidents to report in this Period.

The principal activities to improve safety performance are:-

- Commencement of **tie** Corporate Safety Management system
- Development of Safety & Quality Interface Document for issue to contractors

2. Programme and Progress

Current status of key project milestones to achieve project funding are:-

- Preliminary design – package delivered by SDS and is currently being reviewed by **tie**.

Future key project milestones to achieve project funding are:-

- Preparation for OGC2 Review commenced – Review to be undertaken in two stages; Stage 1 – 26th, 27th and 28th September 2006 and Stage 2 – in early November 2006.
- MUDFA (Multi Utility Diversion Framework Agreement) tender evaluation paper concluded and recommendation submitted to City of Edinburgh Council (CEC) on 6th September 2006. Proposed contract award 3rd October 2006 (inclusive of 10 day "cooling-off" period).
- INFRACO (Infrastructure Contract) tender issue date has been brought forward to 3rd of October 2006.
- TRAMCO (Tram Contract) tender return date is 5th October 2005.
- Update of Project Estimate based on preliminary designs underway and is scheduled to be completed on 16th October 2006.

Programme for delivery into service of Tram.

- The current forecast completion date is July 2011, based on outline productivity factors and assumed working constraints. The programme is being reassessed based on the measured quantities derived from the preliminary design in order to confirm delivery into service date of Tram (opening date).

Details of the key project milestones to approval of the DFBC are shown in Appendix A (Note – this represents work in progress but will be finalised within the next week).

3. Key Issues and Concerns

Current key issues and concerns arising in the period are:-

- SDS (Parsons Brinkerhoff) delay in completing design deliverables. In particular:-
  - Preliminary Design completion and consequently its validation is running significantly late
  - SDS are not progressing quickly enough with the utilities (MUDFA) diversion designs.
  - SDS are not providing sufficient resources to support the TTRO and TRO consents process.

  The original procurement strategy expected completion of detailed design with design proven to meet Tram system performance requirements by modelling during tender of INFRACO by July 2006. The impact of this delay is that the delivery of the risk transfer objectives of the OBC Procurement Strategy will be compromised. To address this issue we have:-
  - Met with Parsons Brinkerhoff senior UK management and agreed a protocol for supporting delivery of designs for the INFRACO ITN.
  - Identifying and prioritising the design and consent information required for the INFRACO ITN, agreeing this with bidders for SDS to then deliver to an agreed programme.
  - Identifying the information required by bidders to minimise their risk premium levels and developing programmes for delivering this progressively during the bid period.

  A separate paper was submitted to the DPD sub-committee detailing how the objectives of the OBC Procurement strategy will be secured.

- Decision to be made on Tram depot location – see separate paper that was submitted to the DPD sub-committee.
- Funding approval is required from TS for to permit early commencement of advance works and property acquisition. If decision is not made by end September 2006 then the programme will be significantly delayed. See separate paper presented to Transport Scotland proposing how increased spending could be delivered by the end of this financial year.
- INFRACO bidders' final commitment to participate in tender process has been sought, confirmation is required in early September to maintain the programme tender date. This will permit early release of TRAMCO tender documentation to assist comprehension and clarification of documentation. INFRACO bidder input will be obtained with agreement to bid bonds and TS commitment to capped refund bidders costs in the event of the project not proceeding.
- Funding approval is required from SESTRAN prior to issue of Compulsory Purchase Order for land adjacent to current Ingliston Park and Ride
- Lack of resolution of the D&W issue with CEC is delaying the land assembly process.
- The Project Functional Specification is being developed for approval at the September Tram Project Board meeting. This is also required for the OGC 2 Gateway review.
- The Project is currently preparing for the OGC 2 Gateway review, having agreed a revised approach with TS which is focused on the critical activities required to enable release of the INFRACO ITN.
- The principles for indemnification of INFRACO bidders' tender costs have been agreed in principle with TS and are awaiting confirmation.

4. Risks and Opportunities

The significant issues (refer to appendix B) in respect of the current risk position are as follows:-

Stakeholder Risks

- Poor Project Governance; Treatment Strategy is to seek clarity of Delegated Authorities of TS and CEC representatives attending Board meetings. This was due to be resolved in August but remains outstanding.

Project Risks

- Delay to early commencement (Jan 07) of depot works at Gogar – Treatment strategy is to (a) Resolve whether or not Leith alternative is viable for the depot and (b) Gain TS agreement for early commencement of works including ground investigation, earthworks, emergency access road

Management of the Infrastructure Design Risk Register is currently an SDS responsibility. **tie**'s Project Commercial Team will undertake management of the Project Risk Register as from the end of next month after a migration exercise.

Principal Opportunities are:-

Value Engineering has identified the potential for the following significant cost reductions:

- Potential relocation of depot to Leith;
- A change in the design of tram stop shelters from bespoke to off-the-shelf; and
- Use of ballasted track where possible.

The following key opportunities have also been identified:

- Revisit of project procurement strategy to maintain the original objective of risk transfer to private sector;
- To maintain the procurement programme for INFRACO the procurement will need to be conducted as an ongoing negotiation. This will focus the bidders attentions on providing queries for resolution and interim submissions to the Project for evaluation and encourage delivery of final bids to the Project programme. Tenderers progress will be monitored at regular reviews throughout the tender period.
- Emerging INFRACO tender documentation is being shared with TS and CEC and, commencing the first week of September, via external stakeholder review.

Given the concerns in respect of the potentially unaffordable level of Capex costs the Project will undertake a further value engineering exercise in October after completion of the Project Estimate update.

The Primary Risk Register is provided in Appendix B

5. Matters for Approval or Support

Decisions required from Tram Project Board on 25th September 2006

- Approval of the papers submitted separately to DPD.

Decision /support required from TS

- Approval for **tie** proposal to increase spend (£51m) to enable commitments to be initiated to achieve the increased spend. Approval required by 1st October 2006. this includes commitment to SGN to place long lead items to enable diversion of high pressure gas main at Gogar to meet April 2007 to September 2007 Construction dates.
- Approval required by 21st September 2006 for recommended MUDFA contractor and subsequent award of contract.
- Facilitate agreement with Network Rail to ensure immunisation works will be undertaken concurrently with TRAM Bathgate works in order to minimise cost and mitigate disruption.
- Facilitate agreement with Network Rail to commit to support key possession dates and contingency possession dates for Tram works.
- Facilitate agreement with Network Rail on a process for compliance for the undertaking of tram works on NWR controlled infrastructure.

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

- Confirmation that no further resources to be provided via **tie** (Technical Support Services (TSS) contract) beyond the current deployment of a Structural Engineer and Traffic Signal Engineer. Decision required by end September 2006
- Approval for recommended MUDFA contractor and subsequent award of contract required by 5th October 2006.
- Temporary Traffic Regulation Orders and Traffic Regulation Orders require public enquiry and **tie** will requires assistance in gaining public approval. Public objections could have serious programme implications. Support required in order to ensure that no objections adversely delay TRAM programme.
- Greenways – confirmation of implementation option **tie** is to follow in respect of Greenways, as detailed in **tie** letter reference 40.02.18/AL/FH dated 30/08/06, which outlines options regarding "decriminalisation" of Greenway route.

Decision /support required from others

- Funding approval required from SESTRAN prior to issue of Compulsory Purchase Order for land adjacent to current Ingliston Park and Ride in order to permit development of Ingliston Park and Ride Phase 2. Proposed dates to take Title / Purchase of Land March 2007 and commencement of works on site March 2007.

6. Financial and Change Control Position

Financial Status

The current reported forecast spend to Dec 06 is £23m and £40m to the end of the financial year. The financial year spend could be up to £51m to March 07 if approval is granted by TS to the full spend opportunities proposed by the Project. These proposals were submitted to TS on 24 August 2005.

Current Year Position

A – , Current Budget Year Position - To December 06				
Approved Budget 06/07 £k	Current Forecast £k	Previous Forecast £k	Variance £k (Current minus Previous)	Comments
£32,678k	£23,162k	£32,678k	£9,516k	"Bottom-up" reassessment of spend & slippage

B - VOWD 06/07				
Month £k (Incremental)	Current Actual £k (Cumulative)	Previous Forecast £k (Cumulative)	Variance £k (Current minus Previous)	Comment
£2,140k	£11,910k	£11,610k	£300k	Deferred payment and reassessment of SDS milestone payments

C –, Current Financial Year position - To March 07				
Approved Budget £k	Current Forecast £k	Previous Forecast £k	Variance £k (Current minus Previous)	Comments
*£32,678k**	£40,022k	£46,355k	-£6,333k	"Bottom-up" reassessment of spend & slippage

**Budget to end December 2006*

Project Position (To end of Trial Running)

D - Anticipated Final Cost				
Budget £k	Current Forecast £k	Previous Forecast £k	Variance £k (Current minus Previous)	Comments
£545,000k	£623,000	£623,000	£0k	Reassessment of project budget underway, for completion 16/10/06

Fuller financial details are provided in Appendix C

Change Control Summary

The Project has developed and is now implementing a clearer and more efficient change control process. This will be implemented during September.

We are working on the backlog of historical change orders to provide improved impact assessment. This will be resolved during September.

See separate paper for current status of project changes.

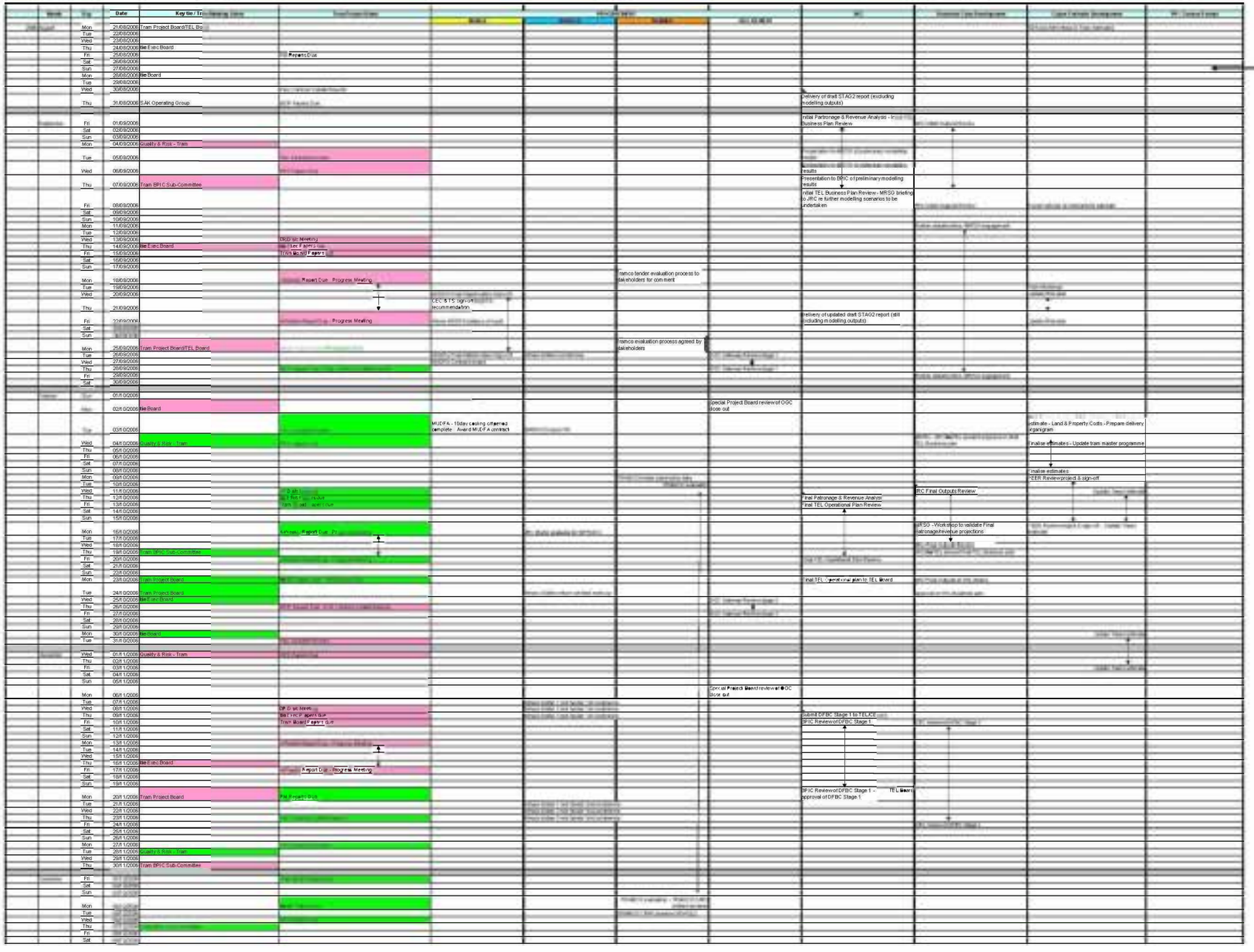
7. Early Warning Claims

SDS have indicated that they believe they are not obligated to deliver certain of their contract deliverables on the basis of certain purported written and verbal 'side agreements'. The Project is investigating the veracity of these claims and will advise further in the next report. They have also indicated that they are concerned that one of their contract conditions gives INFRACO too much latitude to reject their deliverables. They wish this to be revisited prior to novation.

Submitted by:- Andie Harper
Project Director

Date:- 18/9/06

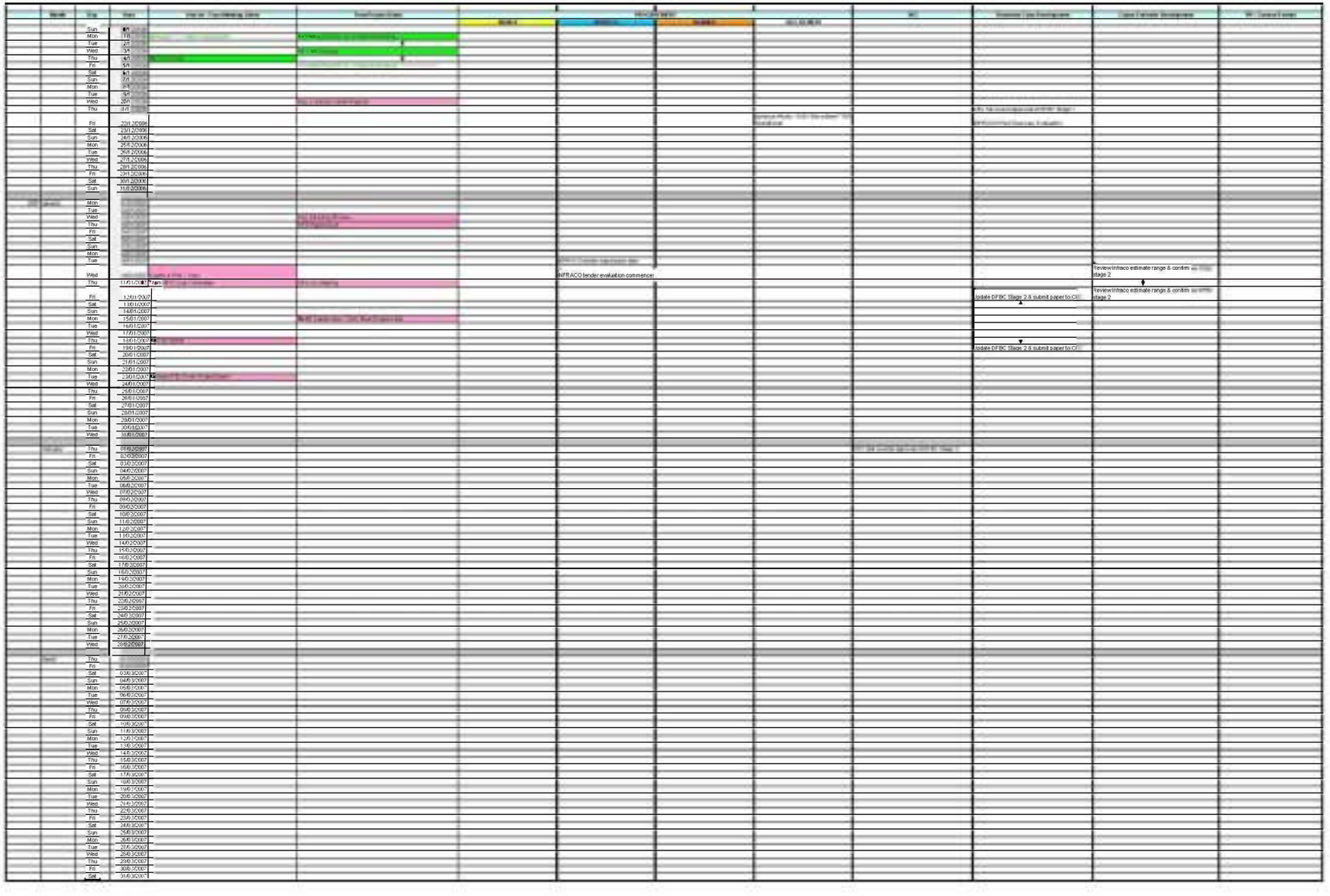
Edinburgh Trams Project
Key Milestone Schedule



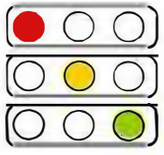
To be amended to include
Traffic Managemen
Land Assembly
PPP Comms

CEC01688881_0009

Edinburgh Trams Project
Key Milestone Schedule



RISK STATUS



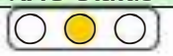
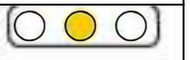
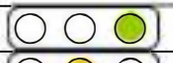
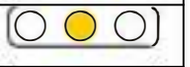
RED – Treatment Strategy behind programme

AMBER – Treatment Strategy on programme

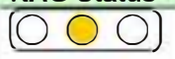
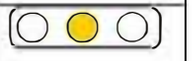
GREEN – Treatment Strategy ahead of programme or complete

Tram – Stakeholder Risks

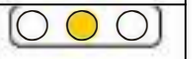
Risk Description	Effect(s)	Treatment Strategy	RAG Status	Due Date	Risk Owner
Failure to demonstrate robust case for scheme against required tests of Affordability, Financial Viability, Economic Viability and Modal Shift	• Business case is not acceptable • Approvals delayed • Slips into purdah period	Regular engagement with stakeholders to ensure clarity of requirements		Aug-Nov 06	**Stewart McGarrity A&B**
		Progressive development of draft business case			
		Updated Project estimate			
Political risk to continued commitment of TS/CEC support for the Tram scheme	• Reversal of decisions by incoming administrations in either or both of CEC and Holyrood • Project becomes key political issue during election campaign • Protracted decision making and unnecessary debate during consideration of Business Case	Monitor likely outcomes and do our best to brief all relevant parties about the project in a balanced way		Aug-Nov 06	**Willie Gallagher A** **Andie Harper B**
		'Hearts and minds' campaign including Senior Executive Officer meetings with Councillors and MSPs			
		Regular briefings and discussions with senior CEC and TS officers particularly in relation to Full Council presentations			
Poor project governance	• Insufficient information flow to decision makers • Slow or overturned decision making • Failure to grasp or create opportunities	Seek clarity of Delegated Authorities of TS and CEC representatives attending Board meetings		Aug 06	**Graeme Bissett A** **Geoff Gilbert B**

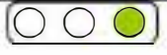
Risk Description	Effect(s)	Treatment Strategy	RAG Status	Due Date	Risk Owner
JRC model is insufficiently robust to support the Business Case.	• Business case not approved. • Time delay and resultant costs caused by redesign and remodelling.	Intense engagement of TS, CEC and TEL in the development and delivery of patronage, revenue and BCR projections during August and September.		Aug-Sept 06	**Stewart McGarrity A&B**
		Hold meeting with JRC and stakeholders to discuss results to gain confidence in performance.			
		Encourage approval for tram to be given appropriate priority at junctions during operation.			
		Scenario modelling of estimate			
If there is inadequate progress on the operational system including bus/tram integration, development of network service pattern and TEL Business Plan may not be sufficiently robust.	• Delay to JRC programme. • Reworking of Plans or poorly developed Infraco arrangements with consequential delays due to re-working/change. • Increased operating costs and loss of potential revenue.	Develop clarity on the role and planned deliverables of TEL to bring about integration including development of ticketing strategies and bus/tram service patterns.		Aug 06	**Neil Renilson/ Bill Campbell (TEL) A** **Stewart McGarrity A**
		Model integration plans through JRC with rigorous review process using LB knowledge.			
		Identify optimal position for a combined tram/bus position.			
		Prepare TEL Business Plan (incorporating business case tram for system) with development of necessary policies to cover operations.			
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	• Possible showstopper. • Delays and increase in out-turn cost may affect affordability.	Ensure close and continual interactions with TS and CEC to establish funding delivery confidence and agreement.		Oct 06	**Graeme Bissett A** **Geoff Gilbert B**
		Confidence required in contingency figures.			

