



**Tram Project Board  
Report on Period 13 (2010/11)  
Papers for meeting 13<sup>th</sup> April 2011**

**09:30am – 12:00pm**

**Distribution:**

**Members and attendees**

Vic Emery

Richard Jeffrey

Donald McGougan

Bill Campbell

Cllr Gordon Mackenzie

Brian Cox

Kenneth Hogg

Peter Strachan

Neil Scales

Cllr Phil Wheeler

Cllr Allan Jackson

Cllr Ian Perry

Dave Anderson

Marshall Poulton

Alan Coyle

Andy Conway

Steven Bell

Mandy Haeburn-Little

Gregor Roberts

Alastair Richards

Ian Craig

Alasdair Sim (Minutes)

**In addition – for information only**

Cllr Maggie Chapman

Norman Strachan

Cllr Tom Buchanan

Frank McFadden

Dennis Murray

Ailie Wilson

<b>Contents .....</b>	<b>Page</b>
<b>Agenda Tram Project Board .....</b>	<b>3</b>
<b>Tram Project Board Minutes 16/03/11 .....</b>	<b>5</b>
<b>Project Directors' Report .....</b>	<b>13</b>
<b>Primary Risk Register .....</b>	<b>20</b>
<b>Papers for Consideration Period 13 2010/11 .....</b>	<b>23</b>
<b>Period 13 Transport Scotland Report Sections 2-7 .....</b>	<b>47</b>

**Agenda Tram Project Board**

**Brunel Suite – Citypoint, 2<sup>nd</sup> Floor**

**13<sup>th</sup> April 2011 – 09.30am to 12.00pm**

	Agenda Item	Led by	Page Ref
1.0	Welcome & Opening Remarks		VE
2.0	Review of Previous Minute & Matters Arising	VE	P5
3.0	<p><b>5 Key Business Priorities</b></p> <p><i>3.1 Building the Tram</i></p> <ul style="list-style-type: none"> <li>▪ Period Update</li> <li>▪ Project Director's Report <ul style="list-style-type: none"> <li>○ HSQE</li> <li>○ SVS Presentation</li> <li>○ Progress</li> <li>○ Finance</li> <li>○ Project Risk Register</li> <li>○ Papers for Consideration <ul style="list-style-type: none"> <li>▪ Period 13 Change Paper</li> <li>▪ Change – Project cost budget</li> <li>▪ Water Connection – Assembly Street</li> <li>▪ Princes St Stage 3 Audit</li> <li>▪ Utilities Betterment</li> </ul> </li> </ul> </li> </ul> <p><i>3.2 Preparing for Operations</i></p> <ul style="list-style-type: none"> <li>▪ Procurement of Revenue Collection Equipment</li> </ul> <p><i>3.3 Building the Brand/Communications</i></p>	<p>VE</p> <p>SB</p> <p>SB</p> <p>BCu</p> <p>SB</p> <p>GR</p> <p>GR</p> <p>GR</p> <p>FMF</p> <p>BCu</p> <p>SB</p> <p>AR</p> <p>MHL</p>	<p>Verbal update</p> <p>p13</p> <p>p74</p> <p>p48</p> <p>p63</p> <p>p20</p> <p>p23</p> <p>p24</p> <p>p29</p> <p>p32</p> <p>p34</p> <p>p39</p> <p>p43</p> <p>p78</p>
4	Any Other Business		All
5	<p><b>Close &amp; Date of Next Meeting</b></p> <p>Wednesday 11<sup>th</sup> May 2011 commencing at 09:30</p>		VE

## Tram Project Board Glossary of Terms

APA	Asset Protection Agreement	MUDFA	Multi Utilities Diversion Framework Agreement
AFR	Accident Frequency Rate	NPF	National Planning Framework
BCR	Benefit to Cost Ratio	NPV	Net Present Value
BROR	Benefits Realisation & Operational Readiness Committee	NR	Network Rail
BSC	Bilfinger Berger, Siemens and CAF	NTS	National Transport Strategy
CCTV	Closed Circuit Television	OCIP	Owner Controlled Insurance Programme
CEC	The City of Edinburgh Council	OGC	Office of Government Commerce
COCP	Code of Construction Practice	OJEU	Official Journal of the European Union
DFBC	Draft Final Business Case	OLE	Overhead Line Equipment
DPOFA	Development Partnering & Operating Franchise Agreement	PFI	Private Finance Initiative
DRP	Dispute Resolution Process	PIN	Preliminary Information Notice
DV	Valuation Office Agency	PMP	Project Management Plan
EARL	Edinburgh Airport Rail Link	QRA	Quantitative Risk Analysis
ER	Employers Requirements	RBS	Royal Bank of Scotland
ETL	Edinburgh Trams Limited	REV	Revision
ETN	Edinburgh Tram Network	RIDDOR	Reporting of Injuries, Diseases and Dangerous Occurrences Regulations
ETP	Edinburgh Tram Project	ROGS	Railway and Other Guided Transport Systems (Safety) Regulations
FATS	Factory Acceptance Test	RPI	Retail Price Index
FBC	Final Business Case	RTS	Regional Transport Strategy
FOISA	Freedom of Information (Scotland) Act	SATS	Site Acceptance Test
FoTW	Foot of the Walk	SCADA	Supervisory Control and Data Acquisition
GMP	Guaranteed Maximum Price	SDS	Systems Design Services contractor
GVD	General Vesting Declaration	SE	Scottish Executive
H&S	Health and Safety	SESTRAN	South East of Scotland Transport Partnership
HSQE	Health, Safety, Quality & Environment	SNH	Scottish Natural Heritage
HMRI	Her Majesty's Rail Inspectorate	SP	Scottish Power
HR	Human Resources	SPOKES	Lothian Cycle Campaign
IDC	Inter-Disciplinary Checks	SRO	Senior Responsible Owner
ICP	Independent Competent Person	SRU	Scotland Rugby Union
Infraco	Infrastructure Contract	STAG	Scottish Transport Appraisal Guidance
ICT	Information Communications & Technology	SUCs	Statutory Utility Companies
INTC	Infraco Notice of Tie Change	SW	Scottish Water
ITN	Invitation to Negotiate	TEL	Transport Edinburgh Limited
ITPs	Implementation Test Plans	TENS	Trans-European Transport Network Executive Agency
ITT	Invitation to Tender	TPB	Tram Project Board
JRC	Joint Revenue Committee r	TRO	Traffic Regulation Order
KPI	Key Performance Indicator	TTRO	Temporary Traffic Regulation Order
LB	Lothian Buses	Tramco	Tram Vehicle Supply and Maintenance Contract
LLAU	Limits of Land to be Acquired or Used	TS	Transport Scotland
LOD	Limits of Deviation	TSS	Technical Support Services contract
LRT	Light Rapid Transit	UTC	Urban Traffic Controls
LRV	Light Rail Vehicle	VAT	Value Added Tax
LTS	Local Transport Strategy	VFM	Value For Money
MP	Member of Parliament		
MSP	Member of Scottish Parliament		

**Edinburgh Tram Network Minutes**

**STRICTLY PRIVATE AND CONFIDENTIAL**

**Tram Project Board**

**16<sup>th</sup> March 2011 (09:30 to 12:05)**

**tie offices – Citypoint II, Brunel Suite**

<b>Members in Attendance:</b>			
Vic Emery Richard Jeffrey	VE RJ	Bill Campbell Dave Anderson	WWC DA
<b>In Attendance:</b>			
Steven Bell Neil Scales Brian Cox Kenneth Hogg Alastair Richards Alan Coyle Ian Craig Marshall Poulton	SB NS BC KH AR AC IC MP	Gregor Roberts Cllr Gordon MacKenzie Cllr Phil Wheeler Cllr Ian Perry Cllr Allan Jackson Mandy Haeburn-Little Bob Cummins (part time) Alasdair Sim (minutes)	GR GMac PW IP AJ MHL BCu AS

**Apologies:** Cllr Tom Buchanan, Cllr Maggie Chapman, Peter Strachan, Donald McGoughan

<b>1.0</b>	<b>Introduction, Review of Previous Minutes and Matters Arising</b>	
1.1	VE opened the meeting and welcomed the participants.	
1.2	<u>Review of Previous Minutes</u> All actions noted in the previous TPB minutes have been discharged and/or will be dealt with during the course of this TPB meeting.	
1.3	The minutes from the previous TPB held on 9th February 2011 were approved as an accurate record.	
1.4	<u>Matters Arising</u>  The Board were informed that the Audit Sub-Committee met on 16/03/11 (prior to the TPB). KH summarised the discussions noting that:  <ul style="list-style-type: none"> <li>▪ The positive Lloyds Register Safety Audit has been reviewed by the BROR and Health and Safety Committees.</li> <li>▪ An External Audit of the Tram Project will be completed over the next three months.</li> <li>▪ A programme of Internal Audits has been agreed. This will include assessments of organisational resilience and commercial strategy.</li> </ul>	

	<ul style="list-style-type: none"> <li>▪ The requirement for a TEL Risk Register was discussed and actions agreed.</li> <li>▪ Outstanding actions arising from the Audit Scotland Report were reviewed, actions on <b>tie</b> and CEC to close out.</li> </ul> <p>AJ reported that he is considering his position serving on the Audit Committee, and will discuss this further with KH.</p>	
<b>2.0</b>	<b>Update on Mediation</b>	
2.1	<p>VE provided a brief update to the Board on the Mediation process. Given that the process is not yet concluded, and that all of the individuals involved have signed a confidentiality agreement, he was unable to elaborate further.</p> <p>It was noted that a joint press statement has been agreed between the parties (CEC, <b>tie</b> and BSC), and that no further comment beyond that statement will be made at this time. Any further media statements will be on a joint basis and an approval process has been agreed between the parties.</p> <p>A number of work streams in relation to the mediation are underway, and progress on these will be reviewed at a forthcoming meeting of the Principals.</p> <p>VE commended the efforts of the whole team involved; both in the preparation prior to commencement of the mediation and also to those actively involved during the sessions to date.</p> <p>VE and Sue Bruce will brief the Council Leaders on 17/03/11.</p>	
<b>3.0</b>	<b>Parliamentary Audit Committee</b>	
3.1	<p>RJ summarised the CEC/<b>tie</b> appearance before the Parliamentary Audit Committee on 23 February 2011. This being a follow up to publication of the Audit Scotland Report.</p>	
<b>4.0</b>	<b>Dispute Resolution Process Update</b>	
4.1	<p>SB updated the Board on DRP matters, noting:</p> <ul style="list-style-type: none"> <li>▪ 30 items in DRP - 20 referred by <b>tie</b>, 10 by BSC.</li> <li>▪ 7 resolved by negotiation &amp; 4 resolved through mediation - 12 decisions made by Adjudication</li> <li>▪ 2 resolved through mediation in period – South Gyle, Bankhead Drive</li> <li>▪ 1 adjudication decision in period - Preliminaries</li> <li>▪ Live DRPs submitted by Infracore : Princes Street valuation and INTC 536 (MUDFA)</li> <li>▪ Live DRPs submitted by <b>tie</b> : Lindsay Road, Street lighting (x 4)</li> </ul>	
<b>5.0</b>	<b>Building the Tram</b>	
5.1	<p><u>HSQE – Deliver a Tram Safely</u></p> <p>There were no reportable accidents and no MOP incidents recorded during Period 12. CoCP compliance was recorded at 100%.</p>	

	<p>The Board debated the systems and process that are in place to define the safety case for the tram project through design to operations, including the involvement of the Independent Competent Person (ICP). It was agreed that BCu will produce a summary of the Safety Verification System (SVS) for review at the next TPB.</p>	BCu
5.2	<p><u>Princes Street Cycle Incidents</u> BCu referred the TPB to the paper entitled 'Princes Street Cycling Incidents – Update Paper, dated 16<sup>th</sup> March 2011'. The Board discussed the findings of this report, noting that options to infill the track groove had been considered, but rejected on the grounds of efficacy, maintenance and experience elsewhere in the UK and in Europe. A number of factors that could minimise risk exposure to cyclists were discussed including:</p> <ul style="list-style-type: none"> <li>▪ More visible warning signage for cyclists</li> <li>▪ Road rail levels and acceptable tolerances</li> <li>▪ Ongoing consultation with cycling lobby groups</li> <li>▪ Anti-skid treatments at key crossing locations</li> <li>▪ Bus operator and taxi group engagement</li> </ul> <p><b>The Board noted the findings of the paper and confirmed that the findings of a Stage 3 Road Safety Audit are to be reported to the next TPB.</b></p>	BCu
5.3	<p><u>HSQE – Deliver a Safe Tram</u> BCu reported that two metrics inspections were carried out during Period 12; both at Gogar Depot concerning interface between track concrete and column, and electrical installations.</p> <p>A proposal from BSC for an improved, durable design for on-street track is being considered by <b>tie</b> and CEC.</p> <p><b>tie's</b> Safety Verification Scheme has been redrafted for improved clarity. This has been issued to the Office of Rail Regulation (ORR) for information and comment. ORR will be interviewing Bob Cummins and Tony Glazebrook on 24th March as part of their assessment of the <b>tie</b> processes.</p> <p>A <b>tie</b> comparison document and response presented to <b>tie's</b> SHE Committee covering the report on the multiple derailments which occurred on the Dutch 'Randstadt' tram system was discussed. This will continue to be used to identify improvements and prevent similar occurrence on the ETN.</p>	
5.4	<p><u>Progress Overall</u> SB reported on overall progress on the project at end of Period 12. Progress achieved was 0.1% in the period. Given the relatively low rate of progress on site, and the known reasons for this, there was no further discussion on this point.</p>	

5.5	<p><u>Financial Position at end of Period 12</u> GR presented the detailed project financial position at Period 12. Key points arising from this were:</p> <ul style="list-style-type: none"> <li>▪ Underlying rate reduced to £3m in Period 12 (£3.5m - P11)</li> <li>▪ YTD Spend £61.1m (£58.1m – P11).</li> <li>▪ TS Forecast reduced to £63.6m with sensitivities of £2.5m for prelims</li> <li>▪ Total spent at Period 12 is £408.9m</li> <li>▪ Period Exceptions are (-£835k) due to detailed assessment of BSC changes and Wide Area Network provisional sums; and (+£2,546k) for Utilities/Other Infrastructure recognised in lieu of BT betterment sign off</li> </ul> <p>SB to arrange an updated betterment review to be presented at the next TPB.</p>	SB																																
5.6	<p><u>Change Requests and Risk Drawdown</u> The change and risk allowance status at Period 12 is summarised below:</p> <table border="1" data-bbox="316 808 1307 1113"> <thead> <tr> <th>Description</th> <th>Base cost</th> <th>Risk</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td><b>Position at Financial Close (PCB)</b></td> <td><b>481,680,811</b></td> <td><b>30,336,196</b></td> <td><b>512,017,007</b></td> </tr> <tr> <td>Increase in Approved Budget</td> <td></td> <td>32,982,993</td> <td></td> </tr> <tr> <td><b>Total Risk</b></td> <td></td> <td><b>63,319,189</b></td> <td><b>545,000,000</b></td> </tr> <tr> <td>Changes to end Period 11</td> <td>51,649,059</td> <td>-51,649,059</td> <td></td> </tr> <tr> <td><b>Position at end Period 11</b></td> <td><b>533,329,870</b></td> <td><b>11,670,130</b></td> <td><b>545,000,000</b></td> </tr> <tr> <td>Period 12 Changes</td> <td>6,854,804</td> <td>-6,854,804</td> <td></td> </tr> <tr> <td><b>Position at end Period 12 (CAB)</b></td> <td><b>540,184,674</b></td> <td><b>4,815,326</b></td> <td><b>545,000,000</b></td> </tr> </tbody> </table> <p>GR referred to Board to the paper entitled 'Project Change Control Update – Period 12, 2010/11', dated 16<sup>th</sup> March 2011.</p> <p><b>The Board were asked to note the Project Control Status at Period 12, and this was confirmed.</b></p>	Description	Base cost	Risk	Total	<b>Position at Financial Close (PCB)</b>	<b>481,680,811</b>	<b>30,336,196</b>	<b>512,017,007</b>	Increase in Approved Budget		32,982,993		<b>Total Risk</b>		<b>63,319,189</b>	<b>545,000,000</b>	Changes to end Period 11	51,649,059	-51,649,059		<b>Position at end Period 11</b>	<b>533,329,870</b>	<b>11,670,130</b>	<b>545,000,000</b>	Period 12 Changes	6,854,804	-6,854,804		<b>Position at end Period 12 (CAB)</b>	<b>540,184,674</b>	<b>4,815,326</b>	<b>545,000,000</b>	
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5.7	<p><u>Board Papers for Review</u> The Board were asked to review two papers requesting authority to award two tenders;</p> <ul style="list-style-type: none"> <li>▪ Section 5C : Utilities Diversion 5C/SW/D/01 Gogar Depot 250 Water Main, dated 16<sup>th</sup> March 2011, and;</li> <li>▪ Section 1B/1C/1D: Scottish water Abandonments at Various Locations, dated 16<sup>th</sup> march 2011.</li> </ul> <p>SB outlined the purpose of both papers confirming that these works are required to progress the project.</p> <p><b>The Board noted the request, and referred delegated authority to the Financial, Legal and Commercial sub-committee for approval.</b></p>																																	



5.8	<p><u>Funding Position at End of Period 12</u> GR confirmed that there is currently £4.8m of non-committed funding available within the £545m funding envelope.</p> <p>At the end of Period 11, it was reported that £11.7m of risk available to drawdown, from which, £6.85m was drawn-down during Period 12.</p> <p>The underlying £900k-£1m project costs run-rate will put the current budget under pressure, as this does not account for other genuine changes not yet drawn down.</p>	
5.9	<p><u>Project Risk Register</u> SB referred the Board to the Top 6 Project Risks. There were no material changes to the risk profile in the period, and the commercial dispute with BSC remains the number one risk.</p> <p>SB to prepare a slide for review as a standing TPB item outlining the top 10 project risks for future TPB meetings.</p>	SB
<b>6.0 Preparing for Operations</b>		
6.1	<p><u>Tram Progress</u> AR reported that all 27 trams now completed or in production with 21 trams now completed factory testing and stored for delivery. 88% of CAF's programmed tasks have now been completed.</p> <p>It was noted that a PQQ submission has been prepared for potential tram lease opportunities.</p>	
6.2	<p><u>Operational Readiness</u> AR reported Construction works at the depot now 78% complete, noting that:</p> <ul style="list-style-type: none"> <li>▪ the building offices fit-out complete and snagging rectification completed in the Period.</li> <li>▪ The main Workshop and store rooms are almost complete,</li> <li>▪ External track works have recommenced in Period 12.</li> <li>▪ The HV sub-station ready;</li> <li>▪ Workshop plant installation just started.</li> </ul> <p>The hard-standing ransom strip around the building remains and issue and it is anticipated that this will be resolved in Period 13.</p> <p>AR referred the Board to the paper entitled 'Tram Delivery, Testing and Storage Options Paper', date 16th March 2011.</p> <p><b>The Board approved the recommendation of the paper to secure delivery of 14 no. trams to the Gogar Depot subject to the work streams flowing out of the mediation.</b></p> <p>It was agreed that further consideration to be given to an opening ceremony at</p>	

	Gogar Depot when the facility becomes operational. This is likely to be co-incident with the test running of trams in Section 5C in the Autumn 2011.	Note
<b>7.0</b>	<b>Building the Team</b>	
7.1	RJ reported that <b>tie</b> currently employs 60 permanent staff, with 5 fixed term employees. There are a further 9 secondees, one staff member on sabbatical and 5 consultants on the HR system.	
<b>8.0</b>	<b>Building the Brand</b>	
8.1	MHL presented an analysis of media coverage and social media and online activity for Period 12. The majority of this activity focussed on the mediation process and statements made during the Parliamentary Audit Committee session.  It was noted that the Scottish Parliamentary Elections will be held on 5 <sup>th</sup> May 2011. As a Council arms length company, <b>tie</b> Ltd will operate in alignment with the Council's guidelines during the Pre-Election Period.	
8.2	<u>Freedom of Information</u> At Period 12, it was noted that <b>tie</b> are dealing with 25 FOI requests in various stages of the process. The TPB will be updated on a period by period basis to track FOI caseload. It was noted that 72% of the FOI requests have come from members of the media.  MHL will arrange for a series of FOI briefings to be presented to project staff during period 13.	MHL
<b>9.0</b>	<b>Preparing for the Future</b>	
7.1	No updates to report in the Period.	
<b>10.0</b>	<b>Governance</b>	
8.1	No updates to report in the Period.	
<b>11.0</b>	<b>AOB</b>	
11.1	RJ notified the Board that the Remuneration Committee will meet following the TPB.	
11.2	RJ referred the Board to the £4.8m of available headroom at the end of Period 12, noting that additional funding will be required beyond the £545m funding envelope.  <b>On this basis, the TPB requested that the TEL Board increases the delegated authority of the TPB to allow the TPB to increase the delegated authority of the Project Director.</b>	
<b>12.0</b>	<b>Date of Next Meeting</b>	
12.1	VE thanked the Board for their participation and confirmed that the date of the next meeting will be <b>Wednesday 13<sup>th</sup> April 2011</b> commencing at <b>09:30hrs</b> .	

12.2	The meeting closed at 11:55.	

Prepared by Alasdair Sim, 24<sup>th</sup> March 2011

### TRAM PROJECT BOARD 2011/12 – ROLLING ACTIONS LIST

<b>Tram Project Board Meeting – 16 March 2011</b>							
<b>Action ref No.</b>	<b>Actionee</b>	<b>Date Action Opened</b>	<b>Action</b>	<b>Expected Date of Closure</b>	<b>Actual Date of Completion</b>	<b>Status</b>	<b>Comment/Commentary</b>
16/03/11-5.1	Bob Cummins	16/03/11	BCu to prepare a summary of the Safety Verification System (SVS) for review at the next TPB.	13/04/11	13/04/11	Closed	Presentation being made to TPB on 13/04/11
16/03/11-5.2	Bob Cummins	16/03/11	BCu to present the findings of the Stage 3 Road Safety Audit for Princes Street to the next TPB.	13/04/11	13/04/11	Closed	Paper in 13/04/11 TPB pack
16/03/11-5.5	Steven Bell	16/03/11	SB to prepare a paper on Utilities Betterment progress for the next TPB	13/04/11	13/04/11	Closed	Paper in 13/04/11 TPB pack
16/03/11-5.9	Steven Bell	16/03/11	The Top 10 Risks to be presented to the TPB for review at each meeting going forward	13/04/11	13/04/11	Closed	Presentation being made to TPB on 13/04/11
16/03/11-8.2	Mandy Haeburn-Little	16/03/11	Staff briefings on Freedom of Information to be arranged during Period 13	13/04/11	13/04/11	Closed	Dates programme in for briefings and presentation produced
<b>Tram Project Board Meeting – 13 April 2011</b>							
<b>Action ref No.</b>	<b>Actionee</b>	<b>Date Action Opened</b>	<b>Action</b>	<b>Expected Date of Closure</b>	<b>Date of Completion</b>	<b>Status</b>	<b>Comment/Commentary</b>

## Building The Tram Project Director Report - Period 13 [10/11]

*On Friday 1<sup>st</sup> October 2010, BSC began to demobilise and cease works on certain sites across the route (over Sections 2A, 5A, 5B and 5C), this reflecting an escalation in the contractual dispute between BSC and tie. tie continue to undertake site monitoring on both active and inactive worksites.*

*During March, positive mediation discussions were held between the parties. Transport Scotland were party to these discussions.*

*Edinburgh Gateway is now reported in a standalone report.*

### HSQE

#### H&S Accidents and Incidents, Near Misses or Other

HS&E ACCIDENTS and INCIDENTS SUMMARY											
Total	Total Hours	>3 day	Major	Injury	NM/Unsafe Condition	Service Damage	ENV	RTA	MOP	AFR	SFR
Period	51,512	0	0	0	10	0	2	0	0	0.00	0.00
13 period rolling	1,251,468	0	2	11	142	13	11	6	18	0.16	1.04



There were no reportable accidents during the period. The rolling 13 Period AFR is at 0.15, better than the KPI of 0.24 for the project.

The CoCP compliance was recorded at 94% during Period 13. Non-compliance issues related to damaged fences, litter and potential trip hazards on temporary footpaths.

100% of planned PM joint inspections were carried out during Period 13. Only 50% of planned safety tours were carried out during Period 13, this was due to mediation and the non-availability of some staff.

Interim remedial works to road defects on Princes Street have continued during the period. Whilst BSC have provided tie with details of the risk assessment process being applied to road defects, tie have formally requested that BSC review the process to ensure that prioritisation of work includes appropriate recognition of elements including rate of deterioration and increased risk to cyclists/pedestrians at bus stops/pedestrian crossings and other hot spots with a historically high incident rate. The output of this exercise is awaited from BSC.

#### Environment

Two environmental incidents recorded during period 13 Diesel was spilling into generator bund and overflowing onto ground at Gogar depot. tie were made aware of a diesel spill that occurred at the Gogar site adjacent to the Gogar Burn and was not reported through the correct reporting system.

**Deliver a Safe Tram Key Metrics**

Section	Activity	Data Checked				
		IBC	ITPs	Design Variations/Change	As Built	Asset Register
Section 6 - Depot	Painting, tiling, floor	0.5	0.5	1	1	N/A
PD	Total (y)	0.5	0.5	1	1	N/A
	Max Possible Total (y)	1	1	1	1	N/A
Total	Percentage P12	48%	92%	86%	79%	40%
	Percentage P13	48%	91%	86%	79%	40%

**Key - Y = Evidence exists (1) N = No evidence exists (0) NA = Not applicable (-) P = Part evidence in place (0.5)**

**Assurance & Project Safety Certification Committee (PSCC)**

All Cases for Safety have now been reviewed and comments have been returned in Record of Review forms. BSC had previously stated that they were aiming to deliver to **tie** a draft, informal, DAS for Section 6 by the end of February 2011. This was not delivered and is now expected during period 1.

An SVS audit on the Tram vehicle design will take place in Zaragoza on the 11<sup>th</sup> May 2011. An SVS Audit Track and Civils re-scheduled to take place 9<sup>th</sup> March 2011; this date was declined by BSC. **tie** has requested a new date. **tie** assisted ETL with an independent audit of their SMS on the 17<sup>th</sup> March 2011. The audit went extremely well with no obvious gaps in the system identified. An audit of the BSC testing and Commissioning Plan and BSC's readiness for operation is to be carried out; details will be determined during period 1.

**Progress**

The progress achieved in Period 13 for INFRACO works was 0.2% against a plan of 0.1% although it should be noted that against the contractual Rev.1 programme all construction activities both On and Off-street (Sectional Completion C) should now be complete with the route in total planned to be 100.0% complete.

As BSC had previously demobilised from previously active on-street worksites in the Leith Docks area at Lindsay Road and Tower Bridge, the only progress achieved in the period has been at the Depot Access Bridge and in the Depot itself.

The total cumulative completion for Infraco Works is 28.2% at end of Period 13. A summary of progress on various project elements can be found below:

**Progress Comparison Period 12 vs Period 13 – Infraco**

Period	Cumulative Progress (Actual)	Rev 1 Target
2010/11 Period 12	28.0%	99.9%
2010/11 Period 13	28.2%	100%

BSC continue to report progress against the agreed Rev.1 contractual programme. This shows for progress up to and including 26<sup>th</sup> March 2011 an OFRS date of 25 February 2014 against the contractual Rev.1 programme date of 06 Sep 11 and reports a **15 calendar day slippage during the period.**

**Dispute Resolution**

In total, 30 items have now been referred to the formal dispute resolution process – 20 by **tie** and 10 by Infraco. Of the 30 disputes raised 7 still remain to be resolved. However following the Mediation discussions with BSC both parties agreed that the Dispute Resolution Procedures set out in the Contract should be 'frozen' until early September 2011. Letters and emails between the parties have been exchanged confirming this position. Therefore on each of the live disputes the current position is as follows:-

- Payment for Princes Street Works – Adjudication Hearing cisted
- Lindsay Road – Mediation cisted
- Extension of Time due to Utility Works (INTC 536) – referral to mediation deferred
- Notified departures (4No) re Highways/street lighting – Chief Executive's meetings

As a result of the agreement to suspend the DRP process no new decisions have been received during the period.

**Design**

**IFC Design**

Following the mediation talks, a fast-track approach to reviewing and closing out CEC consents has been implemented. This is having positive results and may result in improvements being reported in the next reporting cycle compared to that reported here in period 13.

v68 was submitted to **tie** on 17 March 2011 with a progress date of 14 February 11. 26 IFC activities have a slippage of 28 Days or more. The final scheduled IFC is Ground Improvement & Vibration Mitigation on 08-06-11.

Design approvals status in Period 13 is summarised below:

Phase 1a only	Numbers Required											Number		Number	
	V26	V31	V58	V59	V60	V61	V62	V63	V64	V66	V67	Granted	V68	Granted	
Prior Approvals	44	49	56	56	56	56	60	60	60	60	62	56	60	57	
Technical Approvals	53	71	92	92	92	92	63	63	63	63	63	95	63	56	
IFC	71	81	233	230	227	230	230	229	229*	234	238	192	240*	201	

\* Additional IFC activities added V60

To date 201 out of 969 technical informative comments have been closed. Accelerated approvals process is building on earlier workshops and agreement in principle has been reached on approximately 700 further comments.

**tie** has implemented an extensive programme of site based monitoring to validate & verify the installation of works in line with an integrated design assured construction. Design performance by Infraco and their designer is the subject of one of the RTN's and is being vigorously pursued through the Design Task Force sessions held-with BSC.

**Utility & Cabling Works**

Telecoms continue to progress their re-cabling activities on-street – with works in St Andrews Square, York Place & Torphichen St due to complete during Q2 2011. Cabling in Torphichen St could be protected to allow tramworks to commence as crossings are perpendicular to Tram route. The pulling of remaining BT cables on the northbound carriageway between MacDonald Rd – Jane St has been achieved and works are now nearing completion with the intermediate jointing of the cables now progressing.

**Tramworks (INFRACO)**

The progress achieved in Period 13 for INFRACO works was 0.2% against a plan of 0.1% although it should be noted that against the contractual Rev.1 programme Off-street construction should now be complete with the route in total planned to be 100% complete.

**(%) Infraco Construction Progress Period 13**

Period 13 2010-11	Period		Delta	Cumulative		Delta	Project
INFRACO PERIOD 13 PROGRESS (Contract Rev.01 Programme)	Plan	Actual		Plan	Actual		Wtg
Section 1a Newhaven to Foot of the Walk	0.0%	0.0%	0.0%	100.0%	8.6%	-91.4%	16.2%
Section 1b Foot of the Walk to McDonald Road	0.0%	0.0%	0.0%	100.0%	1.3%	-98.7%	7.4%
Section 1c McDonald Road to Princes Street West	0.9%	0.0%	-0.9%	100.0%	0.0%	-100.0%	10.8%
Section 1d Princes Street West to Haymarket	0.0%	0.0%	0.0%	100.0%	42.1%	-57.9%	7.6%
<b>Combined Sections 1A-1B-1C-1D (On-Street) Newhaven Road to Haymarket</b>	<b>0.2%</b>	<b>0.0%</b>	<b>-0.2%</b>	<b>100.0%</b>	<b>11.2%</b>	<b>-88.8%</b>	<b>42.0%</b>
Section 2 Haymarket to Roseburn Junction	0.0%	0.0%	0.0%	100.0%	35.1%	-64.9%	4.2%
Section 5a Roseburn Junction to Balgreen Road	0.0%	0.0%	0.0%	100.0%	10.0%	-90.0%	13.9%
Section 5b Balgreen Road to Edinburgh Park Central	0.0%	0.0%	0.0%	100.0%	43.4%	-56.6%	13.2%
Section 5c Edinburgh Park Central to Gogarburn	0.0%	1.5%	1.5%	100.0%	26.9%	-73.1%	7.2%
Section 6 Gogar Depot	0.0%	1.1%	1.1%	100.0%	79.0%	-21.0%	11.9%
Section 7a Gogarburn to Edinburgh Airport	0.0%	0.0%	0.0%	100.0%	47.3%	-52.7%	7.6%
<b>Combined Sections 2A-5A-5B-5C-6A-7A (Off-Street) Haymarket to Edinburgh Airport</b>	<b>0.0%</b>	<b>0.4%</b>	<b>0.4%</b>	<b>100.0%</b>	<b>40.5%</b>	<b>-59.5%</b>	<b>58.0%</b>
<b>FULL ROUTE PHASE 1A NEWHAVEN ROAD TO EDINBURGH AIRPORT</b>	<b>0.1%</b>	<b>0.2%</b>	<b>0.2%</b>	<b>100.0%</b>	<b>28.2%</b>	<b>-71.8%</b>	<b>100.0%</b>

Progress Points to note in Period 13:

- Depot Access Bridge progressing to programme with major deck pour completed on 9<sup>th</sup> March.
- Depot Building internal fit out progressing well with trackwork on going both internal. Area 2a handed over to Siemens in Period 13.
- HV cable at Depot was Energised on 10<sup>th</sup> March 2011.
- Manhole Works – Tender returned to **tie** 02/03/11 – **tie** reviewed and issued tender queries and signed tender recommendation report 25/03/11.
- 250 water main at Depot – Looking to start on site on 04/04/11.
- Assembly Street Water Connection – Tender due back on 30/03/11.
- Scottish Water Abandonments – **tie** discussing with potential Contractor.
- Formal approval on flooding report from BAA received on 09th March 2011.

Issues in the Period

- Final proposal for remedial works / design change for Princes Street still not approved.
- Installed water main at Depot Building has been rejected by Scottish Water alleging non compliant pipework for industrial use being used. This is currently under investigation by all parties and could have implications to depot completion. Meeting on Tuesday 29th March 2011 for Scottish Water to confirm position.
- Still no progress being made from Haymarket Viaduct through to the A8 Underpass due to the ongoing dispute.

**TRAMCO**

The CAF contract programme is incorporated in the Master Tram project Programme. We receive electronic submission of the CAF programme to allow analysis of the programme.

CAF is progressing well to deliver trams to Edinburgh according with its contractual programme but there is currently no access available to the depot to receive the trams. Tram 252 is stored in Broxburn and is checked on a regular basis, trams 251 and 253 to 274 are stored at the factory in Irwin.



**Period 13 Summary – Tramco**

No	Planned	Activities in current Period
1	Fabrication of the trams	Fabrication and primer painting is completed on all the body-shells for all twenty seven trams. Equipment fit-out for the remaining trams 26 and 27 is continuing in the assembly hall. The first 24 trams are completed and tram 25 is completing factory acceptance testing.
2	Enhanced passenger information upgrade	Plan still to fit final equipment when trams arrive in Edinburgh.
3	Review of Test Protocols and test results	CAF have completed final internal tests to verify and calibrate computer design tools using Tram 251 at Wildenrath on the 12 <sup>th</sup> October 2010, final report awaited.
4	Depot Equipment	CAF are continuing progress, delivery schedule under discussion in conjunction with civil works programme for the depot now in mid-March 2011.
5	Finalisation of external branding	Final branding will be applied whilst the trams are stored at the factory prior to shipping to Edinburgh.
6	Tram O&M Manuals	Revised manuals next update due late 2011 after experience on site with the trams.
7	Key sub-contract placement	Collateral warranties – 3 signed warranties have been received, remaining continue to be progressed.
8	Factory Based Acceptance Testing complete	First 24 trams have successfully completed factory testing to date. 89% of trams now completed and tested.
9	Testing regime	CAF have revised the Delivery & commissioning regime for the trams to reflect the requirement to store Trams pre delivery to Depot. All Trams will be prepared after storage, undertake dynamic testing and commissioning. 1 <sup>st</sup> tram due for starting commissioning April 2011- last tram mid-May 2012.
10	Programme progress	89% of scheduled activities completed.

**Preparing for Operations**

Detailed operational and outline maintenance instructions are being written and the Operator's Safety Management System has been further developed and peer reviewed.

The procurement of the ticketing equipment for the tram system, to integrate with the existing Lothian Buses ticketing system has now concluded and at the BROR meeting on the 30/03/11 the recommendation was made and accepted of the preferred bidder which is subject to ratification at the TPB on the 13/04/11.

With the support of CAF, we submitted a PQQ for leasing some tram vehicles to Croydon, and on the 21/03/11 were confirmed as having been shortlisted to tender. We are currently evaluating the tender documentation and planning how to respond with CEC.

**Cost**

The 'AFC' (£545m) in this report does not reflect an approved and reliable Anticipated Final Cost for the Edinburgh Tram Project. Rather, the forecast presented reflects the best view of the spend profile of the funding currently available for the delivery of phase 1a. Given the continuing commercial uncertainties with the Infracore and continuing delays to the project it is considered unlikely that the full scope of Phase 1a will be completed within the available funding envelope of

£545m. It is not however possible at the present time to accurately forecast a reliable outturn cost until the key commercial issues are resolved through the contractual and legal process. It should also be flagged that the profile of the forecast for 2011/12 is likely to change dependent upon the outcome of mediation.

Until the key issues are resolved through the contractual and legal process, it will not be possible to accurately forecast a revised budget outturn.

Key cost related items to note in Period 13 are:

- COWD to date is £411.5m, with funding to date split to TS (£377.5m) and CEC (£34.0m).
- The budget for ETP in 2010/11, established in April 2010 was £142.2m (£153.3m 09/10). Transport Scotland funding for 2010/11 was £130.5m for ETP, with £11.7m funding available from CEC.
- The original TS share of the budget (£130.5m) is measurable against actual TS spend of £58.4m.
- Key sensitivities to the reforecast are identified in the main report.

**tie spend for 2010/11 fell within the range presented to TS on 4<sup>th</sup> November 2010.**

**Actual Spend - FY10/11**

£m	2010/11 to P13
Infrastructure and vehicles	38.9
Utilities diversions	8.0
Design	1.7
Land and compensation	0.1
Resources and insurance	14.9
<b>Total Phase 1a</b>	<b>63.6</b>

- Full Year COWD was £63.6m in 2010/11, in-line with the forecast provided in P12.

As previously reported and agreed with CEC and TS, initial milestones under the Infraco and Tramco contracts in the aggregate amount of £14.3m, in respect of advance material purchases, have been classified as prepayments. These will be reclassified as expenditure against funding in the periods when the related materials are delivered to site and incorporated in the works. The release will occur on the achievement of trackwork and structures milestones in 2010/11 and future years.