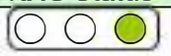
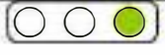
Risk Description	Effect(s)	Treatment Strategy	RAG Status	Due Date	Risk Owner
Agreement on financial over-run risks sharing has not been reached between CEC and TS due to doubts over costs staying in budget.	• Potential showstopper to project if agreement is not reached.	Hold discussions with CEC & TS to ensure adequate release of funds at appropriate periods of time.		Dec 07	**John Ramsay (TS) A**
		Understand commitments by TS and CEC re: 1A and 1B			
		Facilitate agreement between CEC and TS.			
Uncertainty about requirements for wider area modelling and need and extent of construction works required on road network	• Increased construction cost. • Delay while additional funding is found.	Clarify and agree boundaries of scope and funding provision between TS and CEC		Oct 06	**Willie Gallagher A** **Trudi Craggs B**
Failure to reach a suitable agreement with CEC regarding: a. Roads maintenance responsibility where the tram has been installed in CEC maintained roads; b. What is and is not realistically within the scope of the tram infrastructure delivery contract; c. The way in which tram UTC priorities are handled at key junctions.	• Delay to project while agreement with CEC is reached. Sacrifices being made to ensure agreement is concluded.	Heads of Terms in place by end Oct		Dec 06	**Willie Gallagher A** **Trudi Craggs B**
		Final agreement to be approved by Roads Authority, CEC Promoter, CEC in-house legal and tie			
		Final alignments in place			
Delay in land acquisition due to uncertainty of political commitment to scheme.	• Delays to Infraco and the overall Tram project.	Achieve approval as part of the Draft Final Business Case 1		Dec 06-Feb 07	**Willie Gallagher A** **Susan Clarke B**
		Develop alternative programme scenarios and commentary.			
		Manage the political risk and enfranchise all political stakeholders in the benefits of Tram.			
Business case is not approved during February 2007 due to lack of	• Delay and resultant cost	Maintain procurement programme to deliver critical business case inputs		Feb 07	**Stewart McGarrity A**

Risk Description	Effect(s)	Treatment Strategy	RAG Status	Due Date	Risk Owner
political commitment due to impending elections until Summer 2007.	impacts (inflation) on total cost. • Political support may evaporate.	Managing expectations on the part of TS and CEC as to the certainty with respect to costs which are reflected in the business case.			**Bob Dawson B**
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.	• Failure to achieve most effective commercial solution • Delay in resolution of Agreements	Engage with Transdev to ensure adjustment to DPOFA and negotiate requirements.		Ongoing	**Graeme Blissett A** **Alasdair Richards B**
Negative PR coverage due to perceived gaff in project	• Damage to tie's reputation • Loss in confidence of tie's delivery • Funder/promoter dissatisfaction	Control confidential information and closely monitor FoI(S)A requests		Ongoing	**Suzanne Waugh A**
		Develop relationship with press with support for PR advisors to control stories			**Mike Connnelly B**

Tram – Project Risks

Risk Description	Effect(s)	Treatment Strategy	RAG Status	Due Date	Risk Owner
Unacceptable or inaccurate assumptions are used during JRC modelling and SDS design is based on the model.	• Runtime performance requirements are not achieved. • Business case is not approved due to doubts over model. • Delay during remodelling and redesign resulting in cost and time impacts.	Continually monitor JRC output through close interaction and progress meetings.		Sep 06	**Stewart McGarrity**
		Assumptions Approvals process.			
		Ensure regular interaction with stakeholders to keep them informed of progress and expected model results.			
Infraco tender documents are not issued on time	• Delay to Infraco contract award and whole project progress. • Potential showstopper due to cost and loss of political will.	Continue to work on developing documents to issue on schedule and conduct tender and ongoing negotiations indicating the phased release of design information		Oct 06	**Bob Dawson**
		Identify what information is critical to pricing by Infraco.			
		Procure legal advisor commitment to documents and deadlines set (action complete).			
		Take on additional resource if necessary and appropriate.			
		Ensure that governance structure facilitates fast decision making, review of documents and agreement to procurement strategy by stakeholders			
Infraco tenderers seek extensions of time during tender period	• Delay to market pricing and confirmation of business case capex requirements	Agree bid programme with bidders and manage them to deliver to agreed dates		Aug-Sep 06	**Bob Dawson**

Risk Description	Effect(s)	Treatment Strategy	RAG Status	Due Date	Risk Owner
Third party consents including Network Rail, CEC Planning, CEC Roads Department, Historic Scotland, Building Fixing owner consent is denied or delayed.	• 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-Oct 06	**Trudi Craggs**
		Identify fallback options			
SDS deliverables are considered to be below quality levels required or late in production	• 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. Consider inclusion of services within Infraco agreement.		Sept 06-Oct 06	**Geoff Gilbert**
Insufficient planning of procurements and controls on management and contract costs.	• Weak procurement plan • Cost creep • Damage to reputation	Present update on procurement plans		Sept 06	**Geoff Gilbert**
		Closely manage expenditure including examination of opportunities for value engineering, influence of change and optimisation of value for money			
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.	• Increased price of bids • Withdrawal of bidders during bid process	Make risk allocation clear to bidders		Oct 07	**Bob Dawson**
		Identify feasible alternatives to risk allocation and allow negotiation of risk allocation			
Infraco tender returns are outside forecast estimates and business case capex limit	• Draft Final Business Case requires major change and update • Business case not sustainable • Confidence is lost by	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			

Risk Description	Effect(s)	Treatment Strategy	RAG Status	Due Date	Risk Owner
	Funders and politicians	Discuss contingency options with Funders and politicians			
Delay to early commencement (Jan 07) of depot works at Gogar	• Potential delay and increased cost should longer timescale	Resolve whether or not Leith alternative is viable		Oct 06	**Susan Clark**
		Gain TS agreement for early commencement of works including ground investigation, earthworks, emergency access road			
tie fails to secure sufficient resource to manage all relevant processes. Especially issue of ITN, issue of Business Case and evaluation of Infraco tenders by required time.	• Failure to advance processes at required rate resulting in programme delays and missing of milestones	Flexible approach to resourcing.		Ongoing	**Colin McLaughlin**
		Draw on TSS support for relevant work streams.			
Infraco refuses to accept or fully engage in novation of SDS and as a consequence award is successfully challenged	• Significant delay to delivery of Tram • Loss of Reputation • Significant extra costs	Consult with legal		Feb 07	**Bob Dawson**
		Introduce Infraco bidders to SDS as early as possible			

tie Limited
ETN PROJECT PROGRESS REPORT - PROJECT SPEND TO MAR 2007
PHASING OF VALUE OF WORK DONE
Date:- 08/09/06

Appendix C

Cumulative Approved Budget
[redacted]nd Budget

Figures in '£000s		Approved Budget	Cumulative Approved Budget vs Current Forecast Val									
		Apr - Dec 06	Spend/Bud to date (Jul)	Aug-06	Sep-06	Oct-06	Nov-06	Dec-06	Jan-07	Feb-07	Mar-07	07/08
IMPLEMENTATION												
1	tie RESOURCES	2,612	1,152	1,439	1,732	2,026	2,319	2,612				
						3,382	3,912	4,441	4,970	5,500	6,060	
2	DPOF	540	240	300	360	420	480	540				
3	LEGALS	2,072	1,016	1,236	1,447	1,655	1,864	2,072				
										2,499	2,681	
4	SDS	11,478	6,385	7,106	8,127	9,266	10,495	11,478				
											13,002	
5	JRC	638	468	547	596	612	624	638				
										702	702	
6	TSS	3,585	1,657	2,105	2,105	2,894	3,234	3,585				
										4,034	4,424	
7	UTILITIES											
8	DESIGN SUPPORT											
9	3RD PARTY NEGOT			78	118	158	198	210	235	260	280	
10	LAND & PROP	72	32	40	48	56	64	72				
11	TROs											
12	COMMS / MKTG	461	154	211	269	346	412	461				
								550	593	635	665	
13	TEL	585	260	325	390	455	520	585				
										658	723	
14	SERV INTEG PLANNING	250	120	150	180	210	230	250				
15	PUK	54	24	30	36	42	48	54				
								62	68	74	80	
16	FINANCIAL ADVISORS	60			20	40	60	60				
						118	118	118	138	158	158	
17	INSURANCE	994	57	59	60	990	992	994				
18	CONSTRUCTION											
	Utilities incl MUDFA	6,260	390	630	930	6,000	6,130	6,260				
	Infraco										50	
	Tramco											
99	OTHER	45	20	25	30	35	40	45				
						52	57	62	67	72	77	
SPECIFIED CONTINGENCY		2,971	1,198	1,420	1,678	2,505	2,751	2,971	3,615	4,163	6,333	528
BUDGET TOTAL		32,678	13,173	15,624	18,010	27,552	30,264	32,678	30,453	34,702	46,355	528

tie Limited

TRAM Project
(Commercial In Confidence)

Paper to : **Tram Project Board**

Subject : **Health & Safety Management Arrangements**

Date : **15th September 2006**

1.0 Background

1.1 Governance changes to the Tram project have required a review of the current safety management arrangements for the project during the design and construction phases.

1.2 This paper outlines the arrangements for safety that will exist for the project in line with these recently agreed governance arrangements.

2.0 Governance

2.1 The Promoter, CEC, has delegated all its powers for successful delivery of the project to TEL. Any reserved powers are documented but do not include the reservation of any safety arrangements for the Tram Project. Transport Scotland is the Principal Funder.

2.2 TEL, in turn, has delegated these responsibilities to **tie** Ltd as the project management organisation for the project. It is considered that TEL would remain the "client" in terms" of the CDM regulations as the Tram Project Board is not a legal entity although it will make decisions on behalf of TEL (the client).

2.3 **tie** Ltd is responsible as the "client's agent/second client (for the purposes of the CDM regulations) and client/employer (for general health & safety regulations)" for the overall project safety management for the development and implementation of the Tram Project. **tie** Ltd have no responsibility for operations or maintenance of the network after handover.

2.4 Tram Project Board is made up of representatives of TEL, CEC, Transport Scotland and **tie** and has decision making authority for the project. Each organisation will use the Tram Project Board as the mechanism to ensure that safety is being managed on their behalf effectively by **tie** Ltd. The Tram Project Board is an independent body with full authority delegated to it by the CEC and Transport Scotland to execute the Tram Project. The Tram Project Board is not a legal entity and is effectively a high level decision making body for the coordination and review of decisions to be made by representatives from the Tram Project, namely the Promoter, the Principal Funder and the party delivering the Tram Project.

3.0 Safety Responsibilities

3.1 **tie** Ltd is responsible for the Health and Safety Management system under which the Tram project will operate. This will include processes for reporting and audit. TEL will require a corporate safety management system which covers office-based activity and must plan to develop a safety management

system in time for mobilisation and operational commencement of the Tram Project.

3.2 To ensure that safety is being managed effectively, the Tram Project Board will ensure that safety is a core agenda item for each meeting and will ensure that a safety report is tabled at each meeting. The Tram Project Board will also ensure that the results of regular audits for the Tram project are reviewed annually and implemented where appropriate. It is considered that the composition of the Tram Project Board is such that **tie** Ltd will not require to report to CEC, Transport Scotland and TEL in addition to the Tram Project Board.

3.3 **tie** Ltd will be responsible for reporting safety at each meeting and this will include both pro-active and reactive reporting as well as audit reporting. A draft of this report is provided.

3.4 Where changes are submitted for Tram Project Board approval, or changes are requested by the Tram Project Board, **tie** Ltd (and the appointed CDM third parties and their advisors) will be responsible for the identification of any impact that these changes will have on safety and for any mitigation that can be put in place to reduce this safety impact. Tram Project Board will be responsible for ensuring that they understand these impacts and will be responsible for any decisions made in this respect. **tie** Ltd will be responsible for implementing the decision made, along with any mitigation measures agreed by the Tram Project Board. CEC and Transport Scotland representatives of the Tram Project Board may withhold approval of matters within their powers for further reference in their respective organisations. Therefore, notwithstanding that CEC has delegated all its powers to TEL (see 2.1) the composition of the Tram Project Board is such that CEC can still influence the decisions of the Tram Project Board and the delivery of the Tram Project. Transport Scotland holds the same authority as CEC.

It is essential that the enforcement of criminal sanctions are considered in relation to safety responsibilities and consequential liabilities. It is not possible to contract out of criminal liability or personal directors/managers liability. The Tram Project Board is not a shelter from health and safety liabilities or a clearing house of liabilities. In contrast, a fiscal may consider all parties (CEC, Transport Scotland, TEL and **tie** Ltd) to together constitute the client/employer entity and may not distinguish between the distinct corporate/legal relationships created by the governance structure. It is considered that the new revised governance structure which involves CEC, Transport Scotland and TEL in the decision making process creates an "inclusive" framework whereby all the parties attract and therefore need to recognise health and safety liabilities through the governance decision making process.

The creation of an appropriate safety responsible structure, safety management system and culture will form a key defence to any prosecutions assuming all procedures have been followed. Clearly there would also be a number of other parties involved in a safety incident, for example contractors, sub-contractors, agency staff, designers, planning supervisors and third parties.

3.5 TEL becomes responsible for the operation of the system via the various contracts such as DPOFA etc and should plan to implement a H&S Management system prior to commissioning to cater for this handover to TEL.

4.0 Recommendations

4.1 The Tram Project Board is requested to note and agree the contents of this report.

4.2 The Tram Project Board is requested to note the contents of the reporting format to be submitted in future

Proposed	Susan Clark Delivery Director	Date:- 18/9/06
Recommended	Graeme Bissett Strategy & Planning Director	Date:- 18/9/06
Approved	..... Tram Project Board	Date:- ……

Summary Monthly HSQE Report

AUGUST 2006

From: Susan Clark	Date: 18/09/06

SAFETY HIGHLIGHTS

- Signed off **tie** Safety policy
- Completed design and final draft **tie** Safety Management Systems
- Launch of **Safe-tie** – accelerated safety cultural programme that will be the foundation for **tie** safety leadership and safety delivery through the projects
- 6 safety training interventions

SAFETY INITIATIVES

1. **Safe-tie** - **Safetie** is about people choosing to work together to create a safe environment whatever the circumstances. It requires:-
   - A culture where no injury is acceptable
   - An attitude of respect and concern for people
   - The discipline to apply necessary rules and procedures
   - Behaviour that is consistent with personal leadership
2. Improved office layout and working environment
3. Improved security and access control

SAFETY ALERTS

- None issued

SAFETY MEMORANDUM

- None issued

HSE ACTION

- Commitment to meet with HSE and HMRI October to update and validate

FIRES, ENVIRONMENTAL, INCIDENTS AND DANGEROUS OCCURENCES/INCIDENTS THIS MONTH.

- None reported

REPORTING AND AUDITING

KPI	1. EHS Plan Review	2. Project Specific Induction	3. tie Safety Passports	4. Reporting of Accidents/hours worked	5. Toolbox Talks	6. Safe-tie Compliance
No	0	48	0		0	
% COMPLIANT	0%	45%-0 wrong 43%-1 wrong 2%-7 wrong	0%	0%	0%	%
AUDITS (% Compliant)	**1.No**	**2.Planned v Actual**	**3. NCR's**	**4. Close Outs**	**5.Actions Oustanding**	
SAFETY	0	%	0No	%	%	
ENVIRONMENT	0	%	0No	%	%	
QUALITY	0	%	0No	%	%	
MONITORING (% Compliant)	**1.No**	**2.Planned v Actual**	**3. KPI's**			
SAFETY	0	%	0%			
ENVIRONMENT	0	%	0%			
QUALITY	0	%	0%			

tie

AUGUST 2006

		Period	Year to date
	SAFETY DATA		
	Statutory Reporting RIDDORs		
	Fatal	0	0
	Major Injuries	0	0
	Lost Time Reportables	0	0
	Notifiable Dangerous Occurrences	0	0
	Network Rail RIDDORs	0	0
	TOTAL	**0**	**0**
	Other non-RIDDOR events		
	Accidents - Lost Time	0	0
	Accidents - Other	0	2
	Incidents	0	0
	Network Rail Non-RIDDOR Accidents	0	0
	TOTAL	**0**	**0**
	Hours Worked		
	Total hours worked - SITE	0	0
	Total hours worked - NON-SITE	11355	0
	Network Rail hours worked	0	0
	TOTAL	**0**	**0**
	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	**0**	**0**
	Non-Site Hours Worked to Date	**0**	**0**
	Accident Performance Rolling		
	AFR Rolling		**0**
	Reportable Injuries / Lost time accidents Rolling		**0**
	Dangerous Occurrences Rolling		**0**
	Site hours worked Rolling		**0**
	Non-Site Hours Worked Rolling		**0**

TRAINING

COURSE	Tie Employees	Consultants	Contractors	Others	TOTAL
Introduction to Health and Safety	17	0	0	0	**17**
Senior Managers Health and Safety	4	2	0	0	**6**
Fire Safety	5	0	0	0	**5**
First Aid	11	0	0	0	**11**
Manual Handling	5	0	0	0	**5**
COSHH	5	0	0	0	**5**

QUALITY

- No issues

ENVIRONMENT

- No issues

OCCUPATIONAL HEALTH

- No issues

tie limited

Edinburgh TRAM Project
(Commercial In Confidence)

Paper to : **Tram Project Board**

Subject : **TEL business plan / draft final business case (DFBC) Status & Progress Report as at 18th September 2006**

Date : **18th September 2006**

1. OVERALL DELIVERY PROGRAMME

The programmed date for delivery of the complete DFBC document remains **9th November 2006** (6 weeks prior to full Council meeting on 21 December 2006).

A critical element of the programme is the approval of the *TEL Business Plan* by the Tram Project Board (TPB) on **24th October 2006**. The intended format and content of the *TEL Business Plan* document is considered at 3. below and the elements of the DFBC which are not part of the *TEL Business Plan* (i.e. for the most part related to project procurement and delivery) are discussed at 4. below.

As previously advised to all participants, the key meetings/presentation dates leading up the TPB considering the *TEL Business Plan* are as follows:

- **4th Oct – MRSG:** Presentation by JRC/**tie**/TEL of progress on final *TEL Business Plan* – resolve any major issues prior to finalisation.
- **16th Oct – MRSG:** Focussed workshop led to validate and present the 'final' patronage/revenue projections and Benefit Cost Ratio analyses prior to BPIC sub committee
- **19th Oct - BPIC Sub-Committee of TPB:** Presentation by JRC/**tie**/TEL of final *TEL Business Plan* results including written JRC reports and TEL financial forecasts.
- **24th Oct – Tram Project Board:** Presentation by JRC / **tie** / TEL of final *TEL Business Plan* results including written JRC reports and TEL financial forecasts

NB – The MRSG (Modelling & Revenue Steering Group) is the primary forum at which JRC modelling outputs have been and will be presented at a working level before they are subsequently presented to the BPIC Sub-Committee and TPB. This level of engagement is designed such that those attending the MRSG from CEC and Transport Scotland will specify what further information and clarifications they will require to effectively brief members of the TPB in advance.

2. JRC PROGRESS

The significant deliverables on the programme since the TEL Board in August were as follows:

31st August – Delivery by JRC of draft STAG2 report (excluding modelling inputs)

JRC delivered a draft STAG2 report on programme. Following internal review by **tie** it was considered that the draft required some editing and inserts, particularly with respect

to environmental and other documents which emerged during the Parliamentary approval process, the latest service integration plans (with buses) and alignment with the development the Functional Specification for the Tram which is being presented to the TPB on 25th September.

It is anticipated that an updated draft (still excluding modelling outputs) will be available for submission to Transport Scotland / CEC by 22nd September.

5th/6th Sept – Presentation to MRSG of preliminary modelling results
7th Sept – Presentation to BPIC Sub-Committee of preliminary modelling results
8th Sept – MRSG briefing to JRC re further modelling scenarios to be undertaken

All of these sessions took place as anticipated. The overall conclusions reached are that the JRC modelling suite is fit for purpose but that at that stage was not reflecting expected outcomes due to a need to revisit a wide range of inputs such as the underlying level of economic growth / demand and the impact that demand has on journey times for all road users, both in a future without Tram and in the case where the Tram is introduced.

Since 8th September, JRC have been working to a defined programme of amended inputs and further tests as identified by the MRSG. At the time of writing the revised results are not developed enough for distribution to the TPB but a comprehensive briefing on further progress will be given to the TPB meeting on 25th September.