**Risk & Opportunity**

Drawdowns on risk and contingency to the end of Period 13 10/11 now total £71.7m. The remaining risk balance based on the approved QRA plus the additional funding is £4.3m, including uncommitted budgets put on-hold of -£12.69m.

## Stakeholder & Communications

### Media / Press Activity

During Period 13 the Media team received a variety of enquiries regarding the project which subsequently resulted in news items at both local and national news outlets.

A Joint Mediation statement was agreed by all the parties involved in the mediation talks and distributed by ourselves on behalf of all the agencies. The statement was issued due to the high levels of media interest that the process has had over the weeks preceding the talks. While the mediation process is still ongoing the statement outlined that there had been "a very constructive engagement and have established a mutual understanding of the key issues that have been impeding the progress of the Edinburgh Tram project." Beyond this statement, all parties have committed to making no further comment at this time. The statement was distributed to a wide range of local, national and trade publications and was widely reported.

### Website / Internet Communications

Visitor figures for [www.edinburghtrams.com](http://www.edinburghtrams.com) are similar to last period at 13,200 this period with a rise to 863 followers on facebook. Twitter has spiked to 1,402 followers, an increase of over 100 and has seen a boost in activity this period.

### Freedom of Information Requests

Period 13 has seen a sharp decline in the overall volume of Freedom of Information (FOI) Requests from Period 12's total of 17 requests for information. A total of 18 responses were given to different recipients during Period 13 resulting in only 9 FOI being carried forward to the next reporting period.

An enormous proportion of FOI requests continue to be from journalists, with one specific publication having lodged a total of 14 requests with the project over the last four weeks. A number of these have been subsequently covered as a news article while a few are resubmitted for further information. A number of requests have shown that there is a interest in aspects of the ongoing mediation process.

### Customer Service Correspondence

Throughout Period 13 Customer Service correspondence has seen a noticeable increase from Period 12, with overall correspondence reaching 252.

Information Requests continue to make up the majority share of correspondence with the Customer Service team and cover a wide range of topics. The remaining enquiries were filed under six other subject headings including Complaint (3), COCP Complaint (3), Land and Property (2), Business Support (1), Employment (3) and finally Positive Comments (6).

1011 Period 13 Primary Risk Register

Risk Description											
ARM Risk ID	Cause	Event	Effect	Risk Owner	Significance	Black Flag	Treatment Strategy	Previous Status	Current Status	Due Date	Action Owner
343	General delay to programme with various causes e.g. failure to obtain approvals on time; contractor issues, access after completion of utility diversions	Delay to completion of project	Increased out-turn cost due to delay plus revenue loss	S Clark	High - 25.00		Access maps showing areas available	On Programme	On Programme	28-May-11	F McFadden
							Contractually assertive workstreams to progress programme	Complete	Complete	29-May-10	S Bell
							DRP Mudfa Rev 8 response	Complete	Complete	31-Aug-10	S Bell
							DRP on programme management (EOT1)	Complete	Complete	30-Oct-09	S Bell
							Issue UWN on programme	Complete	Complete	15-Sep-10	S Clark
							Liason between tie/BSC programme managers	On Programme	On Programme	30-Dec-11	T Hickman
							Programme Management Panel process	Complete	Complete	30-Dec-11	F McFadden
							Use of Clause 34 / 80.15 - addressed via DRP	Complete	Complete	30-Aug-10	S Bell
1078	Lack of effective engagement from BSC leaders towards tie.	Failure of partnership approach between tie and BSC.	Lack of progress of works and increased costs	S Bell	High - 25.00		Weekly tie/BSC commercial meetings	On Programme	On Programme	30-Dec-11	M Paterson
							Engagement between tie and BSC at different levels. Regular review of BSC management of third parties as per Employers Requirements.	Complete	Complete	31-Dec-09	C Neil
1101	Unreasonable behaviour of BSC commercial management	Unrealistic estimates being submitted for potential changes	Programme delay while disputes regarding estimates are resolved	Dennis Murray	High - 25.00		Additional resource from T&T	Complete	Complete	29-Jul-09	M Paterson
							Agreed with BSC for independant evaluation to get benchmark	Complete	Complete	30-Jul-09	M Paterson
							All estimates to be scrutinised by tie commercial team and, where appropriate, challenge made to BSC. Additional resource (T&T) being used to check estimates to reduce delay and other commercial resources on there areas	Complete	Complete	31-Dec-10	M Paterson
							Clause 34/80 issues using DRP for disputed values	Complete	Complete	31-Aug-10	S Bell
							Legal challenge to Clause 80 and BSCs interpretation thereof	Complete	Complete	30-Sep-10	S Bell

1011 Period 13 Primary Risk Register

Risk Description											
ARM Risk ID	Cause	Event	Effect	Risk Owner	Significance	Black Flag	Treatment Strategy	Previous Status	Current Status	Due Date	Action Owner
1094		Roads throughout works require full depth reconstruction	Programme impact plus additional costs. £1.5m cap applies to only 4 areas. (PA 12) Also affects (PA 14)	F McFadden	High - 24.00		All party buy in - application of appendix 7(1)	On Programme	On Programme	31-Dec-11	C Neil
							Carry out surveys to confirm extent of roads requiring full depth reconstruction	Complete	Complete	30-Jun-09	C Neil
							Intensive engagement with CEC, palette of options, methodology being agreed	Complete	Complete	31-Jan-11	C Neil
							Resolution of trackform at trackform workshop	On Programme	On Programme	30-Apr-11	C Neil
							Suite of options from surveys to be reviewed and agreement reached	Complete	Complete	30-Jul-10	C Neil
							tie developed on-street proposal with scott wilson - complete and under review	Complete	Complete	31-Jan-11	S Bell
1079	Failure of BSC to effectively resource up for project	Lack of competent resources within BSC to safely and effectively deliver Tram project	Delay to programme and additional cost	F McFadden	High - 23.00		Apply contract re personnel	On Programme	On Programme	1-Apr-11	F McFadden
							List of staff and competencies to be provided	On Programme	On Programme	1-Apr-11	F McFadden
							Ongoing review of BSC resources and formal review at 4-weekly meeting. Objectives to be set for BSC at monthly meetings in order to monitor progress.	Complete	Complete	31-May-09	C Neil
							Resource led programmes	On Programme	On Programme	1-Apr-11	F McFadden
							Sub contractor order approval	On Programme	On Programme	31-Jul-11	F Dunn
							Where appropriate tie can request removal of resources.	On Programme	On Programme	1-Apr-11	F McFadden
352	Increase in land values	Higher land compensation claims than anticipated	Additional uplift on compensation claims	A Sim	High - 22.00		Close out initiate early negotiations between V and landowners	Complete	Complete	28-Mar-08	A Sim
							Initiate early negotiations between DV and landowners	Complete	Complete	28-Mar-08	A Rintoul
							Liaise with CEC Planning	Complete	Complete	28-Mar-08	R McMaster
888	Design, construction and/or testing does not meet operator requirements and gain approval from the ROGS Competent Person (ICP)	Lack of evidence from the tie SVS to allow handover of ETN to operator.	Delay to commencement of service, additional cost both for delay and rectification of the issue	B Cummins	High - 21.00		Ensure Infracore Agreement requires Operator to be consulted on appropriate issues	Complete	Complete	28-Dec-07	B Dawson
							Involve ETL fully in design, construction and testing/review process.	On Programme	On Programme	30-Jun-11	A Richards

1011 Period 13 Primary Risk Register

Risk Description											
ARM Risk ID	Cause	Event	Effect	Risk Owner	Significance	Black Flag	Treatment Strategy	Previous Status	Current Status	Due Date	Action Owner
928	Major single safety and/or environmental incident (including a dangerous occurrence) during construction	Safety incident/injury during construction	Delay (potentially critical) due to HSE investigation and rework. PR risk to tie and stakeholders.	F McFadden	High - 21.00		All Site Staff to get CSCS or equivalent	On Programme	On Programme	30-Apr-11	B Cummins
							Develop and Implement Incident Management Processes	Complete	Complete	27-Apr-07	T Condie
							HSOE Audits, site inspections and Management Safety Tours to be carried out	On Programme	On Programme	30-Apr-11	B Cummins
							Incident management process regularly updated and revisited	On Programme	On Programme	31-Dec-12	B Cummins
							Safety Induction to be carried out for all site staff	On Programme	On Programme	30-Apr-11	B Cummins
							Site Supervisors to be appointed by tie	Complete	Complete	28-Feb-07	S Clark
							TEL HSE committee overview applied	On Programme	On Programme	30-Apr-11	B Cummins
							The tie "Safety" bus is being used to deliver safety talks & culture surveys to the contractors workforce. Build the tram safety Drugs & Alcohol policy	Complete	Complete	31-Dec-09	B Cummins
931	Utilities assets uncovered during construction that were not previously accounted for; unidentified abandoned utilities assets; known redundant utilities; unknown live utilities; unknown redundant utilities.	Unknown or abandoned assets impacts scope of Infraco work	Re-design and delay as investigation takes place and solution implemented; Increase in Capex cost as a result of additional works.	C Neil	High - 20.00		Conflicts Register - all on-street sections apart from York Plc and Broughton St	Complete	Complete	31-Aug-10	C Neil
							GPR surveys in areas where there are likely to be services	Complete	Complete	1-Apr-07	T Glazebrook
							Infraco trial holes where applicable.	On Programme	On Programme	31-Jan-10	P Dobbin
							MUDFA trial holes to verify GPR surveys	Complete	Complete	30-Jul-09	A Hill
							Obstructions and voids survey, establish ownership reduced delay on discovery.	On Programme	On Programme	31-Jan-12	C Neil
1076	Utilities do not finish diversion works prior to Tramworks commencing work	Tramworks are unable to commence work or work is delayed/disrupted	Delay and disruption claims from BSC.	F McFadden	High - 20.00		Tramworks PMs attendance at Traffic Management meetings. Weekly meetings between tie Tramworks and Utilities PMs. 4-weekly tie Tramworks/Utilities management meetings. Identification of programme clashes between Tramworks and Utilities works tracked	Complete	Complete	31-Mar-10	C Neil
1106	Failure of SDS to provide IFC drawings in line with the V31 programme	Programme delay with dispute over accountability.	Delay to programme and additional costs	F McFadden	High - 20.00		Production of concurrency information using Accutus and internal production of PITA database	On Programme	On Programme	25-Jun-11	S Clark
							Use of additional resources to apportion accountability for delay in issuing of IFC	On Programme	On Programme	30-Jun-11	D Sharp
1160	Lack of signed, forma agreement between CEC and Forth Ports regarding Forth Ports contribution to Tram works	Forth Ports contribution does not materialise or does not equal value of works carried out	CEC required to fund difference between Forth Ports contribution and value of works	S Bell	High - 20.00		Liase with Dave Anderson and Donald McGuigan to ensure awareness of issue and agreement of current strategy	Complete	Complete	31-Jan-11	S Bell
							Meet with TS and ensure they are aware that costs are being allocated	Complete	Complete	5-Nov-10	S McGarrity

**Period 13 2010/11 – Papers for Consideration**

## Tram Project Board – Board Paper Pro Forma Summary

Subject:	Project Change Control Update – Period 13, 2010/11
Source/Author:	Gregor Roberts
Primary Contact:	Gregor Roberts
Date of paper:	13 <sup>th</sup> April 2011
Status/Approval of paper:	Noting
Date of Board meeting:	13 <sup>th</sup> April 2011
Action requested by Board	
The Board is asked to:	
<ul style="list-style-type: none"><li>▪ <b>Note the Project Change control status at Period 13.</b></li></ul>	



**Paper to:** TPB **Meeting date:** 13<sup>th</sup> April 2011  
**Subject:** Project Change Control Update – Period 13, 2010/11  
**Preparer:** Gregor Roberts

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**Summary**

This paper is to update the Tram Project Board with the current status regarding approved project change orders and their implications on the overall Tram Project Budget. To the end of Period 12, a net figure of -£58.5m has been drawn down from the project risk allowance (including uncommitted budgets approved to be put on-hold of £12.69m).

In Period 13, an additional -£0.5m has been drawn down, leaving a risk allowance of £4.3m remaining.

Any changes which are approved are in relation to either actual expenditure, a commitment to future expenditure or based upon an anticipated future commitment.

Following the delegated authority from TEL to the TPB authorising the use of the £545m funding envelope and the subsequent approval to increase the budget to £545m in Period 9 2010/11, the approved budget now stands at £545m.

**tie** will continue to report on, and ensure that the Board have clear visibility of, all changes which have been authorised and recommended and to seek Board approval for all changes greater than £1m, in line with the Delegated Authority Rules.

The table below summarises the approved changes that have impacted the Project Risk Allowance in Period 13.

<b>Description</b>	<b>Base cost</b>	<b>Risk</b>	<b>Total</b>
<b>Position at Financial Close (PCB)</b>	<b>481,680,811</b>	<b>30,336,196</b>	<b>512,017,007</b>
Increase in Approved Budget		32,982,993	
<b>Total Risk</b>		<b>63,319,189</b>	<b>545,000,000</b>
Changes to end Period 12	58,503,863	-58,503,863	
<b>Position at end Period 12</b>	<b>540,184,674</b>	<b>4,815,326</b>	<b>545,000,000</b>
Period 13 Changes	516,882	-516,882	
<b>Position at end Period 13 (CAB)</b>	<b>540,701,556</b>	<b>4,298,444</b>	<b>545,000,000</b>

**Changes Approved in Period 13**

Depot Manual Bogie Turntable Construction and Design Costs (COP507 -£49,601)

Additional construction works costs as a result of the manual bogie turntable. The Estimate includes both construction and design costs (Siemens / BAM).

Section 5C Depot Access Bridge Piling Obstructions (COP508 -£39,145)

Work associated with the additional time required to break through unforeseen piling obstructions at the Depot Access Bridge in section 5C. This is a change because the Construction Works Price does not include for dealing with below ground obstructions.

Section 5C A8 Underpass phase 4 Piling Obstructions (COP493 -£26,977)

Work associated with the additional time required to break through unforeseen piling obstructions at the A8 Underpass in section 5C. This is a change because the Construction Works Price does not include for dealing with below ground obstructions.

DRP Deloitte Forensic Works (COP500 -£41,229)

Forensic work undertaken by Deloitte regarding preparation for Mediation and DRP talks, including preparation of the draft Pricing chronology by the Real Estate Advisory team; pricing email review and preparation of the 'summary of relevant emails' and 'combined chronology'; fees for running the search terms for the additional four spines; time costs in relation to meetings.

Bankhead Drive Retaining Wall (COP509 -£65,906)

Agreement of Change value at mediation on 11/02/2011 in relation to the Pricing Assumption 3.4.1.1 and 3.4.1.3 changes at Bankhead Drive Retaining Wall. Infraco original Estimate received 13/08/2009 for £718,755.99. In respect of ground improvement, both parties have agreed volumes and values for both BDDI and IFC in respect of excavation and fill which shall be transferred to INTC 402.

South Gyle Access Bridge (COP510 -£153,122)

Agreement of Change value at mediation on 11/02/2011 in relation to the Pricing Assumption 3.4.1.1 and 3.4.1.3 changes at South Gyle Access Bridge. Infraco original Estimate received 09/11/2009 for £474,483.13. In respect of ground improvement, both parties have agreed volumes and values for both BDDI and IFC in respect of excavation and fill which shall be transferred to INTC 402.

Stage 3 Road Safety Audit (COP511 -£3,685)

This change is required because a Road Safety Audit (RSA) Stage 3 is necessary under Design Manual for Roads and Bridges (DMRB), for Princes Street.

Bus Shelter York Place (COP506 -£8,086)

During MUDFA works this shelter, power supply and tracker were removed and following the works, now have to be replaced as requested by CEC & Lothian Buses.

Section 5B Busgate Drainage works (COP476 -£4,275)

Soft Ground encountered during drainage construction works on Section 5B, Busgate. Unforeseen ground conditions are an excluded item under the contract, and this therefore constitutes additional work for Infraco to **tie's** account.

York Place Lining – increase in cost (COP478b -£435)

The carriageway lining in York Place requires to be amended such that all redundant lines are removed and where required lines that are to be retained are refreshed. This Change Paper requests additional funding on top of the previously agreed amount (COP478 £3,933, approved p12 2010/11). Costs have now been agreed for these works between **tie** and Clancy Docwra.

Completion of Cable + Wireless ducts at Conan Doyle (COP499 -£13,155)

Completion of the Cable & Wireless Diversion (1C/CW/D/03), from the Conan Doyle to a new box on the South side of Cathedral Lane. The works remain outstanding and require to be completed to allow C&W to re-cable their network. The costs for these works were not part of the Clancy Docwra final account previously agreed.

Section 5A Ground Improvement - Surveys (COP487 -£19,539)

Survey Works associated with Ground Improvement Works in the Murrayfield Corridor area, Section 5A. This is a change because the SDS designer has identified significant ground improvement works required to be carried out in the Murrayfield Corridor section of the route. BSC/tie have identified 3nr alternative options to the conservative 'dig out and replace' option identified by SDS. To allow one of the three options to be carried out further survey works requires to be carried out to allow SDS to incorporate the alternative option into the design. It should be noted that by carrying out these surveys and proceeding with one of the 3nr alternative options there is a potential saving of time and cost against the conservative 'dig out and replace' option.

Traffic Management Rationalisation – Aecom Design Costs and Additional Works (COP449 -£85,273)

The Traffic Management (TM) Rationalisation works completed in Apr-Aug 2010 utilised designs produced by AECOM. This change paper recognises the AECOM costs associated with the TM Rationalisation works. The AECOM costs form almost all of the change paper value. In addition, this paper recognises minor cost movements associated with the second phase of works undertaken in January to April 2011. The reason for carrying out these works is due to the major dispute with the Infraco Contractor and the requirement to reinstate the City Centre to normal working use.

Additional Stores from BT (COP250 -£1,293)

Additional materials (ducting) are being provided by BT in addition to original agreed free issue quantities of materials to allow Clancy Docwra to carry out duct laying in York Place. This is over and above the ducts that were previously provided under the Carillion contract. All free issue ducts were utilised during the Carillion phase of the works.

Vacuum Excavation for trial holes (COP501 -£5,161)

Vacuum excavation of 8nr trial holes to prove the route of HV cable for Ingliston Park and Ride sub-station, in order to allow SPN to provide a final Estimate for the cable route change. Due to wayleave issues, SPN are required to revise the route of the HV substation cable from the tender proposal. SPN require the cable route to be proven to allow a final Estimate for the revised location. Vacuum excavation is the required method by BAA.



## Tram Project Board – Board Paper Pro Forma Summary

Subject:	Change – Project Costs Budget
Source/Author:	Gregor Roberts
Primary Contact:	Gregor Roberts
Date of paper:	13 <sup>th</sup> April 2011
Status/Approval of paper:	Approval
Date of Board meeting:	13 <sup>th</sup> April 2011
Action requested by Board	
The Board is asked to:	
<ul style="list-style-type: none"><li>▪ <b>Approve the drawdown of budget for PM Staff and DRP related costs.</b></li></ul>	

**Paper to:** TPB/ FCL **Meeting date:** 13<sup>th</sup> April 2011  
**Subject:** Change Paper – Project Costs Budget  
**Preparer:** Gregor Roberts

**Background**

As presented at the January and February 2011 FCL's, the budget allowances for PM Staff Costs and DRP related costs have been submitted to the TPB for the period up to and including Period 12 – 2010/11.

**Current Position**

The Edinburgh Tram Project is currently in a position whereby the shape of the company delivering the project (**tie**) is likely to change significantly on the back of any mediated outcome. Costs relating to PM Staff and DRP costs are now in a position where additional budget approval is required to stay within the Delegated Authority Rules (DARs). This paper proposes to give the Tram Project Director authority to continue to incur Project Management and staff costs up until the end Period 1 - 2011/12 (23<sup>rd</sup> April 2011). Following the conclusion to mediation there will be a full review of the structure and forecast of costs to be incurred for all project related costs.

**Table – Forecast PM Staff & DRP Costs to P1 - 2011/12:**

<b>Description:</b> Budget Requested- £k	<u>P13</u> <u>2010/11</u> <u>forecast</u> <u>to 26/3/11</u>	<u>P1</u> <u>2011/12</u> <u>forecast</u> <u>to 23/4/11</u>	<u>Total</u>
PM Staff Costs	481	380	<b>861</b>
DRP (mediation & legal costs forecast)	915	700	<b>1,615</b>
<b>Sub-total</b>	<b>1,396</b>	<b>1,080</b>	<b>2,476</b>

P13 - PM staff costs are currently running at an underlying £357k per period payroll, plus £65k per period contractor costs (catch up in P13 of difference vs. forecast). P1 2011/12 costs anticipated to be £380k due to significant fall in headcount

It is proposed that the board approve a drawdown of £861k for PM staff costs and £1,615k relating to mediation costs up-to and including 23<sup>rd</sup> April 2011.

**Further Information**

This paper is an update of a version taken to the FCL on 22<sup>nd</sup> March 2011 which was approved on the basis that the budget was approved against cost forecasts to the end of Period 1 - 2011/12 (the original FCL paper proposed originally covered up to and including Period 3 - 2011/12).

Note: The Period 2 budgets/forecasts will also require to be attended to by 23<sup>rd</sup> April to avoid tie exceeding its Delegate Authority for DRP and PM staff costs



## Tram Project Board – Board Paper Pro Forma Summary

Subject:	Water Connection – Assembly Street
Source/Author:	Phil Dobbin
Primary Contact:	Frank McFadden
Date of paper:	13 <sup>th</sup> April 2011
Status/Approval of paper:	Approval
Date of Board meeting:	13 <sup>th</sup> April 2011
Action requested by Board	
The Board is asked to:	
<ul style="list-style-type: none"><li>▪ <b>Approve the proposal to award a contract for these works and present the change to Change Panel.</b></li></ul>	



**Paper to:** TPB **Meeting date:** 13<sup>th</sup> April 2011  
**Subject:** Section 1A : 300mm Connection – Assembly Street  
**Preparer:** Phil Dobbin

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**Summary**

The existing 12" water main running through the middle of Constitution Street had to be diverted to enable the Tram construction. An agreement was reached with Scottish Water in 2007 that, to facilitate the construction of the Tram their Asset capability would be temporarily reduced, pending construction of the Tram itself. Following discussions with Scottish Water relating to the delayed implementation of the tram works Scottish Water have reassessed their risk profile and as a result have requested these works to restore flexibility and redundancy to the Scottish Water Distribution network are completed timeously.

A tender document was issued to three of our approved suppliers:

Clancy Docwra  
Farrans  
Barhale

Tenders were returned on the 30<sup>th</sup> of March 2011 and are currently undergoing formal evaluation to determine correctness of the change amount.

The estimated value for this change is estimated at £163,000.

**Decision(s) / support required**

The TPB is requested to:

- a. Approve the award of the contract during April and note that this will be presented to the next Change Panel.

**Proposed** Name: Phil Dobbin Date: 13<sup>th</sup> April 2011  
Title: Project Manager

**Recommended** Name: Steven Bell Date: 13<sup>th</sup> April 2011  
Title: Tram Project Director

**Approved** .....Date: .....  
Vic Emery on behalf of the Tram Project Board

## Tram Project Board – Board Paper Pro Forma Summary

Subject:	Princes Street – Stage 3 Road Safety Audit
Source/Author:	Bob Cummins
Primary Contact:	Bob Cummins
Date of paper:	13 <sup>th</sup> April 2011
Status/Approval of paper:	Noting
Date of Board meeting:	13 <sup>th</sup> April 2011
Action requested by Board	
The Board is asked to:	
<ul style="list-style-type: none"><li>▪ <b>Note the summary of findings contained in the Stage 3 Road Safety Audit report and actions being progressed.</b></li></ul>	

**Paper to: Tram Project Board****Date: 13th April 2011****Subject: Princes Street Road Safety Audit****Preparer: Bob Cummins, Head of HSQE and Engineering – 13<sup>th</sup> April 2011**

### **1.0 Introduction/Background**

A previous paper to the Board on the 16th March 2011 entitled – *“Princes Street Cycling Incidents – Update Paper”* recommended that a Stage 3 Road Safety Audit was carried out on Princes Street. On Tuesday 15th March 2011 a Stage 3 Road Safety Audit was undertaken by Scott Wilson on behalf of **tie** Ltd. It was agreed that a summary of the Audit findings would be presented to the Board at the April Board meeting. This paper contains that summary.

The full report has been forwarded to BSC and a joint meeting has been requested to take place prior to the 15<sup>th</sup> April 2011 to discuss the findings and action as appropriate. The full report is available upon request.

### **2.0 The Audit**

The Audit Team visited the site on Tuesday 15th March 2011. A further visit was made to view the site at times of darkness at 7pm that evening. Prior to the audit inspection, Richard Kilner, part of the Audit Team, cycled through Princes Street to gain some impression of the experiences of cyclists.

At the time of the site visit it was raining and the road surface was wet with areas of standing water. Traffic on the most part of Princes Street was restricted to buses, taxis and cyclists but there was flowing traffic through a number of junctions crossing Princes Street. At no time would the conditions be described as congested but some sections were momentarily busy due to the frequency of buses or traffic signal operation. Photographs were taken and notes were written in order to document impressions of the scheme prior to the writing of this report.

### **3.0 Summary of findings**

The text within the below table is an extract from the Stage 3 Road Safety Audit. The report has been reviewed by **tie** for any critical action resulting from the findings. Critical actions identified included: repairs to the road surfacing which are continuing to take place through the ongoing remedial works; Cyclists crossing Princes Street at The Mound, this is subject to ongoing design by CEC. All other items are either actioned or require further discussion between **tie**, BSC and CEC. The report has been distributed to BSC and CEC.

It is worth noting that, although some of the findings relate to the deterioration of the road surface since November 2009, there are a number of findings that would have been identified had the Audit been carried out 1 month after opening, as required in the Design Manual for Roads and Bridges.

The Audit report highlights a number of similar points as discussed in the previous Board paper. The Audit report has helped to clarify the position on the provision of lighting recommending that the existing lighting is repaired where it is non operational until the final lighting is in place. It did not however, make any recommendation to help control the risk of cyclists becoming generally stuck in the groove.

The recommendations in the table below are from the Scott Wilson Audit Team and can be countered or alternatives pursued where deemed necessary.

Problem (finding)-summary	Recommendation(s)	tie/BSC/CEC action so far
3.1 Gaps in carriageway alongside rails could lead to cyclist falling	Provide adequate reinstatement alongside rail	Planned reinstatement ongoing as per reinstatement programme
3.2 A number of failed works (surfacing drainage) present a risk to cyclists in particular	Provide adequate carriageway reinstatements	Planned reinstatement ongoing as per reinstatement programme
3.3 Failed lighting units have left significant dark areas	Bring existing lighting units back into operation until the new lighting system is installed and operated	Discussions underway with CEC and SFC
3.4 Signs in central islands do not have adequate clearances	Review the sizes of the signing on the centre islands and reduce if possible	<b>tie</b> to discuss with BSC and agree action
3.5 Dropped kerbs has a very inconsistent standard of construction and there is standing water at a number of crossings	Review the condition and level of crossing points and reinstate kerbing at footway and adjacent carriageway as necessary to ensure that water does not pond at the crossing  Provide a smooth carriageway surface channel alongside dropped kerbs to ease water drainage	<b>tie</b> to discuss with BSC and agree action
3.6 The ends of the rail are exposed	Reinstate carriageway at ends of rails	Planned reinstatement ongoing as per reinstatement programme
3.7 No clear path for cyclists heading east to Princes Street Lothian Rd to South Charlotte Street.	Review share of road space on Princes Street between Lothian Road and South Charlotte Street	Investigate further with BSC and CEC
3.8 Poor condition of crossing. South Charlotte Street Jnc.	Make improvements to the road markings and tactile paving of the crossing and any reinstatement of surfacing and kerbing as necessary to bring this	<b>tie</b> to discuss with BSC and agree action

	crossing up to acceptable standard	
3.9 Large puddles at pedestrian crossing interrupts use of crossing	Take action to remove the cause of the failure to drain	Gullies have been cleaned – to be monitored
3.10 Setts in narrow areas are an unnecessary intrusion with additional risk of surfacing failure	Remove the narrow section of setts	<b>tie</b> to discuss with CEC and BSC. Investigate if this was picked up on Stage 2 audit.
3.11 The extent of setts area adds to the difficulties of cyclists(w/b)	Remove setts from the carriageway except from between rails	<b>tie</b> to discuss with CEC and BSC. Investigate if this was picked up on Stage 2 audit.

3.12 Large protruding kerb is a trip hazard at Tramstop	Replace the upstanding kerb with more suitable form	Temporary arrangement at tramstop. Discuss with BSC to see if trip can be removed
3.13 large puddle at pedestrian crossing interrupts use of crossing. West of The Mound	Take action to remove cause of the failure to drain	Gullies have been cleaned – to be monitored
3.14 Crossing has a central island which has difficulties for the visually impaired and wheel chair users. West of Mound	Replace the staggered crossing with a straight-through crossing	<b>tie</b> to discuss with BSC and CEC
3.15 Cyclists are required to dismount (at the Mound) on the approach to the junction if intending to turn left into Princes Street to the west	Permit cyclists to turn left from the Mound to Princes Street	<b>tie</b> to discuss with BSC and CEC
3.16 No clear advisory path for cyclists through junction	Amend The Mound/Hanover Street route to single lane in both directions Provide marked cycle lanes through the junction and into Hanover Street	Design currently being worked on by CEC. <b>tie</b> to discuss with BSC and CEC.
3.17 Difficult situation at bus stop for cyclists	Reset the bus stop location so that buses are not stopped on the taper Provide a marked cycle lane	Refer recommendation to the Traffic Management Review Group for consideration.

	from the signals to overlap with the first bus stop	Investigate with BSC and CEC
3.18 A temporary steel plate has no protection of sharp edges	Remove the plate or inset it flush with the road surface	BSC to repair manhole and remove plate
3.19 A loose slab could cause trips and possible damage to ankles	Replace loose slab	BSC to repair
3.20 The ends of the rails are exposed	Reinstate the carriageway at the ends of the rails	Ongoing repairs underway as part of overall programme
3.21 Road signs are at low height on footway and hazard to pedestrians	Raise the two road signs and give appropriate vertical clearance	<b>tie</b> to discuss with BSC and TMWG
3.22 A very low kerb within the junction gives the impression of being part of the footway crossing	Provide some means of discouraging or preventing pedestrians stepping off the footway at that point until the future works are completed	<b>tie</b> to discuss with BSC and CEC

The findings and recommendations within the Stage 3 Road Safety Audit will be closed or countered after discussions with BSC and CEC. A formal answer to the Audit report will be generated by **tie** as the initiator based on these discussions.

**Decision(s) / support required**

The TPB is requested to:

- b. Note the contents of this update paper.

**Proposed** Name: Bob Cummins Date: 13<sup>th</sup> April 2011  
Title: Head of HSQE and Engineering

**Recommended** Name: Steven Bell Date: 13<sup>th</sup> April 2011  
Title: Tram Project Director

**Approved** .....Date: .....  
Vic Emery on behalf of the Tram Project Board

## Tram Project Board – Board Paper Pro Forma Summary

Subject: Update	Statutory Utility Companies – Betterment/Deferment
Source/Author:	Fiona Dunn
Primary Contact:	Fiona Dunn
Date of paper:	13 <sup>th</sup> April 2011
Status/Approval of paper:	Noting
Date of Board meeting:	13 <sup>th</sup> April 2011
Action requested by Board	
The Board is asked to:	
<ul style="list-style-type: none"><li>▪ <b>Note the update with progress made with betterment and deferment costs with the SUC's.</b></li></ul>	

**Paper to: Tram Project Board**

**Date: 13th April 2011**

**Subject: Statutory Utility Companies – Betterment/Deferment Update**

**Preparer: Fiona Dunn**

Executive Summary

The purpose of this section of the report is to update the board on the current position in respect of the Betterment and Deferment Account with the Statutory Utility Companies (SUC's).

tie's assessment of the value of utility work and associated costs have been submitted to the respective utility companies. Regular interfaces with senior management are taking place and programmes to conclude matters associated with betterment and deferment have been agreed. A constructive executive level meeting was held with Scottish Water in March 2011 and similar meetings are planned with BT and SGN in April 2011.

Some clarity on costs from the SUC's has been received and this has resulted in a movement in the AFC in the period. However until further information is forthcoming from the utility companies risk still exists in the recovery of betterment and deferment. It is anticipated that high level interface with will facilitate the production of this information.

<u>SUC</u>	<u>Delta</u> <u>Period 12-13</u>	<u>Comments</u>
BT	254k	AFC updated to reflect actual costs received in period
Scottish Water	(2,133k)	Release of betterment opportunity not previously in AFC
Scottish Power	34k	
SGN	1,396k	AFC updated to reflect actual costs
Others	21k	
Total	(428k)	

NB:- There remains £2,858k of opportunity for further betterment not forecasted in the AFC.

This has not been taken in to the account as risk remains that tie's assessment of the age of the assets is not correct. Upon receipt of information from the SUC's this will be 'firmed up' and the AFC adjusted as necessary.

BT

BT have still not advised tie of their position regarding assessment of Betterment and Deferment.

The Anticipated Final Cost (AFC) for work carried out by BT has been assessed by tie based on the known costs for work carried out to date. The Betterment and Deferment has been calculated using tie's interpretation of the Bacon Woodrow formula in the New



Roads and Street-works Act . Upon receipt of BT's position regarding Betterment and Deferment it is likely that it will be necessary to seek Expert opinion on BT's method of calculation.

No further progress can be made with this account until the outstanding information is received from BT. A senior management meeting with BT has been set up to address this issue and it is due to take place within the next period.

#### Scottish Water (SW)

(SW) has agreed the measurement of the diversions carried out. Meetings to agree rates have made some progress and are expected to be concluded within the next period. Values of Changes remain to be agreed and SW and tie are working to an agreed programme to conclude full agreement of tie's costs.

SW have confirmed that they will provide details of the age of the assets which will allow calculation of the deferment.

SW have still to provide visibility of their costs however they have agreed to 'price up' the previously submitted resources schedule for the period ending March 2010.

In assessing the AFC for SW costs **tie** have assumed resources allocated to the project in respect of diversionary works for the period April 2010 to the currently projected. However the variable nature of the end date and the additional work required by Scottish Water still impacts on the fluidity of the cost forecast.

Further to a senior management meeting held in the period SW have now adopted a proactive approach to concluding agreement of their account and have indicated that they will provide **tie** with their deferment calculation. This is expected within the next period.

#### Scottish Power (SP)

**tie** have forwarded their account to SP for review and agreement. A response still outstanding and SP have indicated that this will be forthcoming "within the next few weeks".

#### Other SUCs- Cable and Wireless, Thus, Virgin, Verizon

**tie** have concluded their assessment of Deferment Betterment as minimal due to the relatively recent installation of the original utility by the SUC. Virgin has indicated that they will reply to **tie** within the next period.

#### Abatement of Tram Works at York Place

An analysis has been undertaken to establish if saving on cost could be made against on the current AFC if the outstanding SUC works were concluded at York Place.

In undertaking this assessment due consideration was given to works that, although not completed, have been committed. The analysis indicates that the SUC costs could be reduced by 264K from that reported in the current AFC with a further saving of 2,775k for civils works associated with utilities.

**Decision(s) / support required**

The TPB is requested to:

c. Note the update provided in this paper.

<b>Proposed</b>	Name: Fiona Dunn	Date: 13th April 2011
		Title: Strategic Commercial Manager

<b>Recommended</b>	Name: Steven Bell	Date: 13th April 2011
		Title: Tram Project Director

<b>Approved</b>	.....	Date: .....
	Vic Emery on behalf of the Tram Project Board	

## Tram Project Board – Board Paper Pro Forma Summary

Subject:	Procurement of Revenue Collection Equipment
Source/Author:	Alastair Richards
Primary Contact:	Alastair Richards
Date of paper:	13 <sup>th</sup> April 2011
Status/Approval of paper:	Approval
Date of Board meeting:	13 <sup>th</sup> April 2011
Action requested by Board	
The Board is asked to:	
<ul style="list-style-type: none"><li>▪ <b>Approve the recommendation to proceed with Almex as preferred bidder and to progress with concluding the final contract agreement and to notify Parkeon that they have not been successful.</b></li></ul>	

**Paper to: TPB****Meeting date: 13<sup>th</sup> April 2011****Subject: Procurement of Revenue Collection Equipment Paper****Preparer: Alastair Richards**

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## 1.0 Introduction

We have been undertaking the procurement process for the revenue collection equipment in parallel with the finalisation of the tramstop designs. This process has now been completed and this paper formally reports the evaluation and proposes the recommendation to proceed to preferred bidder

The final ITT was issued to the two remaining bidders on the 26/11/10 and two tenders were returned on the 16th December 2010. Following a period of further tender clarification and evaluation of integration, we have now concluded the evaluation process.

This paper summarises the content of the detailed Evaluation Report which is available upon request. The full Evaluation Report has been reviewed by the members of the BROR sub-committee at the meeting on the 30<sup>th</sup> March 2011 and it is formally recommended by the BROR sub-committee that the TPB Approve the recommendation.

## 2.0 Evaluation of Final ITT Submissions

Each bidder duly submitted their final tenders on the 16th December 2010 as required by the ITT, further clarification questions and meetings have also been held.

The procurement and evaluation was carried out under the direction of Alastair Richards with the detailed process being managed and commercially evaluated by Kenneth McLeod. The other evaluators were Philip Ayles (technical consultant), Sinead Scott (maintenance), Douglas Mathie (Brodies – legals) and Steve Ryan (Lothian Buses - integration).

At each stage of the Evaluation process Almex have been ahead in every criteria most notably in terms of commercial and quality, and the team have tested and challenged through the clarification process including integration issues have been explored and tested to demonstrate that Almex are offering a comprehensive workable solution that addresses all the topics within the ITT. Technically, the Almex offer is superior to that of Parkeon's and this is reflected in their scores for the Platform Equipment and Back Office systems.

In contrast, Parkeon have offered a restricted submission and despite further consultation and clarification that disappointingly fails to capitalise on their existing Lothian Buses system and does not offer a more competitive solution. Overall, the Parkeon submission could have been more professional in its approach with particular emphasis on technical content and quality.