JRC modelling and design development & approval

As previously reported, the JRC model as it currently stands is consistent with the Preliminary Design of phases 1a and 1b of the Tram as developed under the SDS contract to date. There are elements of the Preliminary Design which are still under development and where the impacts on the TEL Business Plan / Tram Business Case will require to be assessed. The most significant of these are:

Impacts on other road users – The further analysis currently being undertake by JRC incorporates an examination of the way the Tram will impact upon other road users (buses and cars) and the ways in which those impacts can be mitigated where they constitute a disbenefit (i.e. increased journey time as a result of introducing Tram). This certainly includes an examination of the junctions on the Tram route and the way in which the signalling at those junctions might be further optimised or the priority which Tram receives at those junctions reduced. It may also include an examination of wider area traffic impacts and the resolution of these will require:

- An identification of the necessary rectifications and an assessment of the likely costs thereof.
- Consideration as to whether such costs should be included in the scope of the Tram project.

Design changes in process – The SDS Preliminary Design did not include certain design changes which are currently in progress and which might have an impact on the *TEL Business Plan* / Tram DFBC, most significantly:

- Interchange Proposals
- St Andrews Square - realignment to East Side

The potential impact of these design related factors on the *TEL Business Plan* / Tram DFBC will be reported upon by JRC as art of their final report in October.

3. FORMAT AND CONTENT OF THE *TEL BUSINESS PLAN*

The development of the TEL Business Plan document (to be presented to the TPB in October) is proceeding in parallel with the JRC modelling. The format and content is described in detail in the Appendix to this report. It should be noted that the JRC report on patronage and revenue as well as the STAG2 report complete with Benefit Cost Ratio analyses will be included as appendices to the *TEL Business Plan*.

For clarity, the TEL Business Plan will include a full appraisal of the incremental economic costs and benefits and impact on forecast net TEL cash flows of delivering phase 1b as well as phase 1a.

4. OTHER DFBC CONTENTS

The table at Appendix 2 documents the status of the delivery of the complete DFBC with reference to the suggested contents list previously provided by Transport Scotland. This table reflects that the workstreams to deliver them are defined and both Transport Scotland and CEC are receiving material or are otherwise engaged in its production.

Appendices

1. TEL BP – Structure & section headings
2. DFBC - Progress against section headings

Appendix 1
TEL BP – structure & section headings

0.0	**Executive summary**
1.0	**Objectives of TEL as a business** *Setting out the key corporate objectives for TEL as provider of an integrated public transport network in Edinburgh. This section will explain TEL's high level ambitions in relation of market position, operational profitability and peer standing. The objectives will be linked to CEC objectives as the major shareholder of TEL and promoter of the tram project. As such, non-quantitative objectives will relate to the topic areas of:* • *Promoting modal shift* • *Travel accessibility* • *Public safety* • *Environmental benefits* • *Urban development and mobility* • *Reduced congestion* • *Social inclusion* Includes a summary of the success criteria for the business
2.0	**Parameters in which TEL operates** *Describes the parameters in which the integrated TEL business will operate. This will include taking stock of the current LB market position, projected impact of tram and market outlook plus making reference to overall PT growth assumptions as provided by the JRC modelling output. Other parameters arise from TEL & stakeholder requirements. For example, these include a description of the criteria to be used in assessing the financially and economically viability of the network. Also included will be high level references to the operational deliverability of the integrated business – key links to Risk section, JRC outputs, Project scope sections of DFBC.* *Includes a programme of key events/milestones*

3.0	**Relationship structure with CEC**
3.1	**- Governance structure**
3.2	**- Operating agreement TEL – CEC** *Following on from current governance proposals and the relevant governance sections of the DFBC, this section outlines practical aspects of the relationship between CEC and TEL from an operational perspective. It identifies at a high level the principles for operating agreements which are to be established. It will also consider specific risks and opportunities arising from the relationship, particularly from a governance and taxation perspective. Links to Governance section of DFBC and Asset section of TELBP*
4.0	**Tram Network scope & service pattern decisions** *Section to provide greater detail on the options for network scope and service patterns and how the selection a particular scope and service pattern is to be achieved. This section will include a tabled summaries of the JRC & Financial model outputs*
5.0	**Revenue targets & strategies**
5.1	- **Patronage targets** *Detailed description of the patronage growth assumptions and projections following from the JRC model testing of the identified scenarios. Includes an explanation of the sensitivities tested and their impact on patronage projection. Section will provide high level benchmarking against other schemes and what lessons have been learned.*
5.2	- **Service patterns & how they meet Edinburgh's Public Transport needs** *Description of the preferred service pattern for trams and bus and reasons for their preference. This section will outline how these service patterns have been developed, what the underlying assumptions and sensitivities are and how they will meet the objectives of TEL / CEC and the needs of the travelling public.*
5.3	- **Interchange effects** *Clear explanation of the rationale for the chosen interchanges, their key features and the impact they have on the network in terms of patronage & revenue projections and the associated operational implications incl. costs.*
5.4	- **Park & ride** *Discuss opportunities (identified & future) from Park & Rides, impact for modelling purposes and associated operational implications, incl. costs*
5.5	- **3rd party responses** *Considers likely responses from other public transport operators, assess the impact of potential competitive response on key sections of the network and outlines how the risks to TEL can be managed. The section will also discuss opportunities for integration with other operators*

5.6	- **Revenue targets** *Based on the JRC model output and revenue yield assumptions. The assumptions and the sensitivities tested are to be described and details of the summary revenue projections used in P&L / Cashflows will be tabulated in this section. It will also contain a discussion on the assumptions for concessionary travel and funding support for a concessionary scheme in a manner which identifies the financial effect.*
5.7	- **Fare strategy & ticketing** *Presents the key elements of the proposed fare strategy and how it supports the modelled revenue targets. This section will set out how the approach to fares fits the stated corporate objectives and minimises risks from competitive responses. Includes proposed ticketing regime and current thinking on ticket machines*
5.8	- **Revenue protection scheme** *Outlining the proposal for 100% ticket inspection regime, this sections explains the rationale for the proposal and results of costs & revenue sensitivities tested. Includes benchmarking against experience from other schemes, and proposal for level of penalty fares charged for on-board ticket purchases.*
5.9	- **Other income opportunities** *This section sets out the scope and assumptions for Advertising and auxiliary income opportunities and includes projections for the integrated network.*
6.0	**– Benefits realisation plan** *The benefits realisation plan will provide clarification on how TEL – (incl. on behalf of CEC) - intends to crystallise the benefits of the integrated network. These include financial and economical benefits as well as the qualitative aspirations of CEC as included in the corporate objectives. The plan will include detail of the factors against which the achievement of the benefits will be measured and how the monitoring will take place.*
6.1	- **Strategic marketing & comms** *Purpose of this section is to explain the approach to strategic marketing and communications once TEL commences operating the integrated network. In addition to the operational strategies, it will also set out how the marketing / comms approach will ensure the patronage and other benefits of the integrated network will actually be realised, thus supporting the benefits realisation plan. Based on the existing Marketing & Comms strategies, following on from the approach established during planning & construction*
7.0	**Operational targets & strategies**
7.1	- **Operational performance regime:** This section outlines the strategies to achieve the operational targets for the network, establishes what constitutes critical success factors for the business – linked to the corporate objectives & key contracts (DPOFA/TramCo/InfraCo). Quantitative and qualitative operational KPI's for TEL are to be summarised – including measures for reliability, cleanliness, information availability, provision of a secure environment etc.
7.2	- **Operating costs:** *Section to contain a summary of the methodology used to prepare the cost forecasts, key assumptions and sensitivity factors. Details of the summary costs projections used in P&L / Cashflows will be tabulated here and linked to the assumptions in this & other sections of the TEL business plan and the Tram business case. The section will also identify key risks associate with the costs projections, such as external cost pressures (e.g. fuel, labour, pension, insurance) and outline opportunities to mitigate these risks.*
7.3	- **LCC costs and capital investment strategy** *Section to contain a summary of the methodology used to prepare the cost forecasts, key assumptions and sensitivity factors. Details of the summary costs projections used in P&L / Cashflows will be tabulated here and linked to the assumptions in this & other sections of the TEL business plan and the Tram business case. The section will also identify the key risks associate with the costs projections and outline opportunities to mitigate these risks.* ***Note: the question of capital investment/ lifecycle replacement of tram assets forms a separate part of the Tram DFBC?***

8.0	**HR plans, Industrial relations and succession planning** *Description of high level HR strategy & plans for TEL and its constituent part (LB & Tram). Based on approved position paper, this section summarises the preferred strategy for resource recruitment, training and retention. It outlines the key assumptions which support staff costs estimates within the Bus & Tram operating costs and the Management & Admin expenditure of the TEL operating plan. The section also addresses the potential cost risks arising from wage & salary disputes and what sensitivities have been considered.*
9.0	**Support systems** *High level explanation of key functional supporting system. These relate to the control centres for bus & tram operations, plans for key interfaces between systems and the preferred strategy for an integrated (?) back office system. Section sets out assumptions in support of costs projection within Operating and Maintenance & LCC costs*
10.0	**Safety Management & Quality Assurance** *Sets out TEL's approach to safety management to satisfy its legal and statutory responsibilities in relation to TEL / Tram & Bus. Included in this section will be a proposal for the integrated risk & QA management system including relevant audit processes, relationship with sub-contractors and associated responsibilities Links to governance and risk sections*
11.0	**Risk & Insurance provisions** *Outlines key elements of risk management plan, including structured approach to assessing major business risks and developing disaster recovery plans. Section will also explain the detailed insurance provisions for TEL, Bus and tram*
12.0	**Assets** *Outline of the ownership structures for TEL's assets, describing key financial, legal and operational obligations arising from the different ownership arrangements. This will cover the methodology of valuation of the tram and bus assets, their respective treatment for depreciation purposes and reference to funding cashflows for heavy maintenance and lifecycle costs. This section will also address the key tax issues for an agreement between TEL & CEC under which CEC will grant a licence to use the tram assets*
13.0	**Financials** - P&L - - Cashflows *All of the above for combined TEL + Tram & Bus business, providing a profile of operational results for 30 years*
	APPENDICES - JRC- Patronage, Revenue & Risk analysis - STAG - TEE / BCR analysis - Assumptions register (contents to be defined)

Appendix 2
DFBC – Progress against section headings

DFBC Section	Status / Progress / Responsibility
Executive Summary	
Scheme justification - History of scheme development - STAG for Ph1a and for Ph1a+b	 - Will be drawn directly from previous documents and in particular the OBC of March 06 - Executive Summary from the STAG2 report being delivered by JRC and which will be incorporated into the DFBC as an appendix
Governance - Governance arrangements - Organograms for Governance and delivery team - Gateway Review report and associated action plan	 - Project Governance arrangements being presented to 25th September TPB and documents will be summarised for inclusion in DFBC. Organograms already exist - to be included as appendices? - Gateway review programmed for 25-27 September
Project scope - Functional spec Ph1a and Ph1a+b - Phasing plan function specs Ph2 and Ph3 - Interchange proposals	 - Functional Spec for Ph1a and Ph1b compete and being presented to 25th September TPB. Document will be updated to reflect Ph2 and Ph3 but it will conclude that timing of further construction beyond Ph1 entirely dependent upon availability of funding in the future - Interchange proposals currently being designed by SDS. Effectiveness of interchanges dealt with specifically in section 5 of *TEL Business Plan* (see appendix)
Procurement Strategy - Contractual structures for delivery and operation - Negotiation strategy	 - Outline papers on principles of the procurement strategy are being presented to the 25th September TPB. - Overview of Infraco document structure, preparation / approval process being presented too 25th September TPB – engagement of TS/CEC through Infraco stakeholder group.
Construction and system integration - Project execution plan - Environmental management plan - Approvals and 3rd party works strategy - Systems integration strategy and implementation plan	 - Under preparation by **tie** implementation team - Being developed by SDS/TSS - Papers on Network Rail immunization and land and property acquisition being presented to 25th September TPB. Documentation of Approvals and TRO process in progress - Systems integration strategy is integral to Procurement Strategy as above.

Operational plan - TEL Business Plan - JRC modelling report - Benefits realisation plan	- Operational plan in its entirety is covered by the *TEL Business Plan* under preparation (see 3 above and Appendix to this paper) and which will be presented to TPB in October - Engagement of TS/CEC through MRSG
Financial analysis - Cost report - Cash flow and funding - Affordability analysis - Risk allocation CEC / TS - Whole lifecycle cost / funding of major renewals	- Updated cost estimates and related cash flow profile programmed to be complete by 16th October following which they will be incorporated into an affordability analysis against visible funding for presentation to TS/CEC and then October TPB. - CEC / TS risk allocation to be discussed in principle at 25th September TPB - Paper on scope / definition of lifecycle costs (ie maintenance costs) in relation to Tram assets as distinct from major renewals to be forwarded to TS/CEC for consideration. *TEL Business Plan* assumes lifecycle costs funded from net TEL revenues.
Risk Management - Comprehensive risk management strategy	- Under preparation by **tie** implementation team

Programme - Detailed programme to Financial close - Best available timetable for construction and commissioning	- Under preparation by **tie** implementation team
Communications Strategy - Media strategy - Stakeholder liaison - Public liaison	**-** Being updated as necessary by **tie** communications team. See also 'Hearts & Minds' campaign initiated in August

tie Limited

Edinburgh Tram Project
(Commercial In Confidence)

Paper to : **Tram Project Board**

Subject : **Year to March 2007 Expenditure**
Review of Possible Outcomes

Date : **18th September 2006**

Background

1. On 23rd August, following the quarterly panel review meeting with Transport Scotland **tie** submitted a reforecast of outturn expenditure for the year ended 31 March 2007 on the basis of an extension of current Tram approved activities till the end of March 07 and to consider items of expenditure which were not included in the scope of the existing Grant of funding. The additional scope items do not include actual earthworks or roadworks.

2. The report of 23rd August is reproduced at page 2 (and appendices). The report reflects a base cases forecast of £40m for the year to March 2007 including land acquisitions amounting to £5m and other items not included within the scope of the original Grant amounting to approximately £2m. The report further notes that if the land acquisition programme were to proceed in full then outturn expenditure for the year might be as much as £51m.

Implications

3. Given that the Draft Final Business Case will not be given final approval until early 2007, an early agreement with Transport Scotland to the extension of funding through to March 2007 would be welcome.

4. The outturn expenditure for the year to March 2007 is very sensitive to whether CEC and Transport Scotland are happy to proceed with the land acquisition programme in accordance with the process and timescales laid out in the paper entitled **Land Acquisition Assumptions** which is also presented to TPB.

Recommendation

5. It is recommended that the Tram Project Board endorses the reforecast as a basis for decision making by Transport Scotland.

Proposed	Geoff Gilbert Commercial Director	Date:- 18/9/06
Recommended	Andie Harper Project Director	Date:- 18/9/06
Approved	..... Tram Project Board	Date:- ……

Edinburgh Tram Project
(Commercial In Confidence)

The following is an extract (such that it deals with Tram only) from the paper submitted to Transport Scotland on 23rd August:

Year to March 2007 Expenditure forecasts on Tram Project
Review of possible outcomes - 23 August 06

Following the quarterly panel review meetings with Transport Scotland (TS), **tie** was asked to present a reforecast of outturn expenditure for the year ended 31 march 2007 on its Transport Scotland funded projects. The forecast was to reflect an extension of Tram approved activities till the end of March 07 although the current Grant funding expires at the end December 2006. The instruction was also to consider items of expenditure or workstreams which were not included in the scope of the existing Grants of funding.

The results of the review insofar as Tram is concerned is presented in the table below and in the detailed tabulation at *Appendix 1.*

As a sensitivity analysis and to aid decision making we have also presented a range of possible outcomes including a Base (most likely) case and both an optimistic (i.e. higher expenditure) scenario and a pessimistic scenario. The assumptions used to produce the range of outcomes and the factors affecting where within the range the outturn expenditure might fall are discussed below.

Year to 31 March 2007	£000's
Funding Currently Approved	32,678[1]
Forecast per July Progress Report	25,012[1]
This review:	
Base case reforecast	40,022
Optimistic	51,432
Pessimistic	32,168

[1] Tram funding approved and forecast per the July progress report are for the nine months ending on 31 December 2006. Tram costs presented under the 'This review' headings are for the year ending 31 March 2006 as requested by Transport Scotland.

Base Case

The Base case extends the forecast of expenditure into the last quarter of the year on existing approved activities including design (SDS) and related activities. The Base case also includes a reforecast of manpower and overhead costs to reflect a strengthening of the **tie** team both at Project level and at management level.

The Base case for SDS spend has been set at a conservative level to reflect the current rate of progress which the contractor is achieving rather then the level of resource application and productivity the contractor would need to achieve to get back onto their original programme which they are currently some 5 months behind.

The Base case includes £1,964k in respect of previously unapproved items which are detailed as "opportunities" in *Appendix 2* and are those costs (excluding land acquisitions) which **tie** might reasonable expect to be able to spend without actually commencing significant earthworks or roadworks.

The Base case includes an amount of £4,890k in respect of land acquisitions in the period up to March 06. This amount was determined as the level of expenditure on land acquisitions which would bring total forecast expenditure on the Tram for the year to £40m. This is the Base case total as we were informed this is the level to which approved funding for the year might be increased, being the approved funding for the nine months to December of £33m plus £8m being the extent to which grants of funding for the years ended 31st March 2005 and 31st March 2006 were unutilised.

The principle of advance purchases of land (meaning purchased in advance of project approval) has been previously explored as an item of expenditure on an asset which can be realised for cash in the event that the Tram project were cancelled. In consideration of whether any particular plot of land should be acquired as an advance purchase the "realisability" in the3 event of project cancellation would be one of the major criteria to consider.

The Base case does not include any specified contingency.