Criterion	Weighting	Almex	Parkeon
Quality	25%	22.2	20.5
Commercial	30%	25.7	4.3
Integration	15%	7.8	7.2
System Support	10%	7.0	5.3
Project Delivery	15%	7.2	6.6
Legal and Contractual	5%	4.5	3.0
<b>Total</b>	<b>100%</b>	<b>74.4</b>	<b>46.9</b>

Based on the overall evaluation as summarised in the table above it is clear that Almex best meet the needs of this commission and it is recommended that they be awarded preferred bidder status subject to contract clarifications.

The anticipated contract value is £860k against an original approved budget of £750k. The BROR committee has also requested a provision be made in the sum of £290k for possible purchasing of IPR for the existing Lothian Buses Ridacard smartcard.

We have negotiated a pre-priced break option into the contract such that in the event that we are unable to proceed with the tram project, then we may break the contract and only be obliged to pay £5k for each month of work for the first 6 months of design and preparation work before manufacturing commences.

### 3.0 Planning Considerations

In the recent design workshops with CEC Planning and SDS, the type, sizes, numbers and exact locations of the proposed Almex equipment on the platform have been agreed and incorporated into the revised drawings.

**Decision(s) / support required**

The TPB is requested to:

The TPB are asked to approve the recommendation to proceed with Almex as Preferred Bidder and to progress with concluding the final contract agreement, and to notify to Parkeon that they have not been successful.

<b>Proposed</b>	Name: Alastair Richards	Date: 13th April 2011
		Title: Strategic Commercial Manager

<b>Recommended</b>	Name: Richard Jeffrey	Date: 13th April 2011
		Title: Chief Executive Officer

<b>Approved</b>	.....	Date: .....
	Vic Emery on behalf of the Tram Project Board	

## **Period 13 Transport Scotland report Sections 2-7**

On following pages are Sections 2-7 of the Transport Scotland report (Section 1 is the Project Directors report).

## 2 Progress

*On Friday 1<sup>st</sup> October 2010, BSC began to demobilise and cease works on certain sites across the route (over Sections 2A, 5A, 5B and 5C), this reflecting an escalation in the contractual dispute between BSC and tie. In response to this action, tie has entered into formal correspondence with the contractor regarding contractual obligations. tie continue to undertake site monitoring on both active and inactive worksites.*

*During March, positive mediation discussions were held between the parties. Transport Scotland were party to these discussions.*

*Edinburgh Gateway is now reported in a standalone report.*

The progress achieved in Period 13 for INFRACO works was 0.2% against a plan of 0.1% although it should be noted that against the contractual Rev.1 programme all construction activities both On and Off-street should now be complete with the route in total planned to be 100.0% complete.

As BSC had previously demobilised from previously active on-street worksites in the Leith Docks area at Lindsay Road and Tower Bridge, the only progress achieved in the period has been at the Depot Access Bridge and in the Depot itself.

The total cumulative completion for Infraco Works is 28.2% at end of Period 13. A summary of progress on various project elements can be found below:

<p><b>Utilities</b> <i>The % complete is a physical measure of the progress against the forecast final volume of diversions across the route. It does not take cognisance of cabling, testing and transfers from the Telecom Providers (BT etc.)</i></p> <ul style="list-style-type: none"> <li>▪ ~ 50,000m of diversions; ~48,300m completed to date.</li> <li>▪ Airport - Haymarket complete</li> <li>▪ Haymarket – Newhaven complete save for:             <ul style="list-style-type: none"> <li>▪ Some telecoms cabling and transfers</li> <li>▪ Testing / commissioning / abandonments of transferred services</li> <li>▪ Baltic Street Diversions (1500m)</li> </ul> </li> </ul>	<p><b>97%</b></p>
<p><b>Tram Project Ancillary Works</b> <i>Equal weighting is applied to the physical progress % complete for all six work packages, irrespective of value.</i></p> <ul style="list-style-type: none"> <li>▪ Ingliston Park &amp; Ride Phase 2 complete 100%</li> <li>▪ Burnside Road Bridge relocation at Edinburgh Airport complete 100%</li> <li>▪ Murrayfield Training Pitches relocation complete 100%</li> <li>▪ Murrayfield Wanderers Club House complete 100%</li> <li>▪ Murrayfield Turnstiles relocation complete 100%</li> <li>▪ South Gyle sewer tunnel: (Site Contract works 100% completed) 100% complete</li> <li>Additional works -TM switchover completed November 10</li> </ul>	<p><b>100%</b></p>
<p><b>Tram Vehicles</b> <i>Weighting is applied to the physical completion of trams with a Factory Acceptance Test (FAT) signed off and accepted. All others are under manufacture so this is a</i></p>	<p><b>82%</b></p>



<p><i>conservative measure of progress.</i></p> <ul style="list-style-type: none"> <li>▪ 22 out of 27 completed and factory tested with 5 under manufacture.</li> <li>▪ On programme</li> <li>▪ Tram 252 relocated to secure compound in Broxburn</li> </ul>	
<p><b>Construction Off Street</b>  <i>The % complete is a physical measure of the proportion of the section from Haymarket to Edinburgh Airport. Some typical elements of sections provide a more granular view.</i>  <i>As has been reported, the on street work is subject to significant dispute and this is excluded in the summary table. Current % complete for the on street Infrastructure construction works is ~11%.</i></p> <p><u>Depot</u></p> <ul style="list-style-type: none"> <li>▪ Stabling area Phase 1 &amp; 2 under construction, completion May '11</li> </ul> <p><u>Structures</u></p> <ul style="list-style-type: none"> <li>▪ Bridges 8 out of 16 under construction ~44% complete</li> <li>▪ Culverts 3 out of 3 completed 100% complete</li> <li>▪ Retaining Walls 6 out of 17 under construction ~ 24% complete</li> </ul> <p><u>Systems</u></p> <ul style="list-style-type: none"> <li>▪ Track 1400m installed &amp; now starting in depot ~12% complete</li> <li>▪ Substations 2 out of 4 under construction ~20% complete</li> <li>▪ Overhead Line Work has just commenced at the depot with 100 out of 124 poles in depot erected.</li> </ul>	<p><b>40%</b></p>
<p><b>Overall Progress as a Financial Metric</b>  <i>This is a summary financial metric, aggregating the current expenditure on the whole project as a % of the currently authorised funding (£545m).</i></p>	<p><b>75%</b></p>

The cost, programme and risk information in this Period 13 report continues to be based upon an unapproved forecast on the information reported in May 2009. This will be updated once agreement is reached with BSC on a new revised programme.

BSC continue to report progress against the agreed Rev.1 contractual programme. This shows for progress up to and including 26<sup>th</sup> March 2011 an OFRS date of 25 February 2014 against the contractual Rev.1 programme date of 06 Sep 11 and reports a **15 calendar day slippage during the period.**

It should be noted that as a result of the current rates of BSC progress and cessation of works across the site, that it is likely that slippage will continue to be reported on a period by period basis, until such time as a re-baselined programme can be agreed with the Contractor.

Overall the relationship with BSC continues to suffer in a number of key areas and progress remains behind the master programme:

- Contractual obligations not met to allow works to commence on street;
- Design slippage since novation of design to INFRACO (now recorded in v68 of the design programme);
- Consortium integrated design programme, assured and validation;
- Finalisation of the agreement of change delaying the commencement of work even though instructed to progress by **tie**;
- Remaining small pockets of incomplete utility diversions in the On-Street sections, and
- Slow mobilisation of INFRACO, including lack of formal sub-contracts being in place.

Section	Description	Contract Programme Rev.01	BSC Forecast (P12) Rev.01	BSC Forecast (P13) Rev.01	BSC Movement in Period Cal Days (c) – (b)	tie Live Forecast (P12) Rev.01**	tie Live Forecast (P13) Rev.01**	tie Movement in Period Cal Days (f) – (e)
		(a)	(b)	(c)	(d)	(e)	(f)	(g)
Section A	Depot completion	01-Jun-10	26-Aug-11	10-Oct-11	-45	20-Dec-11	18-Jan-12	-29
Section B*	Test Track Available	01-Jul-10	03-Dec-12	11-Jan-13	-39	26-Apr-12	24-May-12	-30
Section C	All Phase 1a Construction complete	10-Mar-11	14-Aug-13	29-Aug-13	-15	25-Apr-13	25-Apr-13	0
Section D	Open for Revenue Service	06-Sep-11	10-Feb-14	25-Feb-14	-15	22-Oct-13	22-Oct-13	0

\*The interpretation is that Sectional Completion "B" means that Test Track is available for Tram movements.

\*\* v68 information used.

tie continue to monitor progress against their "live" programme which is based on the contractual Rev.1 Programme logic, although progress recorded against this programme considers the currently known work-scopes including some changes. This indicates a Sectional D completion of 22-Oct-13, which is the same as Period 12. The tie programme shows no slippage in the period for Sections C & D as the final E&M activities in the critical path were spanning a Christmas embargo in 2012-13 in the period 12 update. These activities in the period 13 update finish and re-commence either side of the embargo thus removing 20 days / 4 weeks from the forecast duration, although the Off-street section (which is not affected by the City Centre embargo) records a -28 day slippage in the period.

## Contractual Strategy & Dispute Resolution

### Dispute Resolution (Infraco)

In total, 30 items have now been referred to the formal dispute resolution process – 20 by tie and 10 by Infraco. Of the 30 disputes raised 7 still remain to be resolved. However following the Mediation discussions with BSC both parties agreed that the dispute Resolution Procedures set out in the Contract should be 'frozen' until early September 2011. Letters and emails between the parties have been exchanged confirming this position. Therefore on each of the live disputes the current position is as follows:-

- Payment for Princes Street Works – Adjudication Hearing cisted,
- Lindsay Road – Mediation cisted
- Extension of Time due to Utility Works (Mudfa 2) – referral to mediation deferred
- Notified departures (4No) re Highways/street lighting – Chief Executive's meetings deferred.

As a result of the agreement to suspend the DRP process no new decisions have been received during the period. It is important to note that the application of DRP to disputed matters has reduced BSC's claims for additional payment from £25.0m to £11.4m in relation to those DRPs which have actually reached a financial settlement.

Summary of Live DRP @ Period 113 2010/11

DRP No	Subject	Nature of Dispute	Launched or planned	PD Mtg	Position Papers	CEO Meeting	Referral	Decision
22	Princes St	Payment	√	√	√	√	On hold	
26	Delay due to Mudfa works	Extend contact period & costs	√	√	√	√	On hold	
23	Lindsay Road	Costs	√	√	√	√	On hold	
27 - 30	Street Lighting/ highways x 4	BBDI / IFC	√	√	√	√	On hold	
Launched by <b>tie</b>								
Launched by BSC								

**Design**

**IFC Design**

Following the mediation talks, a fast-track approach to reviewing and closing out CEC consents has been implemented. This is having positive results and may result in improvements being reported in the next reporting cycle compared to that reported here in P13.

v68 was submitted to **tie** on 17 March 2011 with a progress date of 14 February 11. 26 IFC activities have a slippage of 28 Days or more. The final scheduled IFC is Ground Improvement & Vibration Mitigation on 08-06-11.

Design approvals status in Period 13 is summarised below:

Phase 1a only	Numbers Required											Number Granted	V68	Number Granted
	V26	V31	V58	V59	V60	V61	V62	V63	V64	V66	V67			
Prior Approvals	44	49	56	56	56	56	60	60	60	60	62	56	60	57
Technical Approvals	53	71	92	92	92	92	63	63	63	63	63	56	63	56
IFC	71	81	233	230	227	230	230	229	229*	234	238	192	240*	201

\* Additional IFC activities added V68

v68 data has been used to inform the programme updates. **tie** have included these into the live programme.

- IFCs – Phase 1a: 201 issued out of 240 (84%)
- 60 Prior Approvals are included in v68 – 57 of which have been granted – those remaining include Canopy & Boundary Treatment at Edinburgh Airport and Roseburn Viaduct Value Engineering option
- 56 Technical Approvals out of 63 have been granted in V67
- Roads approvals - One area remains outstanding from the V31 Technical Approval in Phase 1a (1C2- Picardy Place to St Andrew Square);
- Scottish Water has sent formal acceptances to BSC for all sections with the exception of 1C2 (Picardy Place to St Andrew Square) & 1C1 (McDonald Rd to Picardy Place).
- Sections 1A1, 1A2, 1A4, 1B, 1D, 5A, 5B, 5C & 6 close reports have been signed off by CEC, subject to BSC concluding any concessions included in the reports during construction. CEC are reviewing all other sections based on the prioritisation list provided by BSC.

To date 201 out of 969 technical informative comments have been closed. Accelerated approvals process is building on earlier workshops and agreement in principle has been reached on approximately 700 further comments.

tie has implemented an extensive programme of site based monitoring to validate & verify the installation of works in line with an integrated design assured construction. Design performance by Infraco and their designer is the subject of one of the RTN's and is being vigorously pursued through the Design Task Force sessions held-with BSC.

**Utility & Cabling Works**

Utility work – The tender process for Utility work at Baltic street remains on hold until tie receive the required IFC drawings from SDS - which remain outstanding with no delivery schedule in place from SDS.

Telecoms continue to progress their re-cabling activities on-street – with works in St Andrews Square, York Place & Torphichen St due to complete during Q2 2011. Cabling in Torphichen St could be protected to allow tramworks to commence as crossings are perpendicular to Tram route. The pulling of remaining BT cables on the northbound carriageway between MacDonald Rd – Jane St has been achieved and works are now nearing completion with the intermediate jointing of the cables now progressing.

**Tramworks (INFRACO)**

The progress achieved in Period 13 for INFRACO works was 0.2% against a plan of 0.1% although it should be noted that against the contractual Rev.1 programme Off-street construction should now be complete with the route in total planned to be 100% complete.

BSC have demobilised from previously active on-street worksites in the Leith Docks area at Lindsay Road and Tower Bridge. The only progress achieved in the period has been at the Depot Access Bridge and in the Depot itself.

Milestone	Period 13		Cumulative (Achieved to date)	Contract Planned to P13
	Planned	Actual	Actual	
Prelims	0	0	69	95
Construction	1	1	170	1229

**Contract Milestones**

Works are currently not being carried out in line with the original Contract Programme and subsequently cannot be achieved as originally forecast.

**Prelim Milestones**

Prelim Milestones are no longer being forecast as BSC are not applying for these milestones in accordance with the Infraco Contract. It is also the case that a number of BSC's key subcontractors have not commenced in certain areas of the site therefore the milestones are not being achieved in full at this stage.

(%) Infraco Construction Progress Period 13

Period 13 2010-11	Period		Delta	Cumulative		Delta	Project
INFRACO PERIOD 13 PROGRESS (Contract Rev.01 Programme)	Plan	Actual		Plan	Actual		Wtg
Section 1a Newhaven to Foot of the Walk	0.0%	0.0%	0.0%	100.0%	8.6%	-91.4%	16.2%
Section 1b Foot of the Walk to McDonald Road	0.0%	0.0%	0.0%	100.0%	1.3%	-98.7%	7.4%
Section 1c McDonald Road to Princes Street West	0.9%	0.0%	-0.9%	100.0%	0.0%	-100.0%	10.8%
Section 1d Princes Street West to Haymarket	0.0%	0.0%	0.0%	100.0%	42.1%	-57.9%	7.6%
<b>Combined Sections 1A-1B-1C-1D (On-Street) Newhaven Road to Haymarket</b>	<b>0.2%</b>	<b>0.0%</b>	<b>-0.2%</b>	<b>100.0%</b>	<b>11.2%</b>	<b>-88.8%</b>	<b>42.0%</b>
Section 2 Haymarket to Roseburn Junction	0.0%	0.0%	0.0%	100.0%	35.1%	-64.9%	4.2%
Section 5a Roseburn Junction to Balgreen Road	0.0%	0.0%	0.0%	100.0%	10.0%	-90.0%	13.9%
Section 5b Balgreen Road to Edinburgh Park Central	0.0%	0.0%	0.0%	100.0%	43.4%	-56.6%	13.2%
Section 5c Edinburgh Park Central to Gogarburn	0.0%	1.5%	1.5%	100.0%	26.9%	-73.1%	7.2%
Section 6 Gogar Depot	0.0%	1.1%	1.1%	100.0%	79.0%	-21.0%	11.9%
Section 7a Gogarburn to Edinburgh Airport	0.0%	0.0%	0.0%	100.0%	47.3%	-52.7%	7.6%
<b>Combined Sections 2A-5A-5B-5C-6A-7A (Off-Street) Haymarket to Edinburgh Airport</b>	<b>0.0%</b>	<b>0.4%</b>	<b>0.4%</b>	<b>100.0%</b>	<b>40.5%</b>	<b>-59.5%</b>	<b>58.0%</b>
<b>FULL ROUTE PHASE 1A NEWHAVEN ROAD TO EDINBURGH AIRPORT</b>	<b>0.1%</b>	<b>0.2%</b>	<b>0.2%</b>	<b>100.0%</b>	<b>28.2%</b>	<b>-71.8%</b>	<b>100.0%</b>

**ON-STREET**

Item	Period11 % Comp	Period12 % Comp	Period13 % Comp
<b>Section 1 Newhaven Road to Haymarket</b>			
Lindsay Rd RW's	66.0%	66.0%	66.0%
S17 Tower Place bridge	73.0%	73.0%	73.0%
1B Leith Walk (Foot of the Walk – McDonald Rd)	1.3%	1.3%	1.3%
1D Princes Street to Haymarket	42.1%	42.1%	42.1%

**OFF-STREET**

Progress Off-street has continued or commenced at the following locations: Note that the (%) completion estimates relate to the full structure.

Item	Period11 % Comp	Period12 % Comp	Period13 % Comp
<b>Section 02 Haymarket to Roseburn Junction</b>			
Caley Alehouse Demolition	100.00%	100.00%	100.00%
S19 Haymarket viaduct	79.7%	79.7%	79.7%
Trackwork Civils and Earthworks Haymarket to Roseburn junction	14.1%	14.1%	14.1%
Trackwork Track Laying Haymarket to Roseburn junction	0.0%	0.0%	0.0%
Haymarket Station TS	1.8%	1.8%	1.8%
<b>Section 05A Roseburn Junction to Balgreen Road</b>			
Network Rail Haymarket Sprinter Depot Carpark	100.0%	100.0%	100.0%
Russell Road Retaining Walls	22.7%	22.7%	22.7%
Murrayfield Wanderers Clubhouse Demolition	100.0%	100.0%	100.0%
Murrayfield SRU Accomodation Mods	100.0%	100.0%	100.0%
<b>Section 05B Balgreen Road to Edinburgh Park Central</b>			
S23 Carricknowe bridge	79.5%	79.5%	79.5%
Trackwork Civils and Earthworks Balgreen to Saughton	42.7%	42.7%	42.7%
Trackwork Track Laying Balgreen to Saughton	11.3%	11.3%	11.3%
Trackwork Civils and Earthworks Saughton to Bankhead (includes Guided Busway)	100.0%	100.0%	100.0%
Trackwork Track Laying Saughton to Bankhead (includes Guided Busway)	63.7%	63.7%	63.7%
Trackwork Civils and Earthworks Bankhead to Edinburgh Park	31.0%	31.0%	31.0%
Trackwork Track Laying Bankhead to Edinburgh Park	0.0%	0.0%	0.0%
Edinburgh Park Station TS	6.4%	6.4%	6.4%
Trackwork Civils and Earthworks Edinburgh Park Station to Edinburgh Park Central	43.4%	43.4%	43.4%
Trackwork Track Laying Edinburgh Park Station to Edinburgh Park Central	0.0%	0.0%	0.0%
S27 Edinburgh Park viaduct	94.2%	94.2%	94.2%
<b>Section 05C Edinburgh Park Central to Gogarburn</b>			
Trackwork Civils and Earthworks Edinburgh Park Central to Gyle Centre	20.6%	20.6%	20.6%
Trackwork Track Laying Edinburgh Park Central to Gyle Centre	0.0%	0.0%	0.0%
A8 underpass (Excluding utilities works)	45.4%	45.4%	45.4%
S32 Depot Access bridge	75.6%	77.4%	78.2%
Trackwork Civils and Earthworks Gyle to Depot Stop	4.2%	4.2%	4.2%
Trackwork Track Laying Gyle to Depot Stop	0.0%	0.0%	0.0%
Trackwork Civils and Earthworks Depot Stop to Gogarburn	66.9%	66.9%	66.9%
Trackwork Track Laying Depot Stop to Gogarburn	0.0%	0.0%	0.0%

Item	Period11 % Comp	Period12 % Comp	Period13 % Comp
<b>Section 06 Gogar Depot</b>			
Depot Earthworks & drainage	99.1%	99.1%	99.1%
Depot Trackworks Civils	78.8%	82.2%	82.2%
Depot Trackworks - Track Laying	20.0%	26.1%	26.1%
Depot building (Total).	80.0%	80.6%	81.6%
Building Services	84.8%	84.8%	84.8%
Fitting Out and Finishes	95.0%	95.0%	95.0%
E&M Workshop Equipment Installation	0.0%	0.0%	0.0%
Depot Sub-station	85.0%	85.8%	91.4%
Depot Access Roads	68.5%	68.5%	68.5%
Depot E&M Works	13.2%	13.2%	18.0%
Depot in totality	77.3%	77.3%	78.9%
<b>Section 07 Gogarburn to Edinburgh Airport</b>			
Gogar Landfill	91.5%	91.5%	91.5%
Gogarburn Bridge	98.5%	98.5%	98.5%
S30 Gogar Culvert No.1	100.0%	100.0%	100.0%
Trackwork Civils and Earthworks Gogarburn to Ingliston P&R	76.2%	76.2%	76.2%
Trackwork Track Laying Gogarburn to Ingliston P&R	0.0%	0.0%	0.0%
Hilton Hotel Carpark Phase 1	100.0%	100.0%	100.0%
Ingliston Park and Ride Sub-station	1.4%	1.4%	1.4%
W14A&B / W15C&D Gogarburn RW's	57.5%	57.5%	57.5%
S31 Gogar Culvert No.2	100.0%	100.0%	100.0%
S34 Gogar Culvert No.3 (Remedial works to be done)	97.2%	97.2%	97.2%
Trackwork Civils and Earthworks Ingliston Park & Ride to Edinburgh Airport	85.9%	85.9%	85.9%
Trackwork Track Laying Ingliston Park & Ride to Edinburgh Airport	0.0%	0.0%	0.0%

Section	Commentary
<b>Section 1a Newhaven to Foot of the Walk</b>	No agreed programme for recommencing the main works in this section.
<b>Section 1b Foot of the Walk to McDonald Road</b>	No agreed programme for recommencing in this section
<b>Section 1c McDonald Road to Princes Street West</b>	No agreed programme for recommencing in this section
<b>Section 1d Princes Street West to Haymarket</b>	No agreed programme for recommencing in this section
<b>Section 2 Haymarket to Roseburn Junction</b>	No agreed programme for recommencing in this section
<b>Section 5a Roseburn Junction to Balgreen Road</b>	No agreed programme for recommencing in this section
<b>Section 5b Balgreen Road to Edinburgh Park Central</b>	Indications that work will commence on south gyle Access Bridge in Period 1.  <u>Edinburgh Park Bridge</u> No works planned or carried out by BSC during the period. The site offices have been removed and the area is now being used for storing track slab sections.
<b>Section 5c Edinburgh Park Central to Gogarburn</b>	<u>Depot Access Bridge</u> 100% of planned progress achieved in Period (including deck pour).
<b>Section 6 Gogar Depot</b>	<u>Depot Building works:</u> Accommodation area fit out and finishes planned progress achieved in Period. Siemens track installation commenced 13 <sup>th</sup> January 2011 with progress restricted due to level tolerance and control issues. <u>Depot Substation:</u> Fit out by Siemens achieved planned progress in Period. <b>HV cable was Energised on 10<sup>th</sup> March 2011</b>  <u>Depot Externals:</u> Area 2C was handed over to Siemens during Period 13.

Section	Commentary
	Remaining civils works no progress in Period due to Change issues. Siemens external track installation no progress in period as limited resource completing Depot Building trackwork prior to completing external areas.
Section 7a Gogarburn to Edinburgh Airport	<p><u>Gogarburn Bridge:</u></p> <p>Remedial works to track plinths commenced in Period.</p> <p><u>Design</u> BSC provided electronic flood model to EAL. EAL removed flooding objection in Period. EAL have agreed in principle to route of HV cable to IPR substation. EAL have agreed in principle to provision of LV power for tramstop.</p>

Progress Points to note in Period 13:

- Depot Access Bridge progressing to programme with major deck pour completed on 9<sup>th</sup> March.
- Depot Building internal fit out progressing well with trackwork on going both internal. Area 2a handed over to Siemens in Period 13.
- HV cable at Depot was Energised on 10<sup>th</sup> March 2011.
- Manhole Works – Tender returned to **tie** 02/03/11 – **tie** reviewed and issued tender queries and signed tender recommendation report 25/03/11.
- 250 water main at Depot – Looking to start on site on 04/04/11.
- Assembly Street Water Connection – Tender due back on 30/03/11.
- Scottish Water Abandonments – **tie** discussing with potential Contractor.
- Formal approval on flooding report from BAA received on 09<sup>th</sup> March 2011.

Issues in the Period

- Final proposal for remedial works / design change for Princes Street still not approved
- Installed water main at Depot Building has been rejected by Scottish Water alleging non compliant pipework for industrial use being used. This is currently under investigation by all parties and could have implications to depot completion. Meeting on Tuesday 29<sup>th</sup> March 2011 for Scottish Water to confirm position.
- Still no progress being made from Haymarket Viaduct through to the A8 Underpass due to the ongoing dispute over change.

**Tram Construction (Tramco)**

The CAF contract programme is incorporated in the Master Tram project Programme. We receive electronic submission of the CAF programme to allow analysis of the programme.

CAF is progressing well to deliver trams to Edinburgh according with its contractual programme but there is currently no access available to the depot to receive the trams. Tram 252 is stored in Broxburn and is checked on a regular basis, trams 251 and 253 to 274 are stored at the factory in Irun.



**Period 13 Summary – Tramco**

No	Planned	Activities in current Period
1	Fabrication of the trams	Fabrication and primer painting is completed on all the body-shells for all twenty seven trams. Equipment fit-out for the remaining trams 26 and 27 is continuing in the assembly hall. The first 24 trams are completed and tram 25 is completing factory acceptance testing.
2	Enhanced passenger information upgrade	Plan still to fit final equipment when trams arrive in Edinburgh.
3	Review of Test Protocols and test results	CAF have completed final internal tests to verify and calibrate computer design tools using Tram 251 at Wildenrath on the 12 <sup>th</sup> October 2010, final report awaited.
4	Depot Equipment	CAF are continuing progress, delivery schedule under discussion in conjunction with civil works programme for the depot now in mid-March 2011.
5	Finalisation of external branding	Final branding will be applied whilst the trams are stored at the factory prior to shipping to Edinburgh.
6	Tram O&M Manuals	Revised manuals next update due late 2011 after experience on site with the trams.
7	Key sub-contract placement	Collateral warranties – 3 signed warranties have been received, remaining continue to be progressed.
8	Factory Based Acceptance Testing complete	First 24 trams have successfully completed factory testing to date. 89% of trams now completed and tested.
9	Testing regime	CAF have revised the Delivery & commissioning regime for the trams to reflect the requirement to store Trams pre delivery to Depot. All Trams will be prepared after storage, undertake dynamic testing and commissioning. 1 <sup>st</sup> tram due for starting commissioning April 2011- last tram mid-May 2012.
10	Programme progress	89% of scheduled activities completed.

**Preparing for Operations**

The Operational Readiness detailed programme information is also incorporated into the Master Tram Project Programme.

Regular meetings are held to review the programme and the potential impact of the infrastructure delivery dates to the commissioning process and the associated operational staff recruitment and training programme based on a set of assumptions surrounding incremental opening.

The Operational Readiness team are working closely with both tie and BSC programme teams to coordinate progress at the Depot, we are concentrating on attempting to bring resolution to the notified changes by the Contractor and particular the drainage and hard standing areas in order to attempt to keep progress continuing at the Depot.

In the period the further tracks in the workshop area have been installed and work has continued in the remaining stabling tracks. Also the preliminary tests prior to energisation of the HV equipment in the depot sub-station have been undertaken.

We have been planning in detail the first three stages of preparation for the Testing & Commissioning. The Benefits Realisation & Operational Readiness Sub-Committee of the TEL

Board provides the governance overview and monitors the progress of the tasks and decisions required to deliver the Operational Readiness programme. Good progress is being made in all activities except those that are directly dependent upon progress with the infrastructure works.

Detailed operational and outline maintenance instructions are being written and the Operator's Safety Management System has been further developed and peer reviewed.

The procurement of the ticketing equipment for the tram system, to integrate with the existing Lothian Buses ticketing system has now concluded and at the BROR meeting on the 30/03/11 the recommendation was made and accepted of the preferred bidder which is subject to ratification at the TPB on the 13/04/11.

The maintenance of completed infrastructure assets continues to be developed with BSC maintenance representatives, notably the tram vehicle O&M and Operator Manuals and the asset management system for the tram vehicles, but also more recently there has been some progress with the infrastructure systems maintenance preparations, although there are some concerns over BSC's arrangements being in place soon enough for the Depot E&M assets. This is being discussed with the maintenance representatives of BSC.

With the support of CAF, we submitted a PQQ for leasing some tram vehicles to Croydon, and on the 21/03/11 were confirmed as having been shortlisted to tender. We are currently evaluating the tender documentation and planning how to respond with CEC.

### 3 Edinburgh Gateway

#### Edinburgh Gateway

Progress on the Edinburgh Gateway Project in Period 13 2010/11 is summarised as follows:

- The work carried out in the Period involved a review of the design risk of the anchored wall and investigation of options for a more conventional piled abutment. Meetings held with key stakeholders TS and NWR promoted preference for piled r/c abutment structure with sewer diversion relocated behind the wall. NWR are to review preferred solution and confirm acceptance. Prior Approval was originally granted on 28th July 2010. The revised Prior Approval was issued on 14th January 2011 with approval being put on hold while review of anchored retaining wall is carried out. Co-ordination meetings continue with NR to resolve issues associated with EMC and co-ordinate discrepancy. Other outstanding design issues including resolution of ICP sign off and drainage approvals continued in the Period.
- **tie** requested an Estimate from BSC for Edinburgh Gateway construction works as a Change under the Infraco Contract including a number of programme matters that **tie** indicated Infraco should assume when completing their Estimate. These programme issues will require adjustment following resolution of the Prior and Technical Approval issues. Further **tie** letter reference INF CORR 7005 of 17th December 2010 requested confirmation from BSC regarding date for receipt of Estimate. Estimate is delayed while final solution regarding form of retaining wall and alignment of sewer is agreed by all parties.

#### Forecast Cost to Complete Design

Forecast outturn is £1,166k against an original £880k:

##### £880k Breakdown

SDS	£400k
JRC	£ 30k
<b>tie</b>	£100k
Siemens	£350k

##### £1,166k Breakdown

SDS	£540k
JRC	£ 45k
<b>tie</b>	£120k
Siemens	£327k
Const. Staging	£ 30k
ICP	£ 20k
Name Change	£ 3k
A8 Drainage	£ 27k
Legal Costs	£ 50k
33kV Enab Wks	£ 4k

**tie** have discussed outstanding milestone applications with BSC in an effort to ensure cash flow is consistent with progress.

**Period 13 Design progress**

At the end of Period 13 **tie** re-assessed the design phase as 55% complete. This significant revision included a review of the impact on the design resulting from the concerns associated with the anchored retaining wall and the preference to revert to a piled abutment.

Cost of work done to date has been re-assessed at £832K, compared to £973k reported in period 12, versus the £880k originally forecast and the £1166k revised AFC. Following agreement on the retaining wall design solution **tie** will reassess the design completion in the next Period and adjust the cost of work done as necessary to ensure alignment.

The work carried out in the Period involved a review of the design risk of the anchored wall and investigation of options for a more conventional piled abutment. Key stakeholders TS, NWR and SW were kept up to date with developments with a report presented to NWR promoting the selection of option 4c. Prior Approval was originally granted on 28<sup>th</sup> July 2010. The revised Prior Approval was issued on 14<sup>th</sup> January 2011 with approval being put on hold while review of anchored retaining wall is carried out. Co-ordination meetings continue with NR to resolve issues associated with EMC and co-ordinate discrepancy. Other outstanding design issues including resolution of ICP sign off and drainage approvals continued in the Period.

**Tram Design Issues**

BSC previously identified a need to discuss the reduced headroom for the OLE through the tramstop with the Independent Competent Person (ICP). The **tie** engineering team have discussed this further with BSC and have received confirmation that this is still an issue. BSC will supply the justification for the **tie**/ICP to review.

A meeting was held on 2<sup>nd</sup> September 2010 between **tie**, TS and NR with ETN ICP John Dolan. The meeting discussed the design interface issues that require to be addressed to satisfy ETN ICP John Dolan. In the Period the design assumptions register was updated to reflect the current status regarding close out of ICP issues. Further discussions will be required with NR to close out the specific interface issues. These will be addressed through the regular Design Managements meetings between **tie**, TS and NR and the fortnightly conference calls. A design review meeting on 17<sup>th</sup> January 2011 updated the ICP sign off and made significant progress. No recorded progress made in Period 13.

**Tram Patronage Modelling & Business Case**

**tie** provided a response to TS queries on JRC modelling during Period 11. TS to confirm if outstanding matters are now closed.

**Programme Milestones**

**tie** updated the forecast dates in Period 13 for indicative purposes only as these are subject to clarity on the wider ETN Project timescales and in particular agreement with TS and NWR regarding the solution for the high level retaining wall. It should be noted the dates will require amendment when the final solution for the Edinburgh Gateway retaining wall is agreed with TS and NWR and the final BSC programme is received and accepted.

## Master Project Milestone Schedule

<b>PERIOD Ending</b>	26/03/2011
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ALL DATES ARE INDICATIVE ONLY UNTIL BASELINE PROGRAMMES ARE AGREED

Progress against milestones in programme					Master Project Milestones
		Baselined	Forecast	Status / Completion Date	
Edinburgh Gateway - Tram Works					
Milestone G1	Submission of Detail Design for Technical Approval	30-Aug-10	05-Aug-11		
Milestone G2	Completion of Cost Estimate (Including Risk & Value)	30-Sep-10	21-Oct-11		
Milestone G3	Completion of Technical Approvals	30-Sep-10	12-Oct-11		
Milestone G4	Completion of Statutory Approval & Consents (Prior Approval)	28-Jul-10	24-Jun-11		
Milestone G5	Completion of Issue for Construction (IFC) Information	18-Oct-10	13-Oct-11		
Milestone G6	Completion of Tram/Business Case Modelling	22-Jun-10	TBC		
Milestone G7	Completion of Construction Staging and Programme	30-Sep-10	18-Nov-11		
Milestone G8	Provision of CEC/tie Proposal to TS (Price & Programme)	08-Oct-10	26-Mar-11		
Milestone G9	Completion of Grant Funding Arrangement	15-Oct-10	18-Nov-11		
Milestone G10	Complete Design & Development Stage 1		TBC		
Milestone G11	Confirmation of Scope of Legal Agreements/Heads of Terms	05-Aug-10	05-Aug-10	Closed	
Milestone G12	Completion of Heads of Terms/Draft Legal Agreement	19-Aug-10	10-Jun-11		
Milestone G13	Completion of Legal Agreements	01-Oct-10	16-Sep-11		
Milestone G14	Commencement of Tram Construction Phase 1	18-Oct-10	21-Nov-11		
Milestone G15	Completion of Tram Construction Phase 1	31-Mar-11	TBC		
Milestone G16	Access to NR for Tram Area 1 (CIV/6001/001) Main Station Works	01-May-11	TBC		
Milestone G17	Access to NR for Tram 2 (CIV/6001/002) Sewer Works	01-Jul-11	TBC		
Milestone G18	Commence Tram Construction Phase 2	01-Jul-11	TBC		
Milestone G19	Completion Tram Construction Phase 2		TBC		
Milestone G20	Commencement of Operational Tramway Restrictions		TBC		
Milestone G21	Access to Tram Cutting for NR Works Around Operational Tram	01-Dec-11	TBC		
Milestone G22	Commence Tram Commissioning	01-Jan-12	TBC		
Milestone G23	Completion of Tram Commissioning	30-Jun-12	TBC		
Milestone G24	Completion of Implementation Stage & Commencement of Operation		TBC		
Milestone G25	Entry into Service	01-Jul-12	TBC		

Item Complete	Strikethrough		
Item due for completion on time	Green		
Overrun, not yet critical - low risk to 'Final Delivery'	Amber		
Significant risk to 'Final Delivery' unless addressed	Red		
Milestone also reported in PDG Section 4.1	Grey		

### Legal Agreements

Following meetings between parties on 25<sup>th</sup> and 29<sup>th</sup> October, it was agreed not to progress the drafting of the legal agreements at the moment. This work will be reviewed once there is clarity on the wider ETN Project timescales. The current status of these agreements is understood to be as follows:

- Licence to occupy land from CEC to NR, also incorporating transfer of land to NR from CEC. This agreement will require to be in place in time for entry to site.
- Construction Interface Agreement. No drafting has progressed on this agreement to date.
- Operational Interface Agreement. No drafting has progressed on this agreement to date.
- Bridge Agreement. No drafting has progressed on this agreement to date.
- Section 21 Agreement: tie have requested draft wording from SW regarding Section 21 Agreement for build over of retaining wall. Meeting with SW and NR on 25th January 2011 reached resolution with SW on issuing draft determination. This is currently on hold while the option for the high level retaining wall is determined.

### Long-lead Items / Abortive Works

tie has written to Transport Scotland confirming arrangements put in place with respect to avoiding re-works to the ETN infrastructure due to EGP. Transport Scotland has confirmed that tie should take steps to minimise the abortive works on the basis that the Edinburgh Gateway Project will go ahead.

Drainage for the earthworks at the Depot is currently being installed to the west of the Depot Access Bridge. There is no option that does not involve some re-works if Edinburgh Gateway Project goes ahead as foul and surface water drainage works need to be installed to allow completion of the Depot and Section 5C test track. BSC are at present only progressing the critical works to allow commissioning of the Depot and Test Track. The full extent of the re-works will not be known until the drainage design for the Edinburgh Gateway Project has been designed and approved. The BSC design is being progressed to maximise reuse of the existing IFC drainage systems.

tie letter reference INF CORR 7004 of 17<sup>th</sup> December 2010 issued to BSC confirmed current works are not to cease while the Edinburgh Gateway design and construction Estimate is agreed.