Optimistic

The optimistic scenario for Tram is one where the amount of funding for the year can be increased above the £40m level to accommodate the purchase of 100% of the land required to construct phase 1a at an estimated cost of £16.5m. This would increase total expenditure for the year to £51.4m

Pessimistic

In the pessimistic case there are no approved advance purchases of land at all and no approval of the £1,964k additional "opportunities" items as per *Appendix 3*. In addition this scenario includes a prudent 12% (£1m) reduction in spend on design activities (SDS) in the period up to march 2006. This would reduce expenditure for the year to £32.2m

Influence on outturn within the range

tie's strategy is for all land to be acquired by CEC in accordance with a 'General Vesting Declaration' process. In order to acquire land on or before 31 March 2007, this process would require a first notice to land owners to be issued on or before 1 November 2006 with a second and contractually binding notice to be issued by 1 February 2007. **Agreement by CEC to the timing of the GVD process in accordance with this timetable would need to be secured to effect land acquisitions prior to 31 March 2007.**

As well as the application of resources, the outturn cost of design (SDS) is also sensitive to the scope of the services. Our procurement strategy allows for flexibility to reduce the scope of detailed design under the SDS contract where the feedback from our tenderers is that they would prefer to complete the detailed design of elements of the Tram themselves.

tie Limited
ETN PROJECT PROGRESS REPORT - PROJECT SPEND TO MAR 2007
PHASING OF VALUE OF WORK DONE
Date:- 22.8.06

Cummulative Approved Budget

Appendix 1

Figures in '£000s	Approved Budget	Cummulative Approved Budget vs Current Forecast Value									
	Apr - Dec 06	Spend/Bud to date (Jul)	Aug-06	Sep-06	Oct-06	Nov-06	Dec-06	Jan-07	Feb-07	Mar-07	07/08
IMPLEMENTATION											
1 tie RESOURCES	2,612	1,152	1,439	1,732	2,026	2,319	2,612				
					3,382	3,912	4,441	4,970	5,500	6,060	
2 DPOF	540	240	300	360	420	480	540				
3 LEGALS	2,072	1,016	1,236	1,447	1,655	1,864	2,072				
									2,499	2,681	
4 SDS	11,478	6,385	7,106	8,127	9,266	10,495	11,478				
										13,002	
5 JRC	638	468	547	596	612	624	638				
									702	702	
6 TSS	3,585	1,657	2,105	2,105	2,894	3,234	3,585				
									4,034	4,424	
7 UTILITIES											
8 DESIGN SUPPORT											
9 3RD PARTY NEGOT			78	118	158	198	210	235	260	280	
10 LAND & PROP	72	32	40	48	56	64	72				
11 TROs											
12 COMMS / MKTG	461	154	211	269	346	412	461				
							550	593	635	665	
13 TEL	585	260	325	390	455	520	585				
									658	723	
14 SERV INTEG PLANNING	250	120	150	180	210	230	250				
15 PUK	54	24	30	36	42	48	54				
							62	68	74	80	
16 FINANCIAL ADVISORS	60			20	40	60	60				
					118	118	118	138	158	158	
17 INSURANCE	994	57	59	60	990	992	994				
18 CONSTRUCTION											
Utilities incl MUDFA	6,260	390	630	930	6,000	6,130	6,260				
Infraco										50	
Tramco											
99 OTHER	45	20	25	30	35	40	45				
					52	57	62	67	72	77	
SPECIFIED CONTINGENCY	2,971	1,198	1,420	1,678	2,505	2,751	2,971				
BUDGET TOTAL	32,678	13,173	15,624	18,010	27,552	30,264	32,678				

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tie Limited
ETN PROJECT - FORECAST SPEND TO MARCH 2007
SUMMARY
Date:- 23.8.06

Appendix 1

Ref		BUDGET	FORECAST TO DEC 2006			FORECAST TO MAR 2007		VARIANCE
			Costs	Forecast	Forecast	Jan 07 - Mar 07	Apr 06 - Mar 07	
		Apr - Dec 06	to Jul '06	Aug - Dec 06	Total	Forecast	Total	Forecast v Budget
		1	2	3	4= 2+3	5	6=4+5	7= 6-1
	IMPLEMENTATION							
1	tie RESOURCES	2,612	1,893	2,548	4,441	1,619	6,060	3,447
2	DPOF	540	107	250	357	150	507	(33)
3	LEGALS	2,072	817	1,249	2,065	616	2,681	609
4	SDS	11,478	4,633	4,919	9,552	3,450	13,002	1,523
5	JRC	638	221	413	634	68	702	63
6	TSS	3,585	1,144	2,040	3,184	1,240	4,424	839
7	UTILITIES							
8	DESIGN SUPPORT							
9	3RD PARTY NEGOT		53	157	210	70	280	280
10	LAND & PROPERTY	72	6	27	33	4,930	4,963	4,891
11	TROs							
12	COMMS / MKTG	461	107	443	550	115	665	204
13	TEL	585	203	325	528	195	723	138
14	SERVICE INTEGRATION	250	58	30	88		88	(162)
15	PUK	54	32	30	62	18	80	26
16	FINANCIAL ADVISORS	60	38	80	118	40	158	98
17	INSURANCE	994	12	65	77	911	988	(6)
18	CONSTRUCTION							
	Utilities incl MUDFA	6,260	110	1,090	1,200	3,374	4,574	(1,686)
	Infraco					50	50	50
	Tramco							
99	MISCL	45	37	25	62	15	77	32
	SPECIFIED CONTINGENCY	2,971						(2,971)
	RISK							
	SPECIFIED COSTS	32,678	9,470	13,692	23,162	16,860	40,022	7,344
	C/F FROM PREVIOUS YEARS (note 3 refers)	8,035						(8,035)
	FUNDED VALUES	**40,713**	**9,470**	**13,692**	**23,162**	**16,860**	**40,022**	**(691)**

Notes:-
1 Prepared on VOWD basis
2 ( ) denotes saving
3 £8.035m comprises FY 04 - 06 unused funding

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tie Limited
PROJECT SPEND OPPORTUNITY TO END MARCH 2007
Date: 22.8.06

Appendix 2

Item	Description	Total to Mar 07 (£000's)
1	**Base provision - accounted for in current spend profile**	
1.1	mudfa Pre-construction - stakeholder mgnt/des liaison with SDS/Utilities/contr office accom & staff costs	1,000
1.2	BT Work 1st Quarter 2007	1,160
1.3	tie allowances for Utility company resource costs during Pre-Construction and Construction	450
	Base Totals	**2,610**
2	**Opportunities - Utilities incl MUDFA**	
2.1	MUDFA Contractor's accommodation set up prior to end March 2007 - Fixed costs only.	370
2.2	Trial Work Section(s) at Roseburn-Granton corridor	500
2.3	Trial holes - to ascertain service depths etc; allow say (100) Nr. (equates to 50% of MUDFA Provisional Sum allowance).	25
2.5	Mudfa Preliminaries arising from 2.1, 2.2 & 2.3 in advance of April 2007 main works.	369
2.4	SGN preliminary costs of HP diversion at Gogar Depot site - advance payment towards purchase of 12-month long-lead delivery of manufactured equipment costing	500
2.5	Design work for HV power requirements at Gogar/Airport (Scottish Power)	200
	Opportunties Sub Total A	**1,964**
	TOTAL - PROJECTED SPEND - UTILITIES incl MUDFA	**4,574**

Notes:-
Based on the assumption that Mudfa contract awarded 2nd October 2006.

3	**Opportunities - Infraco**	
3.1	Commence De-vegetation works - Gogar/Roseburn Cor.	50
	Opportunties Sub Total B	**50**
	TOTAL - PROJECTED OPPORTUNITY WORKS SPEND	**2,014**

tie Limited

Edinburgh TRAM Project
(Commercial In Confidence)

Paper to : **Tram Project Board**

Subject : **Outline Of The Procurement Strategy**

Date : **18th September 2006**

1.0 Introduction

1.1 The purpose of this document is to:-

- Summarise the Procurement Strategy set out within the Outline Business Case (OBC)
- Set out the problems and issues of implementing this strategy given the slippage on design
- Set out the recommendations for mitigating the impact of these problems to maintain the Strategy Objectives.

1.2 This paper deals primarily with the Capex element of the strategy rather than operation and maintenance. A separate paper will be produced to recommend the way forward in respect of maintenance.

2.0 Procurement Strategy Objectives

2.1 The Objectives as set out or implied in the OBC are to:-

- Transfer design and construction risks to the private sector
- Minimise the risk premium (and/or exclusions of liability) that bidders for a design, construct and maintain contract normally include. Usually at tender stage bidders would not have a design with key consents proven to meet the contract performance obligations and hence they would usually add risk premiums for this.
- Mitigation of utilities diversion risk (i.e. potential impact of delays to utilities diversion programme on InfraCo works).

3.0 Background

3.1 The supply chain to deliver the works is, at high level:-

- SDS - system designer
- TramCo – Tram design, manufacture and commissioning
- InfraCo – Infrastructure provider and potentially maintainer
- MUDFA – Utilities diversions and enabling works provider
- DPOFA – Operation of tram system
- TSS – technical engineering and cost validation support.

4.0 Strategy (As set out in the OBC)

4.1 The overall strategy is to procure the supply chain separately, to aggregate the supply chain by novation of SDS and TramCo to Infraco to create a single contract entity to deliver the work. This single entity will then have tram system design, construction and maintenance responsibility to meet the performance requirements of the tram system.

4.2 The OBC Procurement Strategy is shown graphically in Appendix A. The principal steps are:-

A Procure SDS to develop requirements definition, preliminary design, detailed design, modelling, deliver consents all of which achieve the specified project functional requirements (run time, capacity etc).
B Concurrent with design and modelling procure first TramCo and then InfraCo
C Progressively pass design information to Infraco through the tender and CARP period
D Award InfraCo and novate SDS and TRamCo to Infraco
E TSS validating that SDS design will deliver the tram system performance requirements (run time and capacity etc) to ensue discharge of SDS and tie duty of care to CEC.

4.3 This approach is intended to achieve the Objectives by:-

- Providing Infraco with a design that is validated to deliver the tram performance requirements before award of the contract thereby eliminating or reducing bidders pricing risks. This also enables the bidders to put a reliable price on the scope by giving InfraCo the preliminary designs during the tender period.
- Novating SDS to InfraCo to transfer design risk, and hence tram system performance risk to InfraCo. (Novation effectively allows InfraCo to lay off part of their tram system performance risk to SDS)
- Novating TramCo to InfraCo to transfer system integration and system performance risk to InfraCo. Effectively creating a single point responsibility for tram system performance.
- Gaining assurance that the designs will meet the trams system performance requirements through validation by TSS.
- Resolution of consents prior to commencement of InfraCo works avoiding the risk to programme of delays due to consents not being in place.

4.4 To eliminate bidders pricing risks it was intended to progressively reduce bidders remaining pricing risk allowances by progressively providing detailed design information and confirming key consents with bidders during the CARP period from Oct 06 and March 07, as per the programme included in the OBC.

4.5 Bidders are very unlikely to accept the risks of delivering utilities diversions (MUDFA) to meet the programme given that they cannot control the third party utility companies. Therefore the MUDFA works will be procured separately and undertaken well in advance of the commencement of the InfraCo works to minimise risks to InfraCo delivery programme.

4.6 The headline delivery phase risk allocation once designs are completed and SDS and TramCo novated are:-

RISK ALLOCATION			
Risk	**tie**	**InfraCo**	**MUDFA**
Utility diversion scope, cost and consequential delivery performance	Y		
Utility diversion contractor delivery performance risk			Y
Performance of utility companies	Y		
Changes in tram system performance requirements	Y		
Design risk to meet specified performance		Y	
Construction – ground conditions, constructability, street possession compliance		Y	
Incorrect cost estimate for InfraCo works (including tram)		Y	
System integration		Y	
Incorrect programme assumptions		Y	

5.0 Current Issues

5.1 Since the strategy was endorsed by acceptance of the OBC the following position has developed:-

- Delivery of the assured preliminary design by SDS has slipped by three months
- Issue of TramCo tender has slipped by three months
- Award of the MUDFA contract has been delayed by four months
- The InfraCo tender period has been reduced by one month to enable the FBC to be informed by the returned tenders in Jan 07.
- Utilities diversions cannot start before DFBC approval which means that the risk of delaying InfraCo works has increased.

5.2 Delivery of the Strategy is also contingent on:-

- InfraCo accepting novation of TramCo
- Consents (TTROs, TROs and key planning consents) being obtained and communicated to the bidders/preferred bidders before conclusion of negotiations.
- InfraCo bidders having the necessary design and consent approval information at commencement of bid period and within the early stages of the bid period.

6.0 Proposals to Mitigate the Impact of the Issues and Problems

6.1 To mitigate the impact of the above and maintain the integrity of value for money risk transfer:-

- To minimise risk pricing by bidders and deliver negotiated contracts within the shortened timescales:-

- Identify and agree with the bidders the price critical design, performance and consents information that they require.
- Agree a priority design programme with SDS to deliver this design information and share this with bidders.
- Develop a plan for the phased delivery of consents by SDS/Tram and share and agree this with bidders.
- Agree bid programmes with bidders and monitor their performance against them through regular face to face review.
- Agree the phased delivery of bid information with bidders.
- Conduct the bid process as an ongoing negotiation (whilst maintaining parity of tendering).

- To deliver a cost effective (i.e. minimum risk premium) novation of TramCo:-
  - Identify but do not announce the preferred TramCo bidder once evaluated. Hold the bids open until selection of a preferred InfraCo bidder and then facilitate negotiations between TramCo and InfraCo to settle all technical, commercial and programme issues.
- To minimise risk pricing in respect of the capability of the SDS design to meet the tram system performance requirements:-
  - TSS to confirm that the Preliminary Design delivers these requirements.
  - Negotiate with SDS to enforce novation. It is not necessary for SDS to complete detailed design for the InfraCo to effect this risk transfer but purely that tie's rights under the SDS contract in respect of design work to date is transferred to InfraCo.
- To maintain, or minimise delays to, the completion date.
  - Reduce the negotiation (CARP) period for InfraCo by four months to maintain commencement date for the works and hence completion date.
  - Undertake Advance Works prior to award of InfraCo to take the pressure off the critical path in the early stages of the InfraCo works
  - Gain CEC agreement to a limited mobilisation of InfraCo in advance of full approval to award the contract.

7.0 Tender Evaluation Principles

7.1 The approach to be adopted for tender evaluation is to develop an evaluation model to select the bidder:

- With the team we are confident can deliver
- That meets the tram system functional requirements (and with material incremental benefits)
- With the necessary systems (Safety, Quality, Environmental Management)
- For the best price
- Under acceptable commercial terms

i.e. The model is intended to select the bidder best placed to deliver the Procurement Strategy – risk transfer at an economic price.

7.2 Variant bids will also be assessed under this model and may be adopted where they are demonstrated to be more advantageous economically.

7.3 This is explained in more detail in Appendix B.

8.0 Consultation

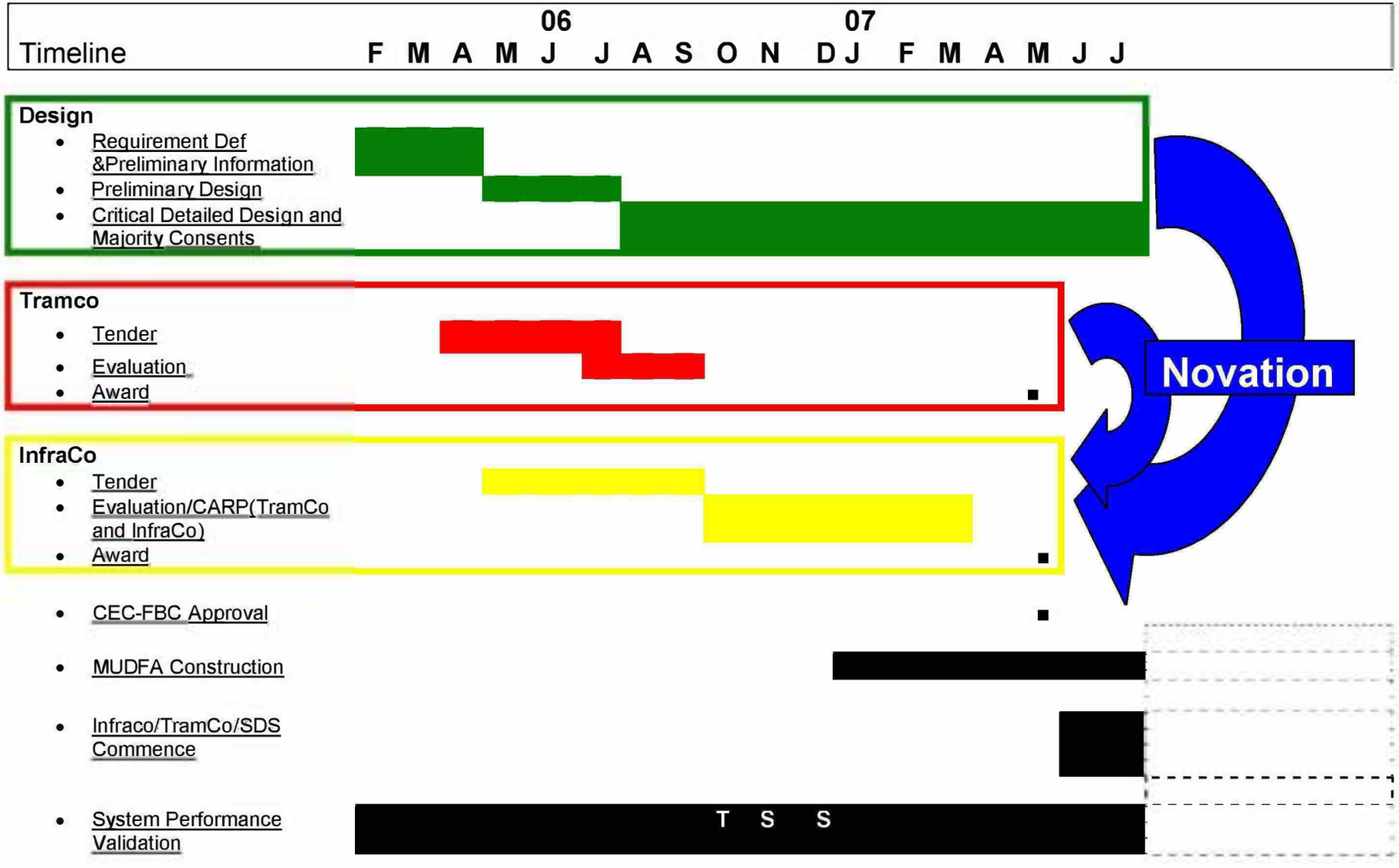
8.1 This paper (but not Appendix B) has been reviewed and endorsed by the Tram Board DPD Sub Committee.

9.0 Recommendation

9.1 It is recommended that the Tram Board approves the proposals set out in paragraph 6.0 and 7.0 above.

Proposed	Geoff Gilbert Project Commercial Director	Date:- 5/9/06
Recommended	Andie Harper Project Director	Date:- 5/9/06
Approved	..... Tram Project Board	Date:- ……

OBC Procurement Strategy



Subject : ITN Evaluation Principles

1.0 Introduction

1.1 This paper summarises the approach to be adopted for evaluating and negotiating the TramCo and InfraCo bids.

2.0 Objectives

2.1 The objective of the evaluation is to select the bidder with the most economically advantageous tender taking account of ability to deliver and in this way select the bidder with the best prospect of delivering the Project Procurement Strategy.

3.0 Principal Steps in the Evaluation and Negotiation

3.1 The Project Procurement strategy is for the Tram bids to be evaluated and a preferred bidder identified for novation and integration into the selected InfraCo bid. To ensure minimum risk and qualifications to the novation the Project will facilitate negotiations between the preferred TramCo bidder and InfraCo bidder to settle all technical, commercial and programme issues between them.

3.2 The steps are:-

1. Preliminary analysis of the bids – analysis of bids to assess the prices against level of compliance so that a price, taking account of the principal qualifications, can be included in the Business Case.
2. Detailed analysis of bids – To understand the bids
    a. Completeness of information submitted
    b. Identification of qualifications and assumptions – technical, commercial, management
    c. Presentation by bidders of their bids to aid the evaluation teams understanding of the bids
    d. Initial evaluation of bids to determine ranking of bidders
3. Clarification and preliminary negotiation – Meet with the bidders to discuss and negotiate away the main qualifications of each bidder such that all bids can be compared on an equivalent basis.
4. Selection of the preferred bidder to take forward into detailed negotiations and the reserve bidder in the event of the ranking changing during negotiations.

For TramCo

5. Negotiations with all bidders to resolve significant qualifications and assumptions which don't require the involvement of the preferred InfraCo bidder.
6. Hold bids open pending selection of a preferred InfraCo bidder.
7. After selection of preferred InfraCo bidder facilitate negotiations between preferred TramCo bidder and preferred InfraCo bidder to achieve technical, programme and financial alignment between the parties prior to novation.

For InfraCo

8. Detailed negotiation to resolve all qualifications and assumptions which don't require the involvement of the preferred TramCo bidder.
9. InfraCo/TramCo facilitated negotiations.

10. Update evaluation model to reconfirm preferred bidder.
11. Final negotiation (equivalent of BAFO)

Recommendation and Award.

12. Prepare Recommendation Paper.
13. Confirm Business Case.
14. Brief Stakeholders.
15. Tram Board Approval.
16. CEC Approval.

4.0 Stakeholder Liaison

4.1 Stakeholders from CEC and TS will be briefed on progress at monthly intervals and at the following stages:

1. Selection of Preferred TramCo bidder.
2. Completion of detailed negotiations with preferred TramCo bidder.
3. Return and initial evaluation of InfraCo bids.
4. Selection of preferred InfraCo bidder.
5. Completion of detailed negotiations with InfraCo preferred bidder.
6. Completion of final negotiations with selected InfraCo bidder.
7. Draft recommendation.
8. Ad hoc where significant decisions are required from stakeholders.

4.2 Briefings will be given to nominated representatives from TS and CEC. These will be:

- TS – John Ramsay and Lorna Davis
- CEC – Andrew Holmes
- Tie – Graeme Blissett and Willie Gallagher
- TEL – TBA
- (Both of the above to be confirmed)

4.3 There will be instances where information will be required from stakeholders during the tender and evaluation periods. The liaison point for this will be:

- John Ramsay – TS
- TBA – CEC

5.0 Evaluation Model

5.1 The evaluation model is constructed to select the bidder:

- With the team we are confident can deliver
- That meets the tram system functional requirements (and with material incremental benefits)
- With the necessary systems (Safety, Quality, Environmental Management)
- For the best price
- Under acceptable commercial terms

i.e. The model is intended to select the bidder best placed to deliver the Procurement Strategy – risk transfer at an economic price.

5.2 Variant bids will also be assessed under this model and may be adopted where they are demonstrated to be more advantageous economically.

5.3 Details of the criteria and evaluation mechanisms are set out in Addenda A. For ease of illustration of the principles this Appendix refers primarily to the evaluation of InfraCo. The same principles will be followed for TramCo evaluation.

5.4 Where bidders' proposals are unclear they will be given the opportunity to provide further information within a specified period. If after review of the further information provided the bidders' proposals do not meet the minimum specified requirements their bid will be rejected.

5.5 Should funding be insufficient to deliver both Phase 1a) and 1b) the evaluation will be undertaken in respect of Phase 1a) only and the best price for Phase 1b) negotiated with the preferred bidder as an option to be taken up at a later date.

6.0 Evaluation Team and Panel

6.1 Evaluation of bids for TramCo and InfraCo will be undertaken by members of the Tram Project client team supported by a representative from the projects external legal advisors, DLA.

6.2 Members of the Evaluation Team are set out in Addenda B together with their CVs (Note CVs to follow).

6.3 The evaluation team will report to the Evaluation Panel at key stages during the tender and evaluation process. These key stages will be as described in 4.1 above.

6.4 The Evaluation Team will be overseen by the Evaluation Panel who will monitor evaluation progress, provide guidance and advice and endorse the recommendation.

6.5 The Evaluation Panel will consist of the leadership team of the Tram Project – Andie Harper, Susan Clark, Trudi Craggs, Stewart McGarrity and Geoff Gilbert.

7.0 Probity

7.1 To underscore the imperative of maintaining commercial probity all participants in the evaluation including stakeholder representatives will be required to sign Confidentiality Agreements.

7.2 To minimize the risk of preference during evaluation, bidders will be referred to in code in all papers and briefings and in the final recommendation.

7.3 Maintaining commercial probity is particularly important for this procurement, given:

- The limited number of InfraCo bidders
- The involvement of TramCo bidders in InfraCo consortia

7.4 To maintain strict confidentiality, bids will be opened and evaluated in a sealed bid room with access limited to members of the evaluation team and evaluation panel members.

8.0 Tender Process Timeline

8.1 The key dates and durations for the tender process are set out in Aaddenda C.

9.0 Recommendation

9.1 It is recommended that the Sub Committee approves the proposed tender evaluation methodology as set out above.

PRINCIPAL CRITERIA	HOW EVALUATED
Financial	
Bid price	- Bidder's bid price + - Adjusted for clarifications (Bidder advises adjustments for agreed resolution of clarifications) + - Adjustments for bidder's qualifications to risk transfer + - Other adjustments arising from evaluation of non financial criteria = Adjusted Price - The bidders Adjusted Prices will be calculated separately for Capex and Maintenance costs as set out above. The NPV for first three years maintenance costs will be used for this purpose (as this is considered the optimum period for maintenance by the InfraCo). The sum of these two elements will then set the ranking of bids, the bid having the lowest overall figure will be the preferred bid.
Technical	Minimum criteria set – technical proposals must deliver the functionality set out in the Employer's Requirements. Any incremental benefits between bidders over and above the functionality set out in the bids is assessed qualitatively. **Note 1:**-Where the bidder with the biggest incremental benefit is not the lowest a qualitative assessment is made to determine whether the price differential is outweighed by the incremental benefit.
Tenderer's proposals for delivering the Employer's Requirements - Contractor's delivery methodology - completion of design, proposals for approvals, construction methodology, traffic management, safety management, environmental management, system integration, trial running, delivery into	- Is the bidder's delivery methodology robust? Will the bidder's proposals meet the functional performance specified in the Employer's Requirements? Are there any incremental benefits between the bidders?

service, configuration management. - Maintenance proposals – reactive, planned and life cycle replacement maintenance plans; asset management plans; performance management (how availability and reliability will be maintained) - Construction Programme and sequencing (Note – any differences in programme duration will be reflected in the bidder's price and so are not assessed in this section)	- Are the bidder's maintenance proposals robust? Will the bidder's proposals meet the functional maintenance performance for availability, maintainability, reliability and asset life specified in the Employer's Requirements? Are there any incremental benefits between the bidders? - Does bidder's programme show how the delivery methodology will be delivered? Are the sequencing of activities and critical path correct? Are the durations of activities reasonable? Are the specified working constraints correctly reflected? Are time risk allowances correctly identified within the programme? Is the programme consistent with the bidder's financial proposals? Are there any incremental benefits between the bidders?
	Note 1 above applies where incremental benefits are identified between bidders.
Management & Resourcing	The minimum criteria that all bids must meet to progress is that proposals demonstrate that the bidder's proposed management and resourcing proposals have the capability to deliver the works.
Capability of the bidder's team to deliver - The proposed project management team - Supervision and control of the works - The bidder's supply chain	- Do the proposed team have the capability and experience to manage delivery of the works? Are there any incremental benefits between bidders? - Is the supervision and site construction works management capable of delivering the works to the proposed methodology and within the programme? Are there any incremental benefits between bidders? - Has the bidder demonstrated that he has either an intact supply chain or credible plans for establishing a supply chain? Have bidders identified a complete supply chain for delivery? Do bidders have a demonstrable ability to mobilize and manage the deployment of the supply chain and its performance? Are there any incremental benefits between

	bidders proposals?
- Attitude and approach of the contractor's team in working with the Project Team	- Can the bidder's proposed management team work effectively with the Tram Project team? This is demonstrated by their approach and attitude during tender negotiations. As a minimum the proposed team must be able to work effectively with the Project Team.
- Resource availability	- Management and supervision resources proposed must be demonstrated as being available for the proposed programme.
Legal and Commercial	
Terms and conditions - Terms and conditions	- Qualifications to terms and conditions will be negotiated with bidders and an early 'mark up' of the contract is to be requested for delivery during the later part of the tender period to ease this process. Any qualifications which adversely change the fundamental principles of the Project Procurement Strategy and which are not withdrawn will at the discretion of the Project and its stakeholders disqualify the bidder from further consideration.
- Insurances	- Are insurances they the correct level with acceptable terms as specified in the ITN? If not bidders will be required to adjust their bids to include the specified requirements.

TENDER EVALUATION TEAMS

TramCo

Name	Evaluation Responsibility
David Powell	Programme and Project Execution (Evaluation PM)
Bob Dawson	Financial and Terms and Conditions (Lead)
Iain Bowler	Terms and Conditions
Mark Bourke	Risk and Insurance
Tim Knapp	Technical (Lead)
Roger Jones	Technical
Tony Goodyear	Technical
Alistair Richards	Technical – Maintenance and operation

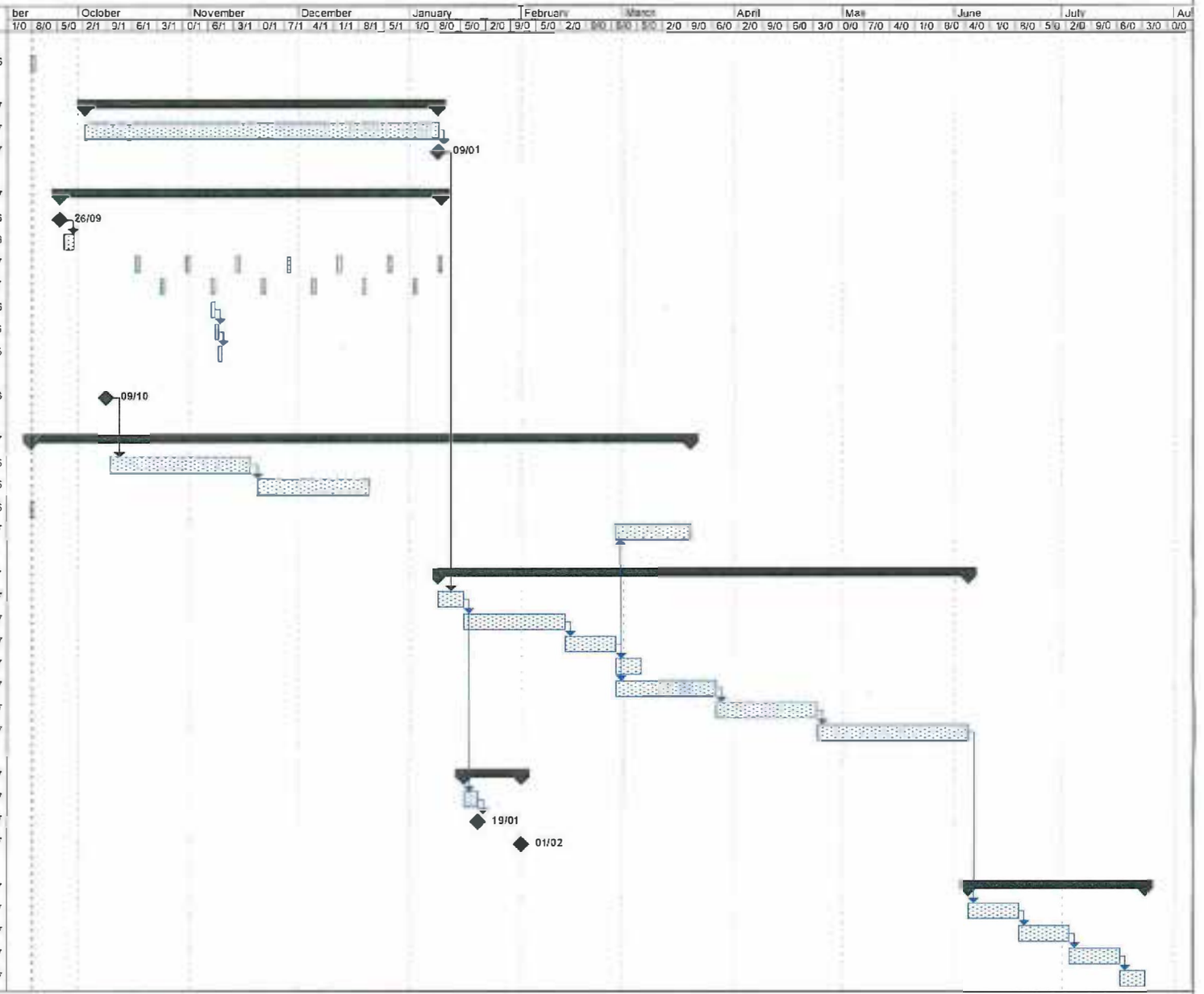
InfraCo

Name	Evaluation Responsibility
Gary Easton	Programme and Project Execution (Evaluation PM and Lead)
Tom Hickman	Programme
Phil Douglas	Project Execution
Anthony Lang	Project Execution
Graeme Walker	Safety
Toby Klisky	Project Team and resources (Lead)
Ailsa McGregor	Project Team and resources
Phil Douglas	Project Team and resources
Douglas Leaming	Project Team and resources
Bob Dawson	Project Team and resources – supply chain
Bob Dawson	Financial and Terms and Conditions (Lead)
John Lyall	Financial
Fiona Duncan	Financial
John Pantoni	Financial
David Carnegy	Financial
Sharon Fitzgerald	Terms and Conditions
Mark Bourke	Risk and Insurance
Alan Cassels	Insurance
Nina Cuckow	Risk
David Powell	Technical (Lead)
Bruce Ennion	Technical
Gavin Murray	Technical
Ray Millar	Technical
Roger Jones	Technical
Alistair Richards	Technical – Maintenance and operation

Note:- “Lead” = Lead Evaluator for the specified criteria

TENDER PROCESS PROGRAMME

ID	Task Name	Duration	Start	Finish
2		1 day?	Mon 18/09/06	Mon 18/09/06
4	**InfraCo ITN Period**	**70 days?**	**Tue 03/10/06**	**Tue 09/01/07**
5	Issue ITN	70 days?	Tue 03/10/06	Mon 08/01/07
6	Return Of InfraCo Tender	0 days	Tue 09/01/07	Tue 09/01/07
8	**InfraCo Bid Liaison**	**76 days?**	**Tue 26/09/06**	**Tue 09/01/07**
9	Bidders Conference	0 days	Tue 26/09/06	Tue 26/09/06
10	Negotiation and Agreemen	3 days?	Wed 27/09/06	Fri 29/09/06
11	**Bid Progress Review**	**61 days**	**Tue 17/10/06**	**Tue 09/01/07**
19	**Technical & Commercial**	**51 days**	**Tue 24/10/06**	**Tue 02/01/07**
26	Mid Bid Review - Tenderer	1 day	Tue 07/11/06	Tue 07/11/06
27	Mid Bid Review - Tenderer	1 day?	Wed 08/11/06	Wed 08/11/06
28	Mid Bid Review - Tenderer	1 day?	Thu 09/11/06	Thu 09/11/06
30	TramCo Bid Return	0 days	Mon 09/10/06	Mon 09/10/06
32	**TramCo Tender Evaluation**	**131 days?**	**Mon 18/09/06**	**Mon 19/03/07**
33	Initial Evaluation	29 days?	Tue 10/10/06	Fri 17/11/06
34	Initial Negotiations	23 days?	Mon 20/11/06	Wed 20/12/06
35	Selection of Prefered Tran	1 day?	Mon 18/09/06	Mon 18/09/06
36	Detailed negotiations with	15 days	Tue 27/02/07	Mon 19/03/07
38	**InfraCo Tender Evaluation**	**105 days**	**Tue 09/01/07**	**Mon 04/06/07**
39	Initial Analysis	5 days	Tue 09/01/07	Mon 15/01/07
40	Detailed Evaluation	20 days	Tue 16/01/07	Mon 12/02/07
41	Initial negotiations and clar	10 days	Tue 13/02/07	Mon 26/02/07
42	Selection of preferred Infra	5 days	Tue 27/02/07	Mon 05/03/07
43	Detailed negotiations with	20 days	Tue 27/02/07	Mon 26/03/07
44	Facilitated InfraCo/TramCo	20 days	Tue 27/03/07	Mon 23/04/07
45	Final negotiations with Infra	30 days	Tue 24/04/07	Mon 04/06/07
47	**Council Funding Approval**	**12 days**	**Tue 16/01/07**	**Thu 01/02/07**
48	Update Business Case	4 days	Tue 16/01/07	Fri 19/01/07
49	Submit paper to CEC	0 days	Fri 19/01/07	Fri 19/01/07
50	CEC Meeting to Approve F	0 days	Thu 01/02/07	Thu 01/02/07
52	**Recommendation Paper**	**35 days**	**Tue 05/06/07**	**Mon 23/07/07**
53	Prepare draft recommenda	10 days	Tue 05/06/07	Mon 18/06/07
54	Review draft recommendat	10 days	Tue 19/06/07	Mon 02/07/07
55	Finalise recommendation	10 days	Tue 03/07/07	Mon 16/07/07
56	Issue final report to stakeh	5 days	Tue 17/07/07	Mon 23/07/07



Project: Tender Process Timeline A
Date: Mon 18/09/06

Task | Progress | Summary | External Tasks | Deadline
Split | Milestone | Project Summary | External Milestone

tie Limited

Edinburgh TRAM Project
(Commercial In Confidence)

Paper to : **Tram Project Board**

Subject : **SDS Novation Issue**

Date : **18th September 2006**

1.0 Introduction

1.1 This paper sets out the current issues in respect of the SDS Novation and the status of their detailed design and the Project's recommendations to resolve these issues.

2.0 Background

2.1 The original OBC Procurement Strategy was based on SDS undertaking the design of the works under their contract with **tie**, largely completing this before award of the InfraCo contract and then the SDS design agreement being novated to the successful InfraCo bidder.

2.2 In this way the detailed designs, warranted and validated by TSS as delivering the Tram system functionality, are completed before conclusion of negotiations with the preferred InfraCo bidder. This would enable tie to negotiate a price with the preferred InfraCo bidder with minimal risk provision or exclusion in respect of the design meeting the functionality specified by **tie.** This novation was therefore a major component to the transfer of design.

2.3 This overlap of detailed design works and preferred bidder negotiations also reduces the overall delivery programme since the InfraCo contractor will already have a detailed design at award of contract.

3.0 SDS Design and Novation Issues

3.1 SDS are uncomfortable with the novation given a clause in their design contract which provides the Employer (either **tie** or the InfraCo contractor after novation) absolute discretion to decide whether the design deliverables are complete. SDS are concerned that an InfraCo may apply this clause unreasonably to avoid payment of monies due.

3.2 During pre tender consultations with InfraCo bidders they have intimated that they may not wish to use SDS to do all of the design, and in particular the system design (namely system integration) and those elements of the work that SDS would produce performance specifications for e.g. communications systems.

4.0 Implications Of these Issues

Novation

4.1 If, in an extreme circumstances, SDS were to refuse to novate their agreement to InfraCo the position would be:-

- Risk transfer is still effected by virtue of the contract between InfraCo and **tie** and SDS remain liable to **tie** for their designs meeting the functionality requirements, to the extent that they are relied upon by InfraCo.
- In the absence of the novated SDS agreement the InfraCo will either
  - include risk premiums around the performance of their design or
  - seek to exclude design liability, to a greater or lesser extent.
- If the first of these scenarios transpires the delivery programme will be extended due to InfraCo needing to engage another designer to undertake detailed design work or validate the designs 'gifted' to InfraCo during the bid process, which they would only commence after award.

4.2 The above is shown graphically in the diagrams in Appendix A.

Extent Of Detailed Design Undertaken by SDS

4.3 As the InfraCo are taking the risk on designs they will have a view on which organisation is best placed to deliver each element of the detailed design and thereby mitigate their risks.

4.4 If InfraCo's views are ignored then **tie** will effectively be paying for work by SDS which is of no real value.

4.5 There is also the subsidiary but related issue that given the now compressed timescales the sequence of detailed design delivery by SDS needs to be prioritised on the basis of the elements that are risk and price critical to InfraCo.

5.0 Legal Position

5.1 DLA have advised on the legal position in respect of SDS's contract on these issues.

Novation

5.1 Legal position is that:-

- SDS's obligation to novate is absolute
- **tie** holds a £500,000 on demand retention bond until such time as the novation is effected.
- Failure to novate would trigger a termination event and give **tie** the right to recover losses (excluding consequential losses) up to the £10m cap per event.
- **tie** also holds a parent company guarantee with Parsons Brinkerhoff Group, this would also be triggered in the event of SDS refusing to novate.

Extent Of Detailed Design Undertaken by SDS

5.2 The legal position is that:-

- Under the novation arrangements **tie** may omit scope from the services to be novated to InfraCo.
- InfraCo tenders are being sought on the basis of a mandatory novation of SDS.
- There are no procurement compliance risks if InfraCo refuses to accept a novation of the SDS design agreement or if SDS refuses to accept novation of their agreement to InfraCo and **tie** consequently retains design responsibility. The OJEU Notices are sufficiently flexible to defend this.

6.0 Proposed Mitigations

Novation

6.1 SDS's concern on the absolute discretion of the InfraCo deciding whether deliverables are complete is not unreasonable, provided that InfraCo is left with sufficient levers to protect its commercial position (otherwise they will argue for lower caps and possibly exclusions of liability). Therefore it is proposed that the project negotiates with SDS to relax this aspect of the current contract, possibly making any disputes on this issue the subject of dispute resolution. Legal advice is currently being provided on a range of options in this respect.

6.2 The Project will use the strong obligations on novation contained within the SDS contract as a negotiating lever to ensure that InfraCo's reasonable commercial position is maintained.

6.3 To gain comfort that that the principle of novation of SDS is accepted by InfraCo the Project will consult with InfraCo bidders to:-

- gain commitment on the principle of the novation of SDS and any isuues and concerns that they may have.
- Explore a reasonable compromise position

6.4 This consultation will be undertaken during the early early stages of the bid period (i.e. early October).

6.5 However, to maintain delivery pressure on SDS there will be no negotiation of this issue until nearer the end of the bid period – say mid December. This negotiation needs to be concluded before the return of InfraCo bids and commencement of negotiations. After this point bidders may feel more confident in taking opportunistic stances to minimise risk transfer.

Extent of Detailed Design Undertaken by SDS

6.6 To avoid unnecessary expenditure on detailed design that the InfraCo bidders will not use the Project will settle a common position with them to Identify the extent of detailed design work they see as benefiting the tendering and negotiation process. The Project will then vary SDS's contract to reflect this.

Prioritisation of Design work by SDS

6.7 By negotiation and agreement SDS's detailed design effort will be prioritised to minimise the bidder risk price and performance allowances or risk transfer exclusions.

7.0 Other Factors

7.1 SDS are also engaged to provide the design for the MUDFA contract. This work is critical to derisking the delivery of the InfraCo works by completing it prior to commencement of the InfraCo works. It is therefore critical that:-

a) there is not conflict of interest between their work for InfraCo (once novated) and their work for **tie** and
b) That during the forthcomming intensive design period for completion of preliminary design and delivery of detailed design.

7.2 To address these issues SDS will be required to provide an entirely separate stand alone team to deliver the designs for all utility diversions including MUDFA. SDS will remain contracted to **tie** for the services that this team provide.