### Construction Staging

Construction Staging meetings with tie, TS, Network Rail and BSC have concluded for now. NR have agreed to work to a predetermined set of ETN night time possessions to construct the recirculation tower and overbridge. All parties have discussed the preferred construction sequence which can only be verified following receipt of an Estimate and Programme from BSC.

tie met with Transport Scotland and BSC on to review the requirements for commissioning of the tram system test track and the impact of Edinburgh Gateway project on 1<sup>st</sup> September 2010. Edinburgh Gateway does not appear to have a significant impact in this respect, however a number of minor issues were identified as requiring consideration. tie issued TNC letter to BSC on 10<sup>th</sup> September 2010 to cover this scope of works.

### Enabling Works

Network Rail commenced on site on 2<sup>nd</sup> November 2010 to divert the Scottish Power 33Kv cable diversion. Cable works completed on site by 26<sup>th</sup> November 2010 ready for jointing. NR completed jointing works on 16<sup>th</sup> January 2011.

## 4 Headline cost report

### 4.1 Current Financial Year

	FY 10/11			FY 10/11			FY 10/11			COWD To Date	Costs To Go	Total AFC
	COWD Period			COWD Year To Date			COWD Full Year Forecast					
	Actual	Budget	Variance	Actual	Budget	Variance	Forecast	Budget	Variance	Actual	Forecast	Forecast
Total Project COWD	2.562	15.378	-12.816	63.656	142.245	-78.589	63.656	142.245	-78.589	411.498	133.502	545.000
Other Funding	0.212	1.270	-1.058	5.256	11.745	-6.489	5.256	11.745	-6.489	33.977	11.023	45.000
Demand on TS	2.350	14.108	-11.758	58.400	130.500	-72.100	58.400	130.500	-72.100	377.521	122.479	500.000

The 'AFC' figure of £545m (table above) does not reflect an approved and reliable Anticipated Final Cost for the Edinburgh Tram Project. Rather, the forecast presented reflects our best current view of the spend profile of the funding currently available for the delivery of the entirety of phase 1a.

Given the continuing commercial uncertainties with the Infracore and continuing delays to the project it is considered unlikely that the full scope of Phase 1a will be completed within the available funding envelope of £545m. It is not however possible at the present time to accurately forecast a reliable outturn cost until the key commercial issues are resolved through the contractual and legal process. It should also be flagged that the profile of the forecast for 2011/12 is likely to change dependent upon the outcome of mediation.

tie outturn for 2010/11 fell within the spend ranges and sensitivities presented to TS on 4<sup>th</sup> November.

COWD to date is £411.5m, with funding to date split to TS (£377.5m) and CEC (£34.0m).

#### Actual - FY10/11

£m	2010/11 to P13
Infrastructure and vehicles	38.9
Utilities diversions	8.0
Design	1.7
Land and compensation	0.1
Resources and insurance	14.9
<b>Base costs</b>	<b>63.6</b>
Risk allowance	0.0
<b>Total Phase 1a</b>	<b>63.6</b>

Full Year 2010/11 spend was £63.6m, in-line with the forecast provided to TS as at the end of P12.

#### Current Financial Year Profile

##### Actual Profile - FY10/11

£m	Q1 (p1-3)	Q2 (p4-6)	Q3 (p7-10)	Q4 (p11-13)	Total FY10/11
Infrastructure and vehicles	16.7	9.2	9.9	3.2	38.9
Utilities diversions	-0.4	0.1	4.7	3.6	8.0
Design	0.5	0.4	0.5	0.4	1.7
Land and compensation	0.2	0.1	0.0	-0.2	0.1
Resources and insurance	3.2	3.7	5.9	2.1	14.9
<b>Base costs</b>	<b>20.1</b>	<b>13.5</b>	<b>21.0</b>	<b>9.1</b>	<b>63.6</b>
Risk allowance	0.0	0.0	0.0	0.0	0.0
<b>Total Tram</b>	<b>20.1</b>	<b>13.5</b>	<b>21.0</b>	<b>9.1</b>	<b>63.6</b>

- The original TS share of the budget (£130.5m) was reduced to a final position of £58.4m for 2010/11.

**Next Financial Year Profile**

Profile for FY2011/12

£m	Q1 (p1-3)	Q2 (p4-6)	Q3 (p7-10)	Q4 (p11-13)	Total FY11/12
Infrastructure and vehicles	14.0	61.6	43.1	1.2	119.9
Utilities diversions	0.0	-4.7	0.0	0.0	-4.7
Design	0.3	0.2	0.4	0.4	1.2
Land and compensation	0.0	0.0	0.0	0.0	0.0
Resources and insurance	3.5	2.6	4.9	1.8	12.8
<b>Base costs</b>	17.8	59.7	48.3	3.4	129.2
Risk allowance	0.0	0.0	0.0	4.3	4.3
<b>Total Tram</b>	17.8	59.7	48.3	7.7	133.5

- According to the current spend profile for 2011/12 we anticipate that TS share of spend will be £122.5m.

Phase 1a Profiling

£m	Cum FY07/08	Actual 08/09	Actual 09/10	FY 10/11	FY 11/12	AFC
Infrastructure and vehicles	30.6	45.2	83.3	38.9	119.9	317.8
Utilities diversions	18.4	33.4	10.6	8.0	-4.7	65.7
Design	24.4	4.7	2.1	1.7	1.2	34.2
Land and compensation	16.8	1.7	1.6	0.1	0.0	20.3
Resources and insurance	42.9	16.0	16.2	14.9	12.8	102.7
<b>Base costs (inc 1b)</b>	133.1	101.0	113.8	63.7	129.2	540.7
Risk Allowance	0.0	0.0	0.0	0.0	4.3	4.3
<b>Total</b>	133.1	101.0	113.8	63.7	133.5	545.0

Note: Base costs include £6.2m for ph 1b.

Per the note in 4.1 the 'AFC' figure of £545m does not reflect an approved and reliable Anticipated Final Cost for the Edinburgh Tram Project, but point to 'our best view' of the spend profile of the funding currently made available for the delivery of the entirety of phase 1a.

The TEL board have approved a risk allowance within the current funding arrangements of up to £63.3m, which takes the current agreed budget up to £545.0m.



## 5 Time schedule report

### 5.1 Report against key milestones

The table below reflects the milestones set out against the Rev1 programme.

Milestones	Baseline programme date	Actual / current forecast date tie live prgm
Approval of DFBC by CEC	21 Dec 06A	21 Dec 06A
MUDFA – commencement of utility diversions	02 Apr 07A	02 Apr 07A
TRO process commences	4Dec07A	10-Dec-07A
Approval of FBC by TS – approval and funding for INFRACO / Tramco	09 Jan 08	Dec 07A
Princes Street closed	03-Feb-09	22-Feb-09A
Tramco / INFRACO – award following CEC / TS approval and cooling off period and SDS novation.	28 Jan 08	14 May 08A
Construction commences	14-Apr-08	14-May-08A
First track installation commences – on street	03-Nov-08	Jun 2009A
Carrick Knowe Bridge commences	21-Aug-08	19-Aug-08A
A8 underpass commences	08-Aug-08	28-Aug-08A
Haymarket viaduct commences	08-May-08	01-Sep-08A
Edinburgh Park viaduct commences	06-Aug-08	01-Sep-08A
Tram mock-up delivered	Oct 2008	Nov 2008A
Demolition of Wanderers clubhouse	25-Aug-08	05-Jan-10A
Edinburgh Park viaduct complete	24-May-09	May-11
Princes Street re-opened	01-Aug-09	29-Nov-09A
NR immunisation complete	Nov 2009	Sep-10A
Utilities works complete (including telecoms)	Nov 2008	Jul-11
All demolition work complete (S21C)	22-Aug-08	Aug-11
All Issue for Construction (IFC) drawings delivered (inc Gogar interchange design)	21-Jan-09	Jun-11
Haymarket viaduct complete	08-Dec-08	Jul-11
All consents and approvals granted	18-May-09	May-11
Design assurance complete	20-Jan-09	May-11
1 <sup>st</sup> Tram delivered	09-Apr-10	25-Apr-10A
Carrick Knowe bridge complete	11-May-09	Aug-11
A8 underpass complete	14-Jul-09	Apr-12
Roseburn viaduct commences	20-Jan-09	Jul-11
TRO1 process complete	01-Dec-09	Nov-10A
Recruitment commences for Operations	July 2010	Jun-11
1 <sup>st</sup> OHL installed (Section 6 Depot)	11-Dec-09	Sep-11
1 <sup>st</sup> section (other than depot) complete ready for energisation (Section 2)	25-June-10	Jan-12
Commission Section 2 (Haymarket to Roseburn junction)	11-Jan-10	Apr-12
Final tram delivered to Depot*	17-Jan-11	Jun-12
Commission Section 6 (depot)	25-Mar-10	Jan-12
Roseburn viaduct complete	20-Apr-10	Aug-12
Test track complete (Ready for tram testing)	23-Apr-10	May-12
Commission Section 7 (Gogar to Edinburgh Airport)	25-June-10	Dec-11 to May-12
Commission Section 1 (Newhaven to Haymarket)	11-Mar-11	May-12 to Apr-13
Commission Section 5 (Roseburn junction to Gogar)	09-Nov-10	Nov-11 to Jan-13
Driver training commences (excludes depot)	Nov 2010	Sep-12

Milestones	Baseline programme date	Actual / current forecast date tie live prgm
System testing complete off street	09-Dec-10	Feb-13
Construction Line 1a complete	17-Jan-11	Apr-13
System testing complete on street	16-Feb-11	May-13
Letter of "no objection" from Independent Competent Person to commence tram running	17-Apr-11	May-13
Shadow running starts	18-Apr-11	Jul-13
Shadow running complete	July 2011	Oct-13
Letter of "no objection" from Independent Competent Person to commence revenue service	July 2011	Oct-13
Open for revenue service	July 2011	Oct-13

\* CAF revised programme to reflect availability of Depot for Tram delivery

**Guidance for Completion:**

**Legend for colouring of Actual / forecast date text**

<b>Green:</b>	Actual / forecast date is ahead or in line with baseline
<b>Yellow:</b>	Slight slippage – readily recoverable with action.
<b>Pink:</b>	Significant slippage but expect recovery can be achieved
<b>Red:</b>	Notable / significant slippage – difficult to recover, even with action.

**Key Issues Affecting Schedule**

- Contractual issues between **tie** and Infraco.
- Lack of agreement with BSC regarding on-street construction programme;
- Completion of a fully integrated and assured design.

**12-Week Look-Ahead**

Until a revised programme is agreed and is in place, the forecast for the next 12 weeks continues to be generated from the **tie** Live programme including latest updated information from both BSC and **tie** Project Managers. Note that due to the uncertainty surrounding the On-street section of the Infraco works, and the recent demobilisation on site by BSC that these works have been removed from the 12 week forecast. Similarly, as BSC have now advised that they are demobilising worksites where there is an outstanding disagreement regarding an estimate, these works have also been removed from the table.

It is unlikely there will be any changes to the information until the mediation talks are concluded.

Milestones	Actual / current forecast date
5C - S32 Depot Access bridge	28-Mar-11C
6 - Depot Building (Siemens Internals Only)	28-Mar-11C
6 – Depot Trackworks -Track Laying	28-Mar-11C
6 – Depot Access Roads	28-Mar-11C
6 – Depot OHL Bases	28-Mar-11C
6 – Depot Sub-station	28-Mar-11C

Key: A=Actual; C=Continues in period; S=Start; F=Finish,

## 6 Risk and opportunity

### Review of Risk Register

#### Project Risk Register

There are 48 risks in the risk register. The top six project risks are listed herein. Four out of these top six risks are issues which have now materialised and are at the core of the overall differences between **tie** and the BSC consortium and which have been or are being discussed through the formal Contractual Dispute Resolution process.

There will be a complete refresh of the Risk Register and opportunities following the overall mediation being held between the parties in the next few weeks.

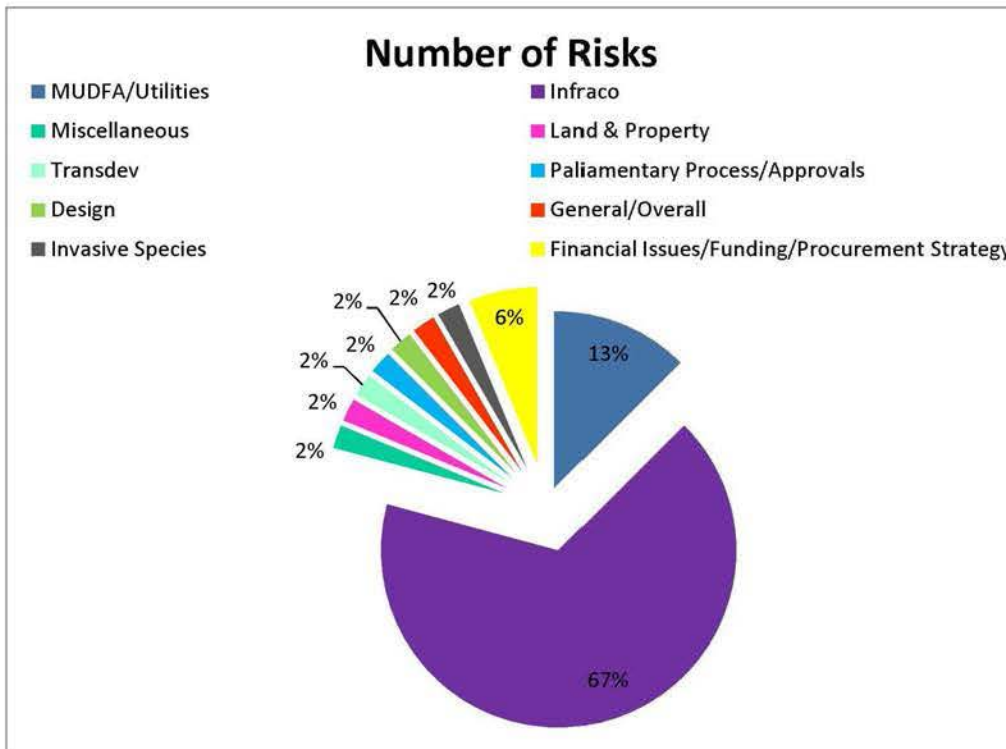
1011 Period 13 Top 6 Risks

Risk Description											
ARM Risk ID	Cause	Event	Effect	Risk Owner	Significance	Black Flag	Treatment Strategy	Previous Status	Current Status	Due Date	Action Owner
1043	General delay to programme with various causes e.g. failure to obtain approvals on project time; contractor issues, access after completion of utility diversions	Delay to completion of project	Increased out-turn cost due to delay plus revenue loss	S Clark	High (25/30)		Access maps showing areas available	On Programme	On Programme	28-May-11	F McFadden
							Contractually assertive workstreams to progress programme	Complete	Complete	29-May-10	S Bell
							DRP Mudfa Rev 8 response	Complete	Complete	31-Aug-10	S Bell
							DRP on programme management (EOT1)	Complete	Complete	30-Oct-09	S Bell
							Issue UWN on programme	Complete	Complete	15-Sep-10	S Clark
							Liason between tie/BSC programme managers	On Programme	On Programme	30-Dec-11	T Hickman
							Programme Management Panel process	Complete	Complete	30-Dec-11	F McFadden
							Use of Clause 34 / 80.15 - addressed via DRP	Complete	Complete	30-Aug-10	S Bell
1078	Lack of effective engagement from BSC leaders towards tie.	Failure of partnership approach between tie and BSC.	Lack of progress of works and increased costs	S Bell	High (25/30)		Weekly tie/BSC commercial meetings	On Programme	On Programme	30-Dec-11	M Paterson
							Engagement between tie and BSC at different levels. Regular review of BSC management of third parties as per Employers Requirements.	Complete	Complete	31-Dec-09	C Neil
1101	Unreasonable behaviour of BSC commercial management	Unrealistic estimates being submitted for potential changes	Programme delay while disputes regarding estimates are resolved	Dennis Murray	High (25/30)		Additional resource from T&T	Complete	Complete	29-Jul-09	M Paterson
							Agreed with BSC for independant evaluation to get benchmark	Complete	Complete	30-Jul-09	M Paterson
							All estimates to be scrutinised by tie commercial team and, where appropriate, challenge made to BSC. Additional resource (T&T) being used to check estimates to reduce delay and other commercial resources on there areas.	Complete	Complete	31-Dec-10	M Paterson
							Clause 34/80 issues using DRP for disputed values	Complete	Complete	31-Aug-10	S Bell
							Legal challenge to Clause 80 and BSCs interpretation thereof	Complete	Complete	30-Sep-10	S Bell

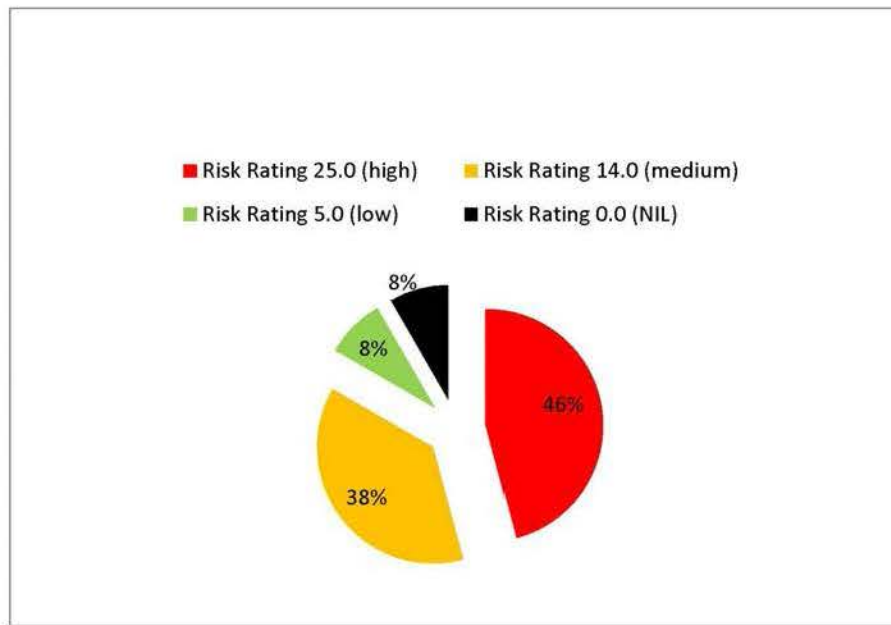
1011 Period 13 Top 6 Risks

Risk Description											
ARM Risk ID	Cause	Event	Effect	Risk Owner	Significance	Black Flag	Treatment Strategy	Previous Status	Current Status	Due Date	Action Owner
1094		Roads throughout works require full depth reconstruction	Programme impact plus additional costs. £1.5m cap applies to only 4 areas. (PA 12) Also affects (PA 14)	F McFadden	High		All party buy in - application of appendix 7(1)	On Programme	On Programme	31-Dec-11	C Neil
							Carry out surveys to confirm extent of roads requiring full depth reconstruction	Complete	Complete	30-Jun-09	C Neil
							Intensive engagement with CEC, palette of options, methodology being agreed	Complete	Complete	31-Jan-11	C Neil
							Resolution of trackform at trackform workshop	On Programme	On Programme	30-Apr-11	C Neil
							Suite of options from surveys to be reviewed and agreement reached	Complete	Complete	30-Jul-10	C Neil
							tie developed on-street proposal with scott wilson - complete and under review	Complete	Complete	31-Jan-11	S Bell
1079	Failure of BSC to effectively resource up for project	Lack of competent resources within BSC to safely and effectively deliver Tram project	Delay to programme and additional cost	F McFadden	High		Apply contract re personnel	On Programme	On Programme	1-Apr-11	F McFadden
							List of staff and competencies to be provided	On Programme	On Programme	1-Apr-11	F McFadden
							Ongoing review of BSC resources and formal review at 4-weekly meeting. Objectives to be set for BSC at monthly meetings in order to monitor progress.	Complete	Complete	31-May-09	C Neil
							Resource led programmes	On Programme	On Programme	1-Apr-11	F McFadden
							Sub contractor order approval	On Programme	On Programme	31-Jul-11	F Dunn
							Where appropriate tie can request removal of resources.	On Programme	On Programme	1-Apr-11	F McFadden
352	Increase in land values	Higher land compensation claims than anticipated	Additional uplift on compensation claims	A Sim	High		Close cut initiate early negotiations between V and landowners	Complete	Complete	28-Mar-08	A Sim
							Initiate early negotiations between DV and landowners	Complete	Complete	28-Mar-08	A Rintoul
							Liaise with CEC Planning	Complete	Complete	28-Mar-08	R McMaster

The risks within the Project Risk Register are categorised below.