8.0 Consultation

8.1 The following will have been consulted on this recommendation prior to the Board meeting:-

- Damian Sharp – Transport Scotland
- James Papps – PUK
- David Connolly – CEC
- Graeme Bissett - **tie**

The paper will be updated and circulated to Board members should any significant changes be made following their review

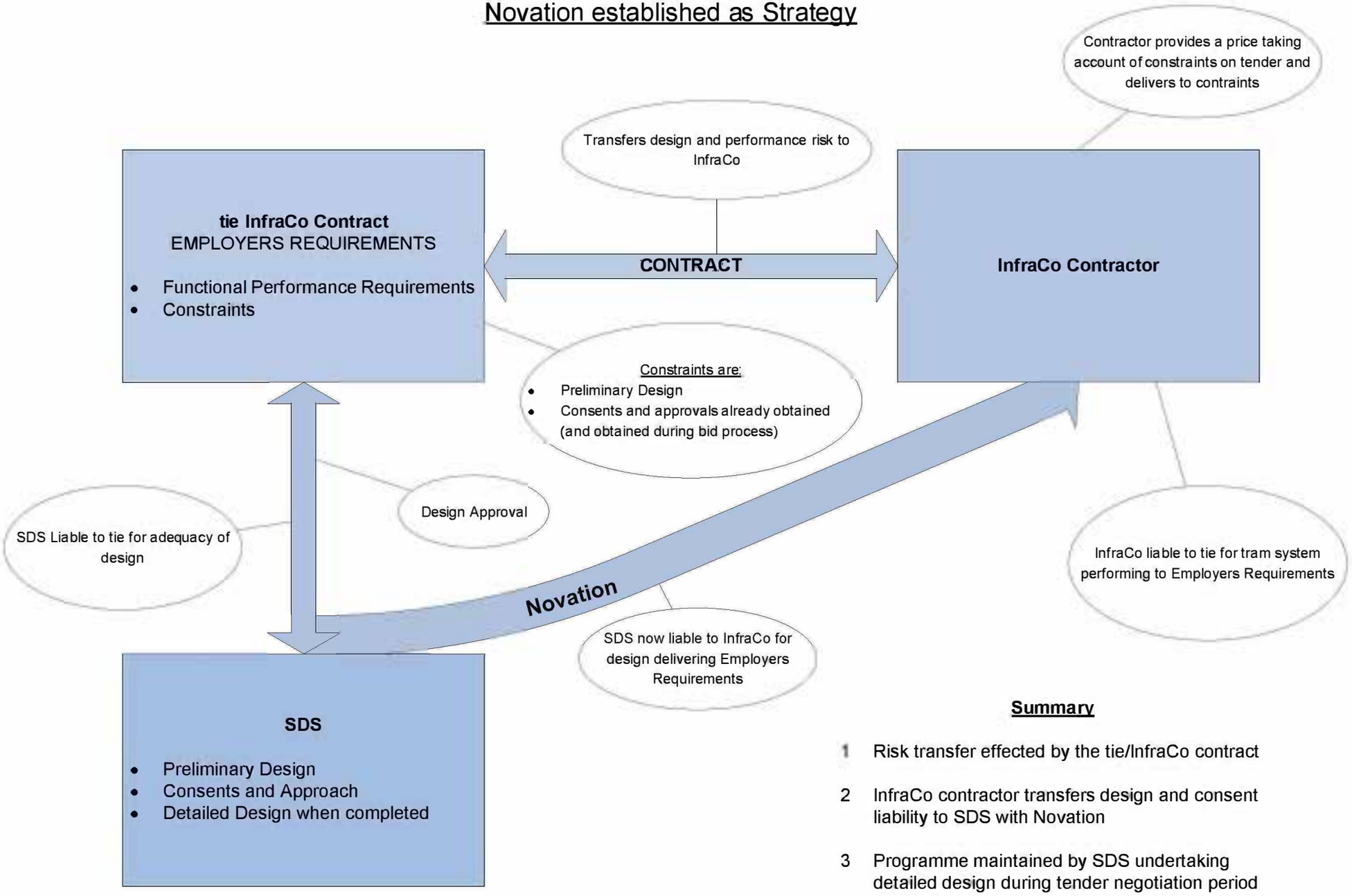
8.2 It is noted that this paper was not reviewed by the DPD Sub Committee.

9.0 Recommendation

9.1 It is recommended that the Board approve the approach to dealing with this issue as set out above in paragraphs 6 and 7.

Proposed	Geoff Gilbert Project Commercial Director	Date:- 19/9/06
Recommended	Andie Harper Project Director	Date:- 19/9/06
Approved	..... Tram Project Board	Date:- ……

SDS Risk Transfer as Procurement Strategy
Novation established as Strategy



Summary

1 Risk transfer effected by the tie/InfraCo contract

2 InfraCo contractor transfers design and consent liability to SDS with Novation

3 Programme maintained by SDS undertaking detailed design during tender negotiation period

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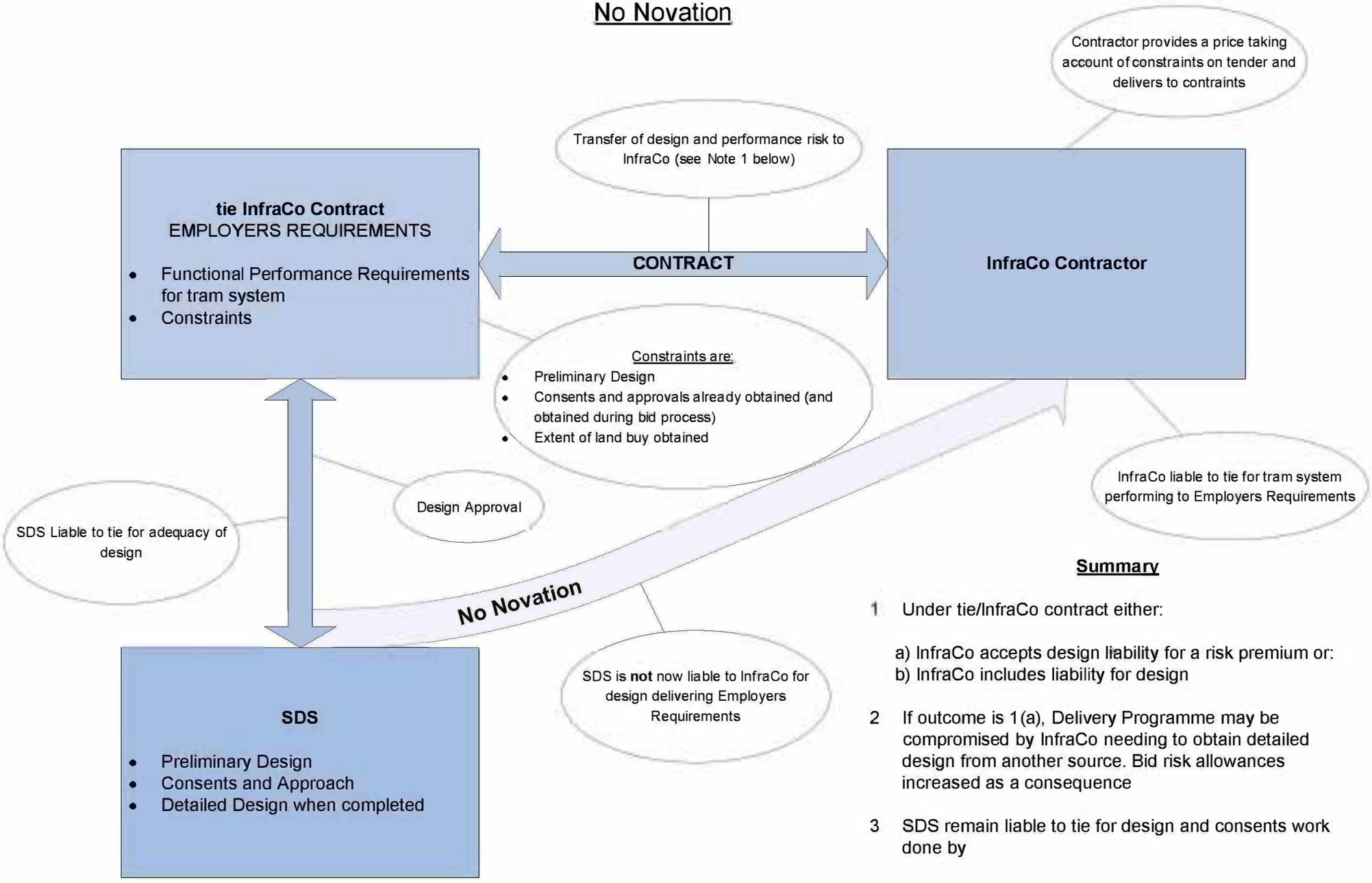
SDS Risk Transfer as Procurement Strategy
No Novation



Summary

1 Under tie/InfraCo contract either:

a) InfraCo accepts design liability for a risk premium or:
b) InfraCo includes liability for design

2 If outcome is 1(a), Delivery Programme may be compromised by InfraCo needing to obtain detailed design from another source. Bid risk allowances increased as a consequence

3 SDS remain liable to tie for design and consents work done by

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Tie Limited

TRAM Project
(Commercial In Confidence)

Paper to	:	**Tram Project Board**
Subject	:	**Commissioning Support & Development Partnering Operations Franchise Agreement (DPOFA)**
Date	:	**19th September 2006**

1.0 Introduction

1.1 When the DPOFA was originally let, the obligation to deliver commissioning support to the Infraco contractor was included but the scope of services was not detailed. As the procurement strategy subsequently emerged it was decided by **tie** that a standalone agreement between Transdev and Infraco covering the commissioning support would be more advantageous by keeping all responsibility for testing, commissioning and service integration totally with Infraco.

1.2 Unfortunately this approach was never agreed with Transdev.

1.3 Further to the Approval by the TEL Board to renegotiate the DPOFA with Transdev, negotiations have been started on all the areas that require updating. Transdev have made it clear that they see no reason to remove the commissioning services from DPOFA and have no desire to form a contractual relationship with the future Infraco contractor.

1.4 As a result of this position, tie have been re-evaluating the procurement strategy in order to determine how best to proceed.

2.0 Outline of the two approaches

2.1 The two approaches are:-

a. Separate CSA between Operator and Infraco (As current strategy)
b. Refine the scope of the DPOFA and provide a committed level of support to Infraco. (Proposed strategy)

Refine the scope of the DPOFA

2.2 In this case Transdev would remain solely contracted to tie, rather than creating parallel contractual relations with both tie (DPOFA) and Infraco (CSA). For all obligations and responsibilities they would be accountable to and visible to tie.

2.3 In order to maintain the responsibility and risk for commissioning and system integration responsibilities solely with Infraco, a very clear master schedule is required to be managed by tie. Critical Milestones and dates are required between tie and Infraco for the provision of O&M Manuals and Training Documentation. These will be back to back with deadlines for the material being provided to Transdev to prepare the O&M procedures and their operator

training in time for gaining approvals for the safety management system by the authorities for each of the stages and finally for operation.

2.4 Decision point milestones are also required 3 months ahead of the requirement for Transdev to recruit each subsequent batch of staff. Infraco will be asked to bid in the ITN for the number and skills of resources they require and the planned durations to undertake the commissioning.

2.5 This will provide an insight into Infraco's experience and intended approach for the purposes of bid evaluation as well as providing the requirements to be met by Transdev.

2.6 In the event that commissioning becomes extended then Infraco would not trigger the next batch of recruitment until it was ready, and in this situation they would meet the extended Transdev costs, maintained at the existing monthly rate. As soon as Infraco feels confident to proceed further with the commissioning, they would trigger the next batch of recruitment, Transdev would ramp-up their resources and Infraco would no longer be liable for the payments.

2.7 If Infraco is able to accelerate their later stages of the commissioning following a delay, then it is intended that there should be a mechanism for them to gain back some of the saved costs as an incentive.

2.8 Tie would be responsible for providing Infraco with the level and skill of commissioning support resource originally bid for. This is totally aligned with **tie's** objective under DPOFA to ensure that Transdev are fully prepared, ie. Resourced, trained and experienced sufficiently, to operate the Tram system with passengers.

2.9 If a dispute arises over the delivered Transdev commissioning support, then an independent competency assessor would be used to determine against the skills specified by Infraco in their original bid.

3.0 Strength and Weaknesses

Option a -	Strengths	Weaknesses
Separate CSA between Operator and Infraco	Single point of responsibility for commissioning activities	Loss of visibility by tie of commissioning process
		Expense both financial and to the relationship of forcing Transdev into a contractual relationship with an 'unknown' Infraco
		Risk of gaps, uncertainty and conflicts between obligations in DPOFA and those in CSA which cannot be performed in isolation
		Restricts tie's control and ability to implement a partial or staged system opening as they are not solely responsible for prioritising Transdev's resources
Option b -	Strengths	Weaknesses
Refine the scope of the DPOFA and provide a committed level of support to Infraco.	Single point of responsibility for delivery of obligations for mobilisation, conunissioning support and operation in one contract.	Risk of tie's two contractors 'colluding' and playing off the Client
	Increased visibility and transparency of the commissioning programme and progress	Tie may be placed in circumstances where it has to find in favour of one or other of it's contractors in the event of dispute
	Reinforces relationship between Client and future operator Transdev through what will inevitably be a stressed period of commissioning	Requires tie to manage the master schedule and any additional payments between the contractor's in the event of delays
	Provides a mechanism for managing the expense of the commissioning support early	
	Places the levers at tie's disposal to determine whether to go for partial/staged opening	
	Provides tie with the ability to benefit from utilising Transdev resources for other tasks in the event of programme delays	

3.0 Recommendation

3.1 It is recommended that the procurement strategy reverts back to that originally intended when DPOFA was placed, and commissioning services are supplied under the DPOFA and issued to Infraco, who triggers their delivery, manages and coordinates them to achieve a successful commissioning and system integration.

Proposed	Susan Clark Delivery Director	Date:- 19/9/06
Recommended	Andie Harper Project Director	Date:- 19/9/06
Approved	..... Tram Project Board	Date:- .....

tie Limited

Edinburgh Tram Project
(Commercial In Confidence)

Paper to	:	**Tram Project Board**
Subject	:	**Options for delivering the Network Rail signalling equipment modifications**
Date	:	**18th September 2006**

Background

1 As part of the Infraco works, there will be need to modify some of Network Rail's (NR) signalling equipment in order to immunise the signalling equipment.

2 The immunisation of NR signalling equipment 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.

Options

3 Three options are currently being considered for the delivery of these works. These are:-

- 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.

Benefits/Disbenefits

4 There options have been considered and a table summarising the benefits and disbenefits each option are summarised below at Appendix 1.

Recommendation

5 Having considered the benefits and disbenefits, it is recommended to the Tram Project Board that

- further work is carried out and that further discussions take place with both NR and TS with a view to progressing Option 3; and
- the scope of these works are removed from the Infraco ITN.

Proposed	Trudi Craggs Project Development and Approvals Director	Date:- 18/9/06
Recommended	Andie Harper Project Director	Date:- 18/9/06
Approved	..... Tram Project Board	Date:- .....

Appendix 1
Assessment of benefits and disbenefits of the various options

Option	Benefits	Disbenefits
1	Overall control is retained by **tie**. With a direct influence on delivery, programme milestones should be managed more effectively. Incentives or penalties could be incorporated into the Infraco contract to ensure delivery on time and on budget.	Given that the project is of no or little benefit to NR it may be difficult to ensure that NR adheres to the project timetable especially as NR is involved in various large scale capital projects already. Developing the project in relative isolation from other major heavy rail projects planned in the Waverley and Haymarket areas and along the Edinburgh – Glasgow mainline imports a risk that an uncoordinated approach will lead to unnecessary disruption and possible rework. **Tie** needs to be sure that the Infraco has the necessary expertise to undertake these works. While there is a direct contract between **tie** and the Infraco, it is likely that in terms of the APA to be entered into between **tie** and NR, there will be extensive indemnities in favour of NR.
2	By making NR responsible for the design and delivery of the signalling works the benefits become more tangible and there is likely to be a greater commitment from NR. As NR is a stakeholder in the majority of the major heavy rail projects planned to take place over the coming years, they are the best placed organisation to achieve co-ordination between projects. NR will be able to call upon a design and management team with unquestionable industry experience and expertise.	The design and delivery of these woks would be managed in much the same way as the SDS deliverables. Accordingly **tie** would need to make specific provision to manage this contract. The cost of the works may be greater due to Network Rail overheads. NR may not have the necessary resources to undertake the work in accordance with the project programme which could lead to a delay in the works being completed.

	There should be no need for indemnities in favour of NR, if NR carry out the works	
3	By making NR responsible for the design and delivery of the signalling works the benefits become more tangible and there is likely to be a greater commitment from NR. The procurement philosophy of the tram project has been to shift risk away from **tie**. Appointing NR as a contractor is in line with this strategy with TS being an organisation better equipped to manage the risk. As NR is s stakeholder in the majority of the major heavy rail projects planned to take place over the coming years, they are the best placed organisation to achieve co-ordination between projects. By NR carrying out the design and delivery of the signalling works, the APA can be simplified. There is likely to be no need for indemnities in favour of NR. NR will be able to call upon a design and management team with unquestionable industry experience and expertise. Given that the contract would be between TS and NR, it is believed that TS will be able to exert more pressure on NR to carry out the works in accordance with the project programme.	It is clearly desirable that the tram team ensures that the works are undertaken in accordance with the programme and functional specification of the project. The removal of direct linkage between **tie** and the procurement and delivery bodies puts **tie** at arms length from the process. The lack of direct contact and control may import risk. **Tie** would require to approve and be a party to any contract between TS and NR. In addition the cost of the works would require to be ring fenced from the project budget with TS and NR being responsible in accordance with the contract for any overruns. There may be a mismatch in the programmes. However this is considered to be a relatively low risk given the relative independence of the main immunisation works from the tram delivery programme. The cost of the works may be greater due to Network Rail overheads. NR may not have the necessary resources to undertake the work in accordance with the project programme which could lead to a delay in the works being completed.

Tie Limited

TRAM Project
(Commercial In Confidence)

Paper to : **Tram Project Board**

Subject : **Ratification of MUDFA Contract award Recommendation**

Date : **19th September 2006**

1.0 Background

1.1 A paper has been prepared by CEC on the basis of the Project's paper recommending the award of the MUDFA contract. This recommendation is to be proposed to the CEC meeting on 21st September 2006. Attached is a copy of the paper and documentation indicating its approval on behalf of the Project Board by both Chairmen of TEL and **tie**.

3.0 Recommendation

3.1 The Tram Project Board is requested to ratify the recommendation to award the MUDFA contract.

Proposed	Geoff Gilbert Delivery Director	Date:- 19/9/06
Recommended	Andie Harper Project Director	Date:- 19/9/06
Approved	..... Tram Project Board	Date:- ……

To:
David Mackay – Chairman of TEL
Willie Gallagher – Chairman of **tie**

Our Ref: 40.03.07/AH/FH

Date: 12th September 2006

Dear David, Willie

Mudfa Tender, Recommendation of preferred bidder.

Attached is a copy of the above recommendation to be submitted to the City of Edinburgh Council for approval. As agreed can I seek your approval/endorsement on behalf of the Project Board

I can confirm this has been a fair and robust process and the recommendation offers the project and its stakeholders value for money. We have kept the identity of the recommended bidder anonymous until approved by CEC to ensure the result does not leak to the market other than through ourselves when full approval is received.

Yours sincerely

[redacted]

Andie Harper
Tram Project Director

I enclose and approve the attached recommendation to appoint Lewis as contractor for the Mudfa works

David Mackay [redacted] Date 13th Sept '06

Willie Gallagher [redacted] Date 14 · Sep · 06

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·EDINBVRGH·
THE CITY OF EDINBURGH COUNCIL

Item no
Report no

Edinburgh Tram - Appointment of Contractor for the Multi-Utilities Diversion Framework Agreement (MUDFA)

The City of Edinburgh Council

21 September 2006

1 Purpose of report

1.1 To report on the assessment of the tenders for the Multi-Utilities Diversion Framework Agreement (MUDFA) and to seek approval for **tie** to award the contract.

2 Summary

2.1 The first stage in the construction and delivery of the Edinburgh Tram Network is the diversion/protection of the utility plant along the route of the tram, in advance of the construction of the tram infrastructure.

2.2 **tie** have obtained the agreement of the major utility companies to the appointment of one contractor to undertake all of the diversion/protection works except for those which are deemed to be technically complex or sensitive.

2.3 **tie** has taken the procurement process for this contractor forward and selected a contractor through a tendering exercise. This contractor has submitted a competitive price and demonstrated that they are competent to undertake the work.

2.4 The MUDFA contract is in 2 stages: the first stage being the pre-construction phase which involves the MUDFA contractor and **tie** refining the scope and the costs of stage 2, the construction stage. Once these costs have been refined they will be fed into the business case which will be submitted to the Council for approval. This step has been allowed for in the MUDFA contract and the contract can be terminated during the pre-construction stage without penalty. Although it should be noted that the MUDFA contractors pre-construction costs would be required to be paid until the date of termination.

3.7 The procurement process for the appointment of a MUDFA contractor followed the statutory process set down within the European Union. The contract was advertised in the European Journal on the 30 September 2005 and following submissions of interest an assessment process was used to select four tenderers. The initial tenderers were :-

Balfour Beatty
United Utilities
Alfred McAlpine Infrastructure Services
Morgan Est (Morgan Est were subsequently joined by Thames Water in Joint Venture)

3.8 The four tenderers were required to submit the following information within their tender submission:-

a Responses to a range of technical questions relating to method statements, safety, quality control, traffic management, stakeholder management and reinstatement;
b A project programme
c CVs for the project team
d Priced bill of quantities
e A fully marked up contract and schedules
f A completed insurance questionnaire

3.9 Following the evaluation of the tender submissions two tenderers were selected to proceed to the Clarification and Refinement Process (CARP). The two tenderers selected to proceed to the CARP were superior in a number of categories including a significantly more competitive price and better value. CARP involved an intensive period of negotiation and the submission of a best and final offer from each of the two tenderers. The tenderers taken through to this stage were Alfred McAlpine Infrastructure Services and Morgan Est-Thames Water Joint Venture. As the contract award process is not complete, it has been necessary to use code names for commercial negotiation reasons to preserve the confidentiality of the preferred tenderer. The code names "Harris" and "Lewis" have been used by **tie** during the CARP process and these names have been continued in this report.

3.10 Each tender and the CARP submission was evaluated by the **tie** team against robust evaluation criteria in the following key areas:-

- Technical & safety;
- Project team;
- Programme and project execution proposals;
- Commercial;
- Legal; and
- Insurance.

5 Conclusions

5.1 The MUDFA is drafted in a way that enables the contract to be awarded at present, prior to the approval of the Business Case for the tram, while still allowing the Council to terminate the contract in advance of the construction phase without penalty. This allows the project to proceed on programme while the Business Case is finalised and presented to the Council for approval.

6 Recommendations

6.1 It is recommended that the Council:

a Grants approval to **tie** to appoint the contractor known as Lewis to undertake the MUDFA contract, subject to Scottish Executive approval

b Notes that the contract award complies with the Edinburgh Tram Network programme

c Notes that the information from the pre-construction stage will be required for the business case, which will be submitted to the Council for approval and that the MUDFA contract can be terminated during the pre-construction stage without penalty. Although it should be noted that the Mudfa contractors pre-construction costs would be required to be paid until the date of termination.

Andrew Holmes
Director of City Development

Appendices	None
Contact/tel	Duncan Fraser - [redacted]
Wards affected	All
Background Papers	**tie** report entitled 'Evaluation of the ITN Tender Submissions for the Procurement of the Multi-Utilities Diversion Framework Agreement (MUDFA) Contractor in Respect of the Edinburgh Tram Network' dated 18 August 2006

tie Limited

Edinburgh Tram Project
(Commercial In Confidence)

Paper to : **Tram Project Board**

Subject : **Tram Project Functional Specification**

Date : **18th September 2006**

Background

1 One of the terms of the grant letter issued by Transport Scotland (TS) to The City of Edinburgh Council (CEC) in respect of the funding of the project to the end of the year, is that the baseline scope (now to be called the Functional Specification) for the project be drafted, finalised and agreed between **tie**, TEL, CEC and TS.

Progress to date

2 On 9 August 2006 an initial meeting took place between John Ramsay and Lorna Davis of TS and Trudi Craggs and Lindsay Hetherington of **tie**. The outline of the Functional Specification was discussed and a draft was submitted to Transport Scotland on 10 August for further consideration. **tie** undertook to continue to develop the Functional Specification and to collate the relevant background documents and information. TS undertook to revert with any comments on the draft.

3 A further meeting took place on 29 August between John Ramsay of TS and Geoff Gilbert, Trudi Craggs, Miriam Thorne and Lindsay Hetherington of **tie**. At that meeting it was agreed that **tie** would develop the existing document so that it followed the style of the Functional Specifications already submitted for the Airdrie to Bathgate Railway and Linked Improvements project and the EARL project. This was at the request of Bill Reeve of TS. This was subject to the caveat stated by **tie** that the tram project was at a different stage in its development and implementation than both those project which are only now going through the parliamentary process and accordingly the Functional Specification for the tram will require to reflect this.

Proposed Contents of the Functional Scope

4 It is proposed that the Functional Specification will cover the following

a. Project Objectives and Targets including purpose of the document, background (including project evolution to date), objectives and benefits

b. Geographical boundaries and interfaces which will include a section on bus/tram integration

c. Interfaces with other projects and functional boundary which will provide a summary of both transport and non-transport projects which will or may have impact/interface with tram, for example, EARL, the Haymarket Masterplan and the Leith Docks Development Framework.

d. Route Capability which will deal with frequency, target runtimes and high level vehicle specification.

e. Operations and Control functionality which summarise the supervisory control and communications proposals, the interface with traffic signalling in respect of the on street sections, the interface with CCTV, ticketing and other communications for example PIDs.

f. Operational Integration with Lothian Buses. This is likely to be a cross reference to the TEL Business Plan.

g. Project Constraints including construction constraints for example the Code of Construction Practice, side agreements, Network Rail and CEC constraints during the Festival and Hogmanay celebrations. This section will also deal with operational constraints for example the Noise and Vibration Policy.

h. Proposed Technical Solutions which will summarise the construction methodology and the assumptions made in that regard in respect of the programme.

i. Project Workscope including trams, track, signalling, OLE, civil and structural works, mechanical and electrical requirements, utilities, environmental mitigation and roads (ie the road works required and the wider area impacts mitigation which may be required).

j. Maintenance effects and requirements post completion. This section will reflect the assumptions used to prepare the maintenance and lifecycle costs.

k. Performance effects and requirements post completion. Again this section is likely to be a cross reference to the TEL Business Plan.

l. Safety and Environmental effects and requirements post completion

5 It is believed that this will lead to a comprehensive document which should meet the satisfaction of TS and CEC and from the base line for future change.

Timetable for completing the Functional Specification

6 TS indicated that they wanted a substantially finalised draft by mid September. In addition the Functional Specification is likely to be required for the OGC review of the project which is scheduled to take place on 26, 27 and 28 September 2006.

7 The latest draft of the Functional Specification will be circulated by close of business on Thursday for consideration prior to the Tram Project Board. It is anticipated that it will already have been circulated and discussed with representatives from CEC, TS, TEL and Transdev.

Recommendation

8 It is recommended that the Tram Project Board approves the current version of the Functional Specification failing which, should any further matter require to be covered in the Functional Specification it is recommended that the Tram Project Board notes the requirements of CEC, TS, TEL and Transdev so that

the Functional Specification can be revised accordingly and finalised in line with the OGC review requirements.

Proposed	Trudi Craggs Project Development and Approvals Director	Date:- 18/9/06
Recommended	Andie Harper Project Director	Date:- 18/9/06
Approved	..... Tram Project Board	Date:- ……

Tie Limited

TRAM Project
(Commercial In Confidence)

Paper to : **Tram Project Board**

Subject : **Tram Depot Location**

Date : **15th September 2006**

1.0 Background

1.1 At the least TPB, potential capital cost savings associated with moving the depot from Gogar to Leith were highlighted.

1.2 Since the last meeting, quantitative and qualitative analysis has been carried out to compare both options looking at capital, operating costs as well as some of the les tangible impacts of both sites.

2.0 Comparison of Options

2.1 This analysis has concluded, that over a 30 year appraisal period, the difference between both sites is marginal from a financial perspective. However, the opportunity cost to CEC has not been yet been factored into the overall analysis.

2.2 The analysis demonstrates that reduced capital costs now will incur increased operating costs through the life of the project and impact on the TEL business plan.

3.0 Recommendation

3.1 The Tram DPD Sub – Committee recommends that the depot location is left as Gogar for the purposes of the Infraco ITN and also recommends that the relative figures are input into the Business Case model to assess overall impact. The Project will advise the TPB of the outcome of this exercise and make further recommendations.

Proposed Susan Clark, Delivery Director — Date:- 15/9/06

Recommended Andie Harper, Project Director — Date:- 6/9/06

Approved ..... Tram Project Board — Date:- ……

tie Limited

Edinburgh Tram Project
(Commercial In Confidence)

Paper to	:	**Tram Project Board**
Subject	:	**Land Acquisition Assumptions**
Date	:	**18th September 2006**

Background

1 The Land Assembly team (LAT) are working to the assumption that The City of Edinburgh Council (CEC) will be using the General Vesting Declaration (GVD) process to compulsorily acquire ALL land required in respect of the Infraco works in advance of the Infraco contract award. The case for the use of the GVD process is set out at Appendix 1. The legal response from Malcolm Thomson QC is set out in Appendix 2.

2 In order to achieve unencumbered land title and other rights in relation to land and property, including removal of any short leases to allow for vacant possession, for the Infraco contract award which is currently anticipated to take place on 28th September 2007 in accordance with the baseline master programme, the LAT are working on a tight programming path.

3 Having investigated a number of scenarios as set out in Appendix 3 it is the LAT's opinion that scenario 1 is the only viable option available if **tie** want to give Infraco the necessary land access rights from the date of the Infraco contract award.

4 A number of constraints, in particular the local and national government elections in May 2007, mean that the land programme is now time critical. The following dates will need to be met in order for the working assumptions to remain feasible:

- **24th October 2006** - CEC to confirm at the monthly Executive meeting that Informal letters can be sent to all persons directly affected by the compulsory purchase of land for the tram. Letters to be sent the following day.

- **24th November 2006** –this is the latest date that that the first notice can legally be sent out in order to achieve the GVD on 1 Feb 2007. This notice does not bind CEC to taking title to land.

- **1st February 2007** – CEC to make the GVD, which will bind CEC to take possession. Title can be taken a minimum of 28 days later – by taking title in March, vacant possession of land can be achieved and advanced works can be carried out in accordance with the current programme.

- **28th September 2007** – Infraco contract award.

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Recommendation

5 It is recommended that the Tram Project Board agrees:-

- That the General Vesting Declaration Process should be used to compulsorily acquire all of the land required for the Infraco works in advance of the Infraco Contract award; and

- That **tie** will recommend to CEC that the General Vesting Declaration is made on 1 February provided that the business case has been approved to enable the project to meet the baseline master programme.

Proposed	Trudi Craggs Project Development and Approvals Director	Date:- 18/9/06
Recommended	Andie Harper Project Director	Date:- 18/9/06
Approved	..... Tram Project Board	Date:- ……

Edinburgh Tram Project
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Appendix 1

tie ltd/CEC
Edinburgh Tram
The Case for Using Compulsory Purchase Powers and For Using the General Vesting Declaration Method of Compulsory Acquisition in Particular

Introduction

This paper sets out the case for the use of compulsory purchase powers to acquire land needed for the Edinburgh Tram. It also explains the advantages and disadvantages of the two compulsory purchase methods which might be used ie Notice to Treat and General Vesting Declaration. It recommends that the General Vesting Declaration method is used.

Background

Now that the Edinburgh Tram Acts have Royal Assent, the City Council as been granted compulsory purchase powers to acquire the land set out in the Acts for the purposes set out in those Acts. This is the equivalent to a Compulsory Purchase Order (CPO) having been confirmed by the Scottish Ministers. Those powers are constrained by side agreements

The compulsory purchase power in the Tram Acts is an enabling one. The Council can still choose to acquire by agreement or it can choose not to acquire at all. In certain locations the Council's ability to exercise the Compulsory Powers is constrained by side agreements entered into with landowners as part of the Parliamentary process.

Case for Using Compulsory Purchase Powers

It is recognised that the use of compulsion in the acquisition of property rights is generally regarded as a measure of last resort, to be used only where it has not been possible to reach voluntary agreement with the affected parties. However this paper recommends that the Council exercises its compulsory purchase powers for the tram project. This is for the following reasons

a. Compulsory purchase is not just necessary to acquire property where the owner will not sell voluntarily. It also gives a means of resolving the following situations

- Obtaining title where the owner is unknown (this situation exists with certain parties of the Roseburn railway corridor
- Provides "clean title" by extinguishing burdens and acquiring multiple interests which the title holder may not have the power to extinguish

b. The large number of interests to be acquired within the required timescale make it likely that compulsory purchase is the only practicable way of delivering in time all of the property rights that are needed

c. Property owners and not disadvantaged financially as they should obtain the same financial settlement that would be obtained had they sold voluntarily.

d. The use of compulsory purchase powers does not preclude the acquisition of interests by voluntary agreement. Neither does it preclude voluntary final settlement of compensation payments.

Appendix 2
TIE/CEC
COMPULSORY ACQUISITION POWERS – LEGAL RESPONSE FROM MALCOLM THOMSON QC

INTRODUCTION

The following note is intended to pull together the answers given to various legal questions relating to the compulsory acquisition powers enjoyed under the Tram Act.

QUESTIONS

1. Is Notice to Treat (**"NTT"**) or General Vesting Declaration (**"GVD"**) the most appropriate method of exercising compulsory purchase powers?

   Both methods are available in terms of the Tram Act (s42(1) and s80(1)). GVD is the more usual and advantageous and is likely to be the most appropriate for this type of project where there are a considerable number of interests in land to be acquired because (a) the effects of inadvertent non-notification are less and do not affect validity of title, (b) the conveyancing procedures are simpler and (c) defects in transferee's title under NTT affect the authority's title which is not the case in terms of GVD procedure.

2. Can there be a mix of NTT and GVD?

   Counsel was unhappy in adopting this course in respect of the same land (save in respect of short tenancies where CPO legislation expressly covers the point - see answer 9 below).

3. Can there be more than one GVD to permit acquisition in tranches?

   In the absence of a prohibition in the Tram Act there can be any number of GVDs made in respect of the area covered by the Tram Act.

4. What are the notification periods for GVD?

   The total time period for getting an effective GVD is approximately 3 months (2 months notice of the intention to use a GVD and 28 days notice that it has been executed). At the end of the second notice period the acquiring party will have title and be entitled to take entry subject only to any short tenancies (see later in this note).

5. Who needs to be notified of GVD's? Owners, occupiers, heritable creditors, other interested parties?

   When the GVD has been executed notice needs to be served on every occupier of the land and on every other person who has given information to the authority with respect of any of that land in response to the authority's invitation.

6. Is there a prescribed form of notification?

   There are prescribed forms of notice confirming intention to use the vesting declaration procedure and also of the notice that the General Vesting Declaration has been executed all set out in the relevant regulations (see 2003 Regulations).

7. What is the required minimum period between notification of intention to make GVD and actually making a GVD?

   Two months (Schedule 15, para 3(2) of TCP(S) Act 1997) unless parties agree otherwise.

8. Can GVD be used to terminate a short tenancy?

   The GVD procedure made under the Tram Act would require to comply with the provisions of Schedule 15 of the 1997 Planning Act. In terms of paragraph 6 of that Schedule 15 the making of a GVD shall have the effect of a deemed service of a notice of a NTT but not in respect of a short tenancy. Accordingly, a GVD does not terminate a short tenancy.

   The NTT procedure required to terminate short leases (see 9 below) can run in tandem with GVD procedure for the land so as to cause no timing implications.

9. If no, can an NTT be used even though GVD used to acquire land interest?

   Yes - Paragraph 8 of Schedule 15 of the 1997 Planning Act expressly provides a mechanism for disposing of short tenancies by serving a NTT.

10. What period of notice, if any, is required to terminate short tenancy?

    The time limits for operation of the exercise of a Notice to Treat procedure for a short tenancy are as set out in the preliminary note on CPO issues (ie three months due to provisions of Section 37 of the Tram Act).

Appendix 3 Land Assembly Programming Table

SCENARIO	ACTIVITY	ACTIVITY/MILESTONE	COMMITMENT	2006 August	September	October	November	December	2007 January	February	March	April	May	June	July	August	September	October	November	Risks identified and comment on scenarios
		CEC Business									I		II	III	IV					
1	1	Informal Letter	None			1														P: Title secured in good time. BP: enough to ensure land is unencumbered. £: budget ok. AM: 6 months
	2	1st Notice	None				2													
	3	2nd Notice (GVD)	Buy							3										
	4	Take Title									4									
	5	Infraco contract Award															5			
2	1	Informal Letter	None			1														P: Title in time ; BP: little scope to deal with problems. £: underspend but less AM cost; £: Infraco Risk premium? AM: 2 months
	2	1st Notice	None							2										
	3	2nd Notice (GVD)	Buy													3				
	4	Take Title															4			
	5	Infraco contract Award															5			
3	1	Informal Letter	None			1														P: Title will be late and delay Infraco. BP: No time to deal with occupancy problem; £: as above AM: none
	2	1st Notice	None													2				
	3	2nd Notice (GVD)	Buy															3		
	4	Take Title																	4	
	5	Infraco contract Award															5			

CEC Business: I = Purdah period; II = Elections; III = New Council organisation period; IV = summer recess

Assumption re CEC Approval process: assumes 1st Notice can be issued on approval of Proper Officer; if needs to be Council, then needs to be brought forward 4 weeks.

Risk notes:

P = Programme

BP = Buffer Period – to deal with occupancy problems or run down leases (with no compensation) and maximise revenue;
£ = Budget, ie £16M in 0607 budget
AM = Asset Management: Cost to ensure sites maintained (public perception, etc) and H&S issues addressed

tie Limited

Edinburgh Tram Project
(Commercial In Confidence)

Paper to	:	**Tram Project Board**
Subject	:	**Public Hearing of Objections to the traffic regulations orders for the core measures**
Date	:	**18th September 2006**

Background

1 While the Edinburgh Tram (Line One) Act 2006 and the Edinburgh Tram (Line Two) Act 2006 give the authorised undertaker/the promoter various powers to construct and operate a tram within specified limits of deviation in Edinburgh, the Acts do not give the authorised undertaker all of the consents which it requires.

2 One of the types of consents which the authorised undertaker still requires to obtain is traffic regulation orders

3 The 'core' traffic regulation orders are those that are necessary to facilitate the operation of the tram. Ideally, these measures would have been included in the Bills as introduced to the Scottish Parliament. However, not only was the technical information was not available at that time, it was thought that by including these in the Bills, the length of the parliamentary process would increase as would the number of objections. In turn this was likely to add an element of risk to the outcome of the parliamentary process.

4 Accordingly, the core measures now require to be approved under road traffic regulation procedures.

Implications

5 Given that the normal statutory process applies to the traffic regulation orders, consideration should be given to the appropriateness of holding a public hearing in respect of objections to core measures. The difficulty is that there will be little, if any, scope for objectors to persuade a Reporter to abandon or to modify the core measures without undermining the operation of the tram system, which has been endorsed by the Scottish Parliament at significant public expense.

6 In these circumstances the objectors may feel that the outcome of the hearing has been prejudged by (1) the prior approval by the Scottish Parliament and (2) the room for manoeuvrability, or lack of it, on the part of The City of Edinburgh Council (CEC) and their agent, the Reporter.

7 Although CEC could decide not to hold a discretionary hearing, in some cases a hearing is mandatory, that is, where the core measure

- prohibits loading either at all times or for specified periods unless those periods fall wholly within 0700 and1000 hours or 1600 and 1900 hours **and** there is a sustained objection by any person, or

- requires vehicular traffic generally or in a specified class, to proceed in a specified direction or prohibiting such traffic from so proceeding **and** there is a sustained objection from public transport operators.

8 It is anticipated that some core measures will fall within these categories. For example, in relation to Shandwick Place it is likely that loading will be prohibited either at all times or for specified periods outwith the hours stated above to ensure that the tram is not impeded. In relation to Grosvenor Place, it is likely that this will restricted to one way traffic only.

9 Apart from the value of committing further public resources to the cost of a public hearing on core measures, it could be considered unreasonable to raise the expectations of objectors who would assume that they had some prospect of influencing the outcome. If they are left with the impression that they faced a fait accompli from the outset, they could well feel aggrieved.

Recommendation

10 It is recommended that the Tram Project Board:

- agrees that **tie** should recommend to CEC that it should not hold a discretionary hearing in respect of core measures, and

- instructs **tie** and/or CEC to ask the Scottish Executive to amend the Local Authorities Traffic Orders (Procedure) (Scotland) Regulations 1999 to remove the requirement for a mandatory hearing in relation to orders supporting major projects already endorsed by the Scottish Parliament.

Proposed Trudi Craggs Date:- 18/9/06
Project Development and Approvals Director

Recommended Andie Harper Date:- 18/9/06
Project Director

Approved ..... Date:- ……
Tram Project Board

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Edinburgh TRAM Project
(Commercial In Confidence)

Paper to : **Tram Project Board**

Subject : **Structure of the InfraCo ITN**

Date : **18th September 2006**

1.0 Introduction

1.1 This paper sets out the matters relating to the InfraCo ITN to be endorsed by the Tram Board. These are:-

a) Procedure for sign off of the InfraCo ITN
b) Proposed delivery of the tram system (Phases 1a and 1b) by sectional completion.
c) Structure of the ITN
d) Schedule for InfraCo ITN information release and bidding Period
e) Variant bid requirements

2.0 Procedure For Sign Off of the InfraCo ITN

2.1 The InfraCo ITN is to be signed off by Project stakeholders, principally CEC and Transport Scotland.

2.2 It was agreed at the Tram Board DPD Sub Committee that Stakeholders will sign off the InfraCo Heads Of Terms and that DLA will provide a written undertaking to the Project that the Heads Of Terms have been prepared in accordance with the Heads Of Terms.

3.0 Delivery By Sectional Completion

3.1 The Project proposes that the tram system is completed and delivered into service in sections.

3.2 The proposed sections are:-

Section 1 – Edinburgh Airport to Haymarket

Section 2 – Haymarket to Ocean Terminal (through Leith)

Section 3 – Ocean Terminal to Newhaven

Section 4 – Roseburn Junction to Crew Toll

Section 5 – Crew Toll to Granton Square

3.3 The key advantages to this approach are that:-

- That it will minimize risk and offer better value for money.

- It is also anticipated that the general public might better receive it than the adoption of a single completion date.
- It has the benefit that if there are insufficient funds to implement the whole of the network in one single contract, there is then a ready basis for negotiation of a partial arrangement, either at bid stage or in extreme cases, after award.
- There are further benefits in terms of a controlled introduction of trams to the system and also the progressive ramping up for the Operator.

3.4 It is therefore recommended that the sectional completion approach is adopted.

4.0 Structure Of The ITN

4.1 The ITN is to be structured within seven volumes. Details of the contents of each Section are set out in Appendix B.

4.2 This structure has been endorsed by the Project Stakeholders.

4.3 The Board is requested to note and approve the structure of the ITN as described in this document.

5.0 Schedule For InfraCo ITN & Bidding Period

5.1 The dates on which and which information will be released to stakeholders for approval with a view to achieving an ITN release to bidders on 3 October 2006 and the further activities that will be undertaken during the bid period are set out in Appendix C.

5.1 The Board is recommended to note and approve this information release and bid period Schedule.

6.0 Milestone Payments

6.1 A milestone payment arrangement is proposed for the InfraCo contract such that the contractor's payment will be linked to the delivery of key programme milestiones. This will incentivise the contractor to deliver to programme as his cashflow will be adversely affected if he does not.

6.2 Details of the proposed mechanisms are set out in Appendix D.

6.3 It is recommended that the Sub Committee approves the proposed milestone arrangements for the InfraCo and TramCo ITNs.

7.0 Variant Bid Requirements

7.1 It is proposed that the number of variant bid options is reduced from 14 to 8. Details of the proposed variants are set out in Appendix E.

7.2 Reduction in the number of variants will better enable the bidders to respond to our shortened timescales, increase their level of confidence in the Project having a clear strategy and is consistent with the recommendations of the TramCo readiness review.

7.3 It is recommended that the Board approve the proposed variant bid requirements for the InfraCo ITN.

8.0 Recommendation

It is recommended that the Board approves the recommendations made in respect of the InfraCo ITN as set out in this paper.

Proposed	Geoff Gilbert Project Commercial Director	Date:- 5/9/06
Recommended	Andie Harper Project Director	Date:- 5/9/06
Approved	..... Tram Project Board	Date:- ……

Tie limited

Edinburgh TRAM Project
(Commercial In Confidence)

Subject : **Delivery by Sectional Completion**

Appendix A

Date : **18th September 2006**

1.0 Introduction

1.1 The background to this paper is that it is currently understood that the whole of the proposed Edinburgh Tram Network comprising Phase 1a and Phase 1b is to be opened as a one completed system. On this basis the Infraco Contract is currently drafted with a single completion date.

1.2 The purpose of this paper is to consider issues associated the incorporation of Sectional Completion provisions within the Infraco Contract whereby the configuration of the Works, together with the structure and content of the Contract enables a formal sequential completion of the project into (typically) geographical areas acceptable to the Promotor, thus enabling the progressive introduction of the Sections into revenue service in a controlled manner, from both technically acceptable and commercial viewpoints.

1.3 The objective is to seek a suitably flexible arrangement, not only in terms of physical Completion of the Works; commissioning and ultimately opening of the Network but how the risk and value associated with this also impacts on other issues.

2.0 Principal Issues

2.1 There are a number of issues surrounding the decision as whether or not to adopt Sectional Completion and the principal ones relate to the following:

- Construction Programme
- Interface with the MUDFA Contract and other variables
- Commissioning
- Defects Liability Periods
- Liquidated Damages
- Risk
- Commercial
- Press handling
- Public perception of success

3.0 Commentary

3.1 Comments against these issues are noted in the table below:

No.	Issues	Comment

1	Construction Programme	In practical terms, the Infraco Contractor will inevitably complete in a phased manner. Incorporation of different Dates of Possession and Completion of Sections would merely regularize this situation.
2	Interface with the MUDFA Contract and other variables	Any interface with another variable, such as a potential over-run on part of the MUDFA Contract, has the risk of causing an adverse impact on the Infraco Contract. Although this would still occur if Sectional Completion were adopted, it should help to contain some of the problems that might arise. NOTE: currently there are no provisions in respect of Sectional Completion in the MUDFA Contract and thus there is not a contractual mechanism for any part of the MUDFA Works to be completed before the Completion Date. This has been discussed with the MUDFA Project Manager, Alasdair Slessor who advises that it could be discussed with the preferred bidder. It would be helpful for both of these contracts to be aligned.
No.	Issues	Comments
3	Commissioning	The Infraco Contractor will need to test individual elements of the system as the Works proceed (Overhead line and associated equipment; Control, communications and tram route setting; Substations, substation equipment etc.) and also carry out Integrated System Testing of the lines and the whole network. These can readily be regularized in a Sectional Completion arrangement.
4	Defects Liability Periods	Although these periods are generally the same length for each Section, subject to Solicitors' confirmation, it could be arranged that each apply from the date that the last Section is completed, in order to achieve commonality, deal successfully with the need to carry out Integrated System Testing of the whole network and allay one of the inevitable concerns against Sectional Completion.
5	Liquidated Damages	Different amounts of damages would apply to each of the Sections, reflecting genuine pre estimates of the anticipated loss. This obviously benefits the Infraco Contractor but should be reflected in the pricing and thus tie would also benefits. Furthermore it might help to avoid a challenge that the LDs represent a penalty and thus possibly become unenforceable.
6	Risk	The adoption of Sectional Completion will limit the risk to both the Infraco Contractor and tie. The Infraco Contractor will have a more manageable

		risk profile, as LDs will apply to Sections only, rather than the whole network; financing costs (either relating to bonds or retention) would reduce, as there will be a partial release at the completion of each section. Also it could limit tie's exposure to claims in the event of delay situations arising for Compensation Events during the construction stage.
7	Commercial	Aside from the potential to earn revenue at an earlier stage (albeit not over the whole of the network), adoption of Sectional Completion will limit the risk to both the Infrastructure Contractor and tie. This should be reflected in the Infraco Contractor being able to submit lower prices and for tie to control costs thereafter.
8	Press handling	If the Infraco Contractor completes a major proportion of the network and it is then not opened it could be expected that the local press might make a few headlines out of the situation.
9	Public perception of success	The general public are more likely to see the project's construction as a success if it opens in a reasonable time and any initial operational difficulties are resolved promptly. The adoption of Sectional Completion would achieve an earlier completion, albeit only on part of the route. It would also help to ensure that even if there are initial operational differences, they may affect the first section but more likely to be resolved before the whole network goes into service.

4.0 Rationale for the proposed approach

There are several advantages to incorporation of Sectional Completion, with few disadvantages. It would certainly be more beneficial than a 'partial possession' arrangement that is discretional and thus lacks the necessary control. Most major projects incorporate some form of Sectional Completion as it enables flexibility with control.

4.1 Additionally it has the benefit that if there are insufficient funds to implement the whole of the network in one single contract, there is then a ready basis for negotiation of a partial arrangement, either at bid stage or in extreme cases, after award.

4.2 There are further benefits in terms of a controlled introduction of trams to the system and also the progressive ramping up for the Operator.

5.0 Possible Sections

5.1 The following represent a possible (maximum) split that could be readily incorporated into the current design:

5.1.1 Section 1 – Edinburgh Airport to Haymarket

This is the section that is planned to be constructed first (and includes the currently suggested track to be used for the trial running). Crossover tracks are currently incorporated into the design at Haymarket that could facilitate turnaround. Although it might be preferable for Section 1 to extend into the central area of the City there are restrictions on working during the Edinburgh Festival and Christmas periods and thus this is suggested as within Section 2. The Depot and Control Room must also be incorporated in Section 1, as should the spur at Roseburn Junction for future connection.

5.1.2 Section 2 – Haymarket to Ocean Terminal (through Leith)

This would represent the majority of the balance of Phase 1a of the network.

5.1.3 Section 3 – Ocean Terminal to Newhaven

Although only a short length, informal comment has been made that this could be deferred if funds are tight.

5.1.4 Section 4 – Roseburn Junction to Crew Toll

This would involve the initial part of Phase 1b of the network but requires the optional crossover that is considered at Crew Toll to be incorporated.

5.1.5 Section 5 – Crew Toll to Granton Square

This would represent the balance of Phase 1b of the network.

5.2 Sections could easily be combined (for example 2 & 3 and/or 4 & 5) and renumbered to suit tie's priorities or possibly modified, subject to physical constraints such as the ability to for trams to turnaround, the proximity of substations and the like.

6.0 Conclusion

6.1 This paper sets out a proposed way forward that offers a number of pragmatic benefits that will minimize risk and offer better value for money. It is also anticipated that the general public might better receive it than the adoption of a single completion date. The only major downside is the additional drafting and impact on payment mechanisms but this is manageable and far easier to sort out at the beginning than later on.

6.2 The Tramco ITN has already been issued to the Tramco Bidders. The Infraco ITN broadly follows a similar format and it is not dissimilar to others that have been issued for various major projects.

Tie limited

Edinburgh TRAM Project
(Commercial In Confidence)

Subject : **Structure of the InfraCo ITN**

Appendix B

Date : **18th September 2006**

The Volumes for Infraco are as follows:

- Volume 1 – ITN and Appendices
  Basic information on background, key contacts, project programme and the like.

- Volume 2 – Format of Tenders
  Options, anti-collusion certificate, technical questions/requirements, legal requirements including Compliance Matrix and Risk Allocation Matrix together with insurances.

- Volume 3 – Contract and Schedules
  The Contract covers the main contractual terms whilst the Schedule cover such things as Bonds, Parent Company Guarantees, Warranties and the like (34 in total).

- Volume 4 – Tram Supply Agreement, SDS Agreement etc.
  Tram as issued to Bidders (may need to be reviewed against agreed position if necessary).

- Volume 5 – Employer's Requirements
  This is the generic term for **tie's** requirements and is effectively a performance specification setting out required standards to be achieved. When finally drafted, this will be 'contractualized' by the solicitors to ensure appropriate obligations are imposed upon the Infraco.

- Volume 6 – Pricing Requirements
  This will include the overall build up by a Contract Price Analysis split into elements and sections of work; Schedules of Rates for the Accommodation Works that are not yet defined together with the pricing of the Milestones and Milestone Payments.

- Volume 7 – Supporting Information
  Including Pre Contract Health & Safety File, Pre Contract Health & Safety Plan, Environmental Management Plan, System Integration Plan, and Stray Current Code of Practice together with Surveys for Utility Apparatus, Structures, Topographical, Geotechnical, Noise & Vibration, Archaeological, Network Rail Assets, Ecological, Hydrological, Drainage, Planning Authority Guidelines, Drawings and information.

SCHEDULE FOR INFRACO ITN & BIDDING PERIOD

		STAKEHOLDERS' MEETING	STAKEHOLDERS' MEETING	STAKEHOLDERS' MEETING	BIDDERS' CONFERENCE	STAKEHOLDERS' MEETING	PROJECT BOARD + DPD S/C APPROVAL	ISSUE OF ITN	BIDDERS RETURN MARK UP'	INITIAL MID BID MEETING	SECOND MID BID MEETING
Volume	Title	Thursday 7 September 2006	Thursday 14 September 2006	Thursday 21 September 2006	Tuesday 26 September 2006	Thursday 28 September 2006	Friday 29 September 2006	Tuesday 3 October 2006	Tuesday 17 October 2006	Tues. 7 to Thurs. 9 November 2006	Tues. 21 to Thurs. 23 November 2006
1	Infraco ITN	Outline	Draft available	Final + Approved							
2	Tender Forms etc.		Drafts available	Final + Approved							
3	Contract & Schedules		Draft Contract available	Balance of key Schedules	Any feedback? (from presentation)	Final + Approved		hard and 'electronic' copy of Contract + key Schedules		Balance of any other (less key) Schedules issued prior to this date	
4	Tram Supply etc.		Approved previously								
5	Employers' Requirements			Draft Employer's Requirements available from TSS	Final + Approved	'Contractualisation' (legal check)					
6	Pricing Schedules	Outline of payment mechanism (capital costs)	Milestone Schedule	Balance of draft Pricing Schedules	Any feedback? (from presentation)	Final + Approved					
7	Supporting Information	Phased Review						Bulk of drawings and related documents		Secondary Release of less critical items	Update of confirmatory consents or surveys

Notes

Bid cost Proposal Approved

All stakeholders such as TEL, CEC, TS and SDS to have signed off prior to project board

Tie limited

Edinburgh TRAM Project
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Subject : **Milestone Payments of the InfraCo ITN**

Appendix E

Date : **18th September 2006**

1.0 Introduction

1.1 Bidders will be invited to submit their proposals for Milestones and Milestone Payments during the construction / implementation stage based on the proposed structure outlined below.

2.0 Basis

The gross amounts are to be calculated with reference to the Contract Price Analysis / Pricing Schedules, Works Programme and the Contract. These will be linked to the achievement of specific items of work that can be verified by **tie** and its technical consultants.

3.0 Intervals

Bidders will draft their proposals to provide for Milestones Payments to be achieved at intervals of either a calendar monthly or four weekly periods (to be confirmed), such that the anticipated number will equate to the number of months [or periods] of the construction works and any pre-construction activities, less the adjustment in respect of the Final Milestone Payment (see below). This is not to infer that payment will be made automatically each month [or period], as certain parameters must be met.

4.0 Composition of Milestones Payments

Depending on the stage of the Works, it is anticipated that typically there will be of the order of 20 to 50 Milestones forming part of each Milestone Payment. Approximately 25% of these Milestones in each Milestone Payment, at the discretion of **tie** are to be Critical Milestones that will be required to be achieved to 'trigger' a Milestone Payment. No payment will be made until all Critical Milestones within a Milestone Payment have been achieved. If other (Non Critical) Milestones within a Milestone Payment are not achieved, the Infraco can elect to receive the Milestone Payment less the stated value of the Milestones that have not been achieved.

5.0 Critical Milestones

The following are examples of items that **tie** regards as critical for the purposes of the Milestone Payments:

- Completion of design for various elements or disciplines must be built into early Milestones.

- Electrical, control and ticketing systems etc.
- Commissioning and testing of various elements or 'Sections' must be built into later Milestones.
- Integrated System Testing.
- Plus more.

6.0 Variation to Milestone Payments

One objective of the Milestone Payments arrangement is to enable **tie** to forecast its anticipated spend at each stage of the Works and thus Milestone Payments are to be 'capped' at the originally proposed amounts for the anticipated date of achievement, even if the Infraco proceeds ahead of programme. However if the Infraco re-programmes or sequences the Work such that a number of Non Critical Milestones within a Milestone Payment are not achieved but others from a subsequent Milestone Payment have been achieved, these will be considered for payment, provided that the amount due is not greater than it otherwise would have been.

7.0 The Final Milestone Payment

The concept of the Final Milestone Payment is to incentivize the Infraco to achieve the Taking over Certificate such that no Milestone Payments will made on an interim basis once the gross amount of payments reaches 85% of the Contract Price (adjusted for each Section). The Final Milestone Payment, effectively 15% of the relevant Section will only be made when the Works are ALL completed and the tram system delivered into service.

7.1 Format of milestone payments for TRAMCO contract

Bidders have been provided with eighty Milestones to insert prices against; however certain percentage limits are noted in order to limit forward loading.

CURRENT DRAFTING - STANDARD TENDER, MANDATORY AND OPTIONAL VARIANTS

	30 year infrastructure maintenance		3 year infrastructure maintenance		6 year infrastructure maintenance	
Geographical	**8 trams per hour**	**6 trams per hour**	**8 trams per hour**	**6 trams per hour**	**8 trams per hour**	**6 trams per hour**
All of Phase 1a	Standard tender	MV3	MV5	MV8	MV10	MV13
Phase 1a less Ocean Terminal to Newhaven Road	MV1	-	MV6	-	MV11	-
Phase 1a + Phase 1b	MV2	MV4	MV7	MV9	MV12	MV14

PROPOSED DRAFTING - TENDER OPTIONS

	3 year infrastructure maintenance (i.e. Years 0 to 3)		15 year infrastructure maintenance (i.e. Years 0 to 15)	
Geographical	**8 trams per hour**	**6 trams per hour**	**8 trams per hour**	**6 trams per hour**
Phase 1a + Phase 1b	Option 1	Option 3	Option 5	Option 7
All of Phase 1a	Option 2	Option 4	Option 6	Option 8

NOTES

Sectional Completion is to be adopted and Ocean Terminal to Newhaven Road will be one of the Sections. Accordingly there will be a mechanism to reduce scope, without overtly suggesting that we might.

Bidders are free to submit optional variants for alternative designs, risk transfer or the like **PROVIDED** that it accompanies the Tender Options 1 to 8 above.

tie Limited

Edinburgh Tram Project
(Commercial In confidence)

Paper to	:	**Tram Project Board**
Subject	:	**Tram Project Changes**
Date	:	**18th September 2006**

Background

1 **tie** has issued 33 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), 13 are changes associated with the terms of the SDS contract and 5 are Change Notices issued by SDS to **tie** (SDS Changes).

3 **tie** has developed a programme with SDS to agree these changes over the next 4 weeks, with the Client Changes having the highest priority.

Update on the status of the various changes

Client Changes

4 **tie** is currently evaluating the Client Changes to assess the design fees, the capex and programme impacts and the risks associated with these. The current status is as follows:

- Nine are agreed in principle subject to clarification of the contract requirements and evaluation of the costs.

- Five, including those in relation to the CCTV link up to the city wide CCTV control room, system integration and PIDs and common ticketing for trams and buses, could be passed through to Infraco for detail design by Infraco or a specialist subcontractor, thus alleviating **tie** from the additional design fees associated with SDS designing these elements.

- The one in relation to the Charette initiated change to the Shandwick Place stop location has been cancelled following the decision of the Promoter at the Planning Summit meeting.

SDS Contract Changes

5 **tie** has agreed six of the SDS Contract Changes and is currently evaluating seven for the design fees, the capex and programme impacts and the associated risks. The current status is as follows:

Agreed Changes:

- CNS 002: the instruction to SDS to set up project office for SDS/tie/TSS - No cost Impact

- 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 Citypoint - Saving of £147,329
- CNS 009: Provision of CEC resource – Not Required / Cancelled
- CNS 012: Provision of a licence for third party software – Fee £625

Agreed in Principle

Seven of the thirteen 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:

- CNS 001: Phasing of the construction of the project – Potential Saving > £500,000
- CNS 003: Traffic Regulation Orders - WIP.
- CNS 004: Temporary Traffic Regulation Orders - WIP.
- 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.
- CNS 013: Earl Ground Investigations - WIP.

6 **tie** has agreed 1 of the SDS Changes in principle and is currently evaluating 4 for the design fees, the capex and programme impacts and the associated risks. The current status is as follows:

- CRS 001: New Bridge over Tramway at Depot - WIP.
- CRS 002: High Level Option - WIP.
- CRS 003: Procurement Support - agreed in principle
- CRS 004: Transport Modelling - WIP.
- CRS 005: Transport Modelling - WIP.

Recommendation

7 It is recommended to the Tram Project Board that the contents of this paper are noted. A further update will be provided at the next Tram Project Board meeting.

Proposed Trudi Craggs Date:- 18/9/06
Project Development and Approvals Director

Recommended Andie Harper Date:- 18/9/06
Project Director

Approved ..... Date:- ……
Tram Project Board