The ratings of the risks are illustrated below.



**Risk Action Plan for Next Three Periods**

The following treatment plans are due for completion in the next three periods:

Action Owner	Risk ID	Action ID	Event	Action Name	Due	Active	Complete	Late	Next 3 periods
A Coyle	1159	745	Depending on outcome of negotiations the revised cost leads to funding pressures for CEC.	CEC exploring contingency measures for additional funding	31/05/2011	Yes	No	No	Period 03
A Richards	886	127	ETL refuse to operate system on safety ground or apply overly restrictive procedures that are not directly the responsibility of Infracore (ROGS Competent Person agrees with this)	Involve ETL fully in design, construction and testing/review process.	30/06/2011	Yes	No	No	Period 04
B Cummins	928	338	Safety incident during construction	Safety induction to be carried out for all site staff	30/04/2011	Yes	No	No	Period 01
B Cummins	928	339	Safety incident during construction	HSQE audits, site inspections and management safety tours to be carried out	30/04/2011	Yes	No	No	Period 01
B Cummins	928	341	Safety incident during construction	All site staff to get CSCS or equivalent	30/04/2011	Yes	No	No	Period 01
B Cummins	928	710	Safety incident during construction	TEL HSE committee overview applied	30/04/2011	Yes	No	No	Period 01
B Cummins	58	228	Infracore fails to deliver construction quality, latent defects occur during or after Infracore maintenance period	Undertake quality audits during construction	30/04/2011	Yes	No	No	Period 01
C Neil	1004	736	Roads throughout works require full depth reconstruction	Resolution of trackform at trackform workshop	30/04/2011	Yes	No	No	Period 01
F McFadden	343	719	Delay to completion of project	Access maps showing areas available	28/05/2011	Yes	No	Yes	Period 02
F McFadden	1102	696	Known non-compliant utility diversions in relation to proximity to the DKE and/or other utilities.	Obtain reduction from SUCs	25/06/2011	Yes	No	Yes	Period 03
F McFadden	1102	697	Known non-compliant utility diversions in relation to proximity to the DKE and/or other utilities.	Where relaxation cannot be obtained replace plastic with steel	25/06/2011	Yes	No	Yes	Period 03
F McFadden	1105	689	Additional protection measures of utilities are required (primarily Leith Walk) reduced depth 1200 to 800 to save time/money. This applies to 20 no crossings on Leith Walk.	Examine possibility of additional protection protection being used rather than additional diversion of utilities	25/06/2011	Yes	No	Yes	Period 03
F McFadden	1079	681	Lack of competent resources within BSC to safely and effectively deliver Tram project	Apply contract re personnel	01/04/2011	Yes	No	No	Period 1
F McFadden	1079	684	Lack of competent resources within BSC to safely and effectively deliver Tram project	Where appropriate tie can request removal of resources.	01/04/2011	Yes	No	No	Period 1
F McFadden	1079	685	Lack of competent resources within BSC to safely and effectively deliver Tram project	Resource led programmes	01/04/2011	Yes	No	No	Period 1
F McFadden	1079	686	Lack of competent resources within BSC to safely and effectively deliver Tram project	List of staff and competencies to be provided	01/04/2011	Yes	No	No	Period 1
S Bell	1077	720	Tramworks price based on a design which may have been altered. Unclear who authorised design change.	PA1 Challenge if legal advice supplied	25/06/2011	Yes	No	No	Period 03
S Bell	1077	724	Tramworks price based on a design which may have been altered. Unclear who authorised design change.	Siemens 33 initiative to achieve Airport to Bankhead Drive continues to be progressed	30/04/2011	Yes	No	Yes	Period 01
S Clark	1106	738	Programme delay with dispute over accountability.	Production of concurrency information using Accutus and internal production of PITA database	25/06/2011	Yes	No	Yes	Period 03

**Cost Quantative Risk Analysis**

The Project Risk Allowance at financial close was £30,336,196. This was increased in Period 1 by £17,982,993 to £530m, to £535m in Period 5 and £540m in Period 7. Drawdowns on risk and contingency to the end of Period 13 10/11 now total £71,710,745. The remaining risk balance based on the approved QRA plus the additional funding is £4.3m.

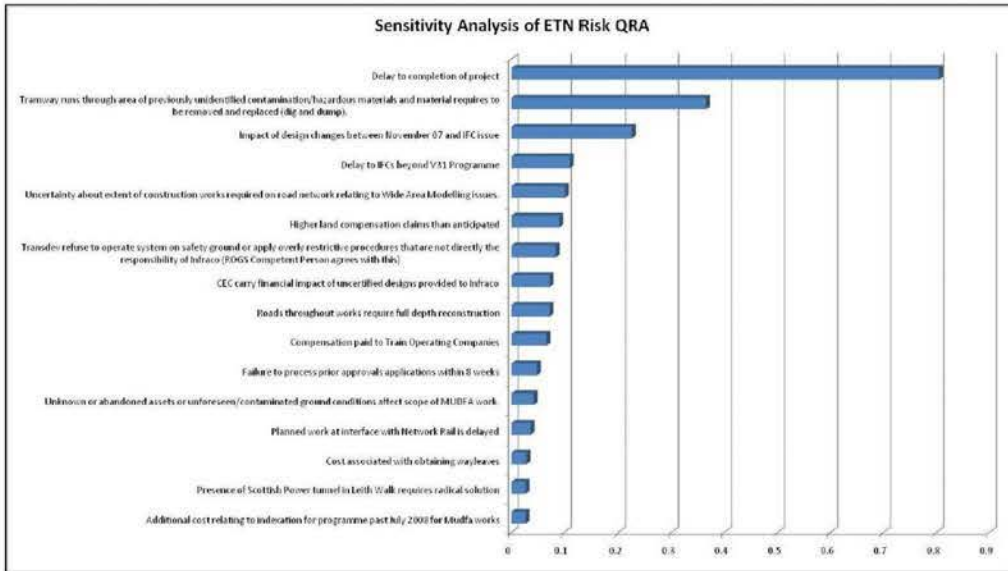
**Risk Drawdown**

The following table illustrates the drawdown applications on the project risk and contingency allocations in Period 13.

Description	Owner	Value (£)
Depot Manual Bogie Turntable Construction and Design Costs	Frank McFadden	£49,601
Section 5C Depot Access Bridge Piling Obstructions	Frank McFadden	£39,145
Section 5C A8 underpass phase 4 piling obstructions	Frank McFadden	£26,977
DPR Deloitte Forensic works	Hamish Sheppard	£41,229
Bankhead Drive Retaining Wall	Frank McFadden	£65,906
South Gyle Access Bridge	Frank McFadden	£153,122
Stage 3 Road Safety Audit	Frank McFadden	£3,685
Section 5B drainage works, soft ground	Frank McFadden	£4,275
Bus Shelter York Place	Frank McFadden	£8,086
York Place Lining - increase in cost	Frank McFadden	£435
Completion of cable + wireless ducts at Conan Doyle	Frank McFadden	£13,155
Section 5A Ground Improvement - Surveys	Frank McFadden	£19,539
Traffic Management Rationalisation - Aecom Design Costs and Additional Works	Frank McFadden	£85,273
Additional Stores from BT	Frank McFadden	£1,293
	<b>Total:</b>	<b>£511,721</b>



**Sensitivity Analysis of Approved Cost QRA**



The above chart highlights those component risks which are correlated most closely with the overall risk allocation. These risks are the ones which, if changed in terms of probability or impact, would have the most significant effect on the final output.

## 7 Health, Safety, Quality and Environment

### H&S Accidents and Incidents, Near Misses or Other

HS&E ACCIDENTS and INCIDENTS SUMMARY											
Total	Total Hours	>3 day	Major	Injury	NM/Unsafe Condition	Service Damage	ENV	RTA	MOP	AFR	SFR
Period	51,512	0	0	0	10	0	2	0	0	0.00	0.00
13 period rolling	1,251,468	0	2	11	142	13	11	6	18	0.16	1.04



There were no reportable accidents during the period. The rolling 13 Period AFR is at 0.15, better than the KPI of 0.24 for the project.

A report was received of a cyclist allegedly suffering a fractured arm after falling from her bicycle when the wheels became caught in the tram tracks on Princes Street. An insurance claim was also received relating to an alleged tripping incident that occurred in December 2010.

The CoCP compliance was recorded at 94% during Period 13. Non-compliance issues related to damaged fences, litter and potential trip hazards on temporary footpaths.

100% of planned PM joint inspections were carried out during Period 13. Only 50% of planned safety tours were carried out during Period 13, this was due to mediation and the non-availability of some staff.

A paper was presented to the board on the Cycle incidents on Princes Street summarising action being taken already and further action to be taken pending a Stage 3 Road Safety Audit.

After being requested by **tie** to carry out a Road Safety Audit on all roads returned to public use, BSC formally declined to carry this out. **tie** subsequently procured a Road Safety Audit for Princes Street from a third party. The audit report is expected at the end of this period.

Interim remedial works to road defects on Princes Street have continued during the period. Whilst BSC have provided **tie** with details of the risk assessment process being applied to road defects, **tie** have formally requested that BSC review the process to ensure that prioritisation of work includes appropriate recognition of elements including rate of deterioration and increased risk to cyclists/pedestrians at bus stops/pedestrian crossings and other hot spots with a historically high incident rate. The output of this exercise is awaited from BSC.

Negotiations to date between **tie**/CEC have failed to reach any agreement on CEC adopting maintenance accountabilities for semi-permanent TM installations formed from Visirail/Redipave products as installed by **tie**.

### Environment

Ongoing progress with regard to the application for the destruction of the artificial otter Holt at the airport and the construction of a new Holt near to culvert 3. BAA has advised that they are happy for the works to proceed, thus BSC can now progress the SEPA and SNH licence applications.

Ongoing discussions with BSC regarding contaminated land. Testing is in the process of being carried out, and results forwarded to **tie** as received by BSC.

Two environmental incidents recorded during period 13 – 8/3/11 Diesel was spilling into generator bund and overflowing onto ground at Gogar depot. BSC to ensure that bunds are kept clear of water and that spills are cleaned using spill kit/plant nappies. 16/2/11 tie were made aware of a diesel spill that occurred at the Gogar site adjacent to the Gogar Burn on the 16/2/11 and was not reported through the correct reporting system.

**Deliver a Safe Tram**

Section	Activity	Data Checked				
		IBC	ITP's	Design Variations/Change	As Built's	Asset Register
Section 6 - Depot	Painting, tiling, floor	0.5	0.5	1	1	N/A
PD	Total (y)	0.5	0.5	1	1	N/A
	Max Possible Total (y)	1	1	1	1	N/A
Total	Percentage P12	48%	92%	88%	79%	40%
	Percentage P13	48%	91%	86%	79%	40%

**Key - Y = Evidence exists (1) N = No evidence exists (0) NA = Not applicable (-) P = Part evidence in place (0.5)**

**Assurance and PSCC**

tie's Safety Verification Scheme version 4 formally issued and copy sent to Ian Raxton of the ORR. The ORR interviewed Bob Cummins and Tony Glazebrook about the tie SVS and role of the competent person. This interview was part of an ongoing ORR national programme.

All Cases for Safety have now been reviewed comments have been returned in Record of Review forms. BSC had previously stated that they were aiming to deliver to tie a draft, informal, DAS for Section 6 by the end of February 2011. This was not delivered and is now expected during period 1.

An SVS audit on the Tram vehicle design will take place in Zaragoza on the 11<sup>th</sup> May 2011. An SVS Audit Track and Civils re-scheduled to take place 9<sup>th</sup> March 2011; this date was declined by BSC. tie has requested a new date. tie assisted ETL with an independent audit of their SMS on the 17<sup>th</sup> March 2011. The audit went extremely well with no obvious gaps in the system identified. An audit of the BSC testing and Commissioning Plan and BSC's readiness for operation is to be carried out; details will be determined during period 1.

The PSCC tracker items currently open and being worked on include –

- o Design Assurance Statements,
- o Assessment and mitigation of risks associated with congestion at Murrayfield,
- o Overshoot protection at Airport, Confirm no DKE/OLE clashes, Resolve DKE issues elsewhere in system,
- o Confirm planting won't cause rail adhesion problems,
- o Confirm drawings are amended to take into account auditor's comments on Gogar Farm and Gogar Castle visibility splays,
- o Ensure risks to cyclists and motor cyclists from slipping on rails have been addressed and that they are guided to cross the tracks at an angle as near as possible at 90 degrees and no less than 60 degrees, as required by RSP2,
- o Further clarification of Junction 91 design solution,
- o Justification for deviation from RSP2 regarding PPI position at Ocean Terminal South West Junction,
- o Tram reversing strategy - include in design, RFI 17 outstanding - evidence of sound integration,
- o OLE reduced clearance at Gogar Interchange station,
- o Audit of safety verification scheme,
- o Drawing configuration control,
- o ICP concern regarding controller confusion with self restoring points HAY\_MP04, Request for Opinion on use of diagonal yellow bar for points position indicator display rather than yellow dog leg,
- o Confirm soil bank proposals at Bankhead won't lead to sighting or trespass and vandalism problems,

- Use supporting evidence of integration from other systems, where applicable,
- TSA/09/01-06 Siemens to document 'management of organisational changes',
- Testing and commissioning audit

**Deliver a Safe Tram Key Metrics**

1 metrics inspections carried out during period 13 at Gogar Depot; QM068 Painting and Decorating, floor, tiling and Glazing. 3 actions and 4 observations were raised. BSC to review and update (where necessary) ITP 26-9-1; ITP 26-10 and ITP 26-11.

Period 12 Electrical Inspection – of the 7 findings raised 5 are now closed and 2 remain outstanding; electrical commissioning programme not issue and electrical installation certificate not issued (BSC have advised that this is Work in progress and will not be issued until works are complete, it is however noted that the electricity is live). BSC provided a substantial amount of information to allow the closure of the 5 findings.

BSC have issued 41 ITP's of these 38 are Level A. 3 Outstanding ITPs relate to works being carried out by Siemens. Advanced draft copy of updated ITP 24 has been issued – now includes columns.

Meeting held with Land Engineering 15/3/11 to discuss documentation requirements/outstanding issues. **tie** advised that a full completion pack was required for each manhole, as was advised at tender stage. H&S file is fully in place and can be issued. **tie** agreed that in order to progress documentation issue; hand marked redline drawings would be accepted. Outstanding TQ's have been issued to SDS and SW for close out.

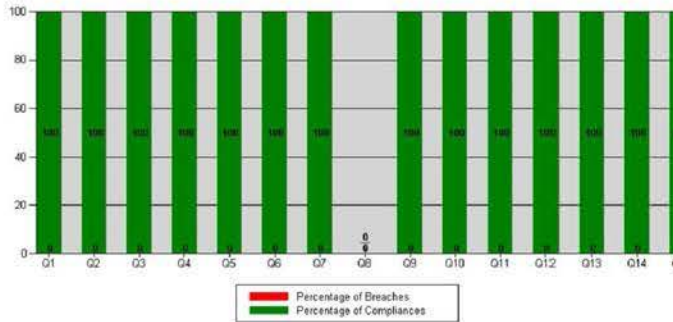
Meeting held with BSC on 14<sup>th</sup> Jan 2011 re Haymarket Approvals Audit. BSC to return agreed responses to **tie**, this action remains outstanding from last period. All Clancy Dowcra updated completion information for Haymarket now issued to SUC's

Review/update of **tie** HSQE procedures, currently ongoing – a number of procedures have been re numbered /revised. Staff to ensure that the procedure as contained on the HSQE system is utilised; appropriate training will be given upon completion of the update.

A spot check was carried out, by the HSQE team on the handover information contained within tenders; a number of inconsistencies were noted – resulting in an addendum being sent to Crummocks. C Bartynek to brief all QS's on the requirements of the handover procedure. A further spot check will be carried out during period 1 to establish the extent of Site Release inspections that are being formally carried out.

**COCP Compliance**

**Period 12**

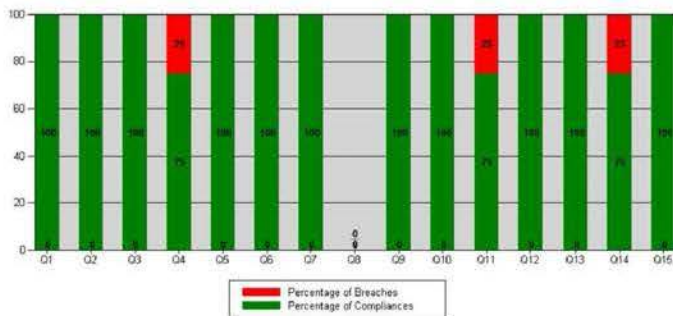


Q1. Hours of Work
Q2. Notification
Q3. Notices
Q4. Fencing and Hoarding
Q5. Noise
Q6. Waste Management
Q7. Waste Water and Run-Off
Q8. Water
Q9. Emergency Access
Q10. Parking
Q11. Litter and general housekeeping
Q12. Dust
Q13. Smoking
Q14. Members of the Public
Q15. PPE and Behaviours

**Movement during the Period**

- Compliance during Period 13 was recorded at 94%. Details of issues and actions taken are detailed below.

**Period 13**



**Summary of issues and action taken**

Date of Inspection	Location	Contractor	Question Number	Issue detail (reason for No answer)	Action taken or required to be taken by contractor	Date to rectify or rectified
03/03/11	Section 5B Busgate	BSC	4	Fencing torn and open at CH 523840	Fence repaired	Complete 11/03/11
03/03/11	Section 5B Busgate	BSC	11	General Litter accumulating within the worksite fencing and around the site boundary.	Debris removed and site monitored	Complete 11/03/11
03/03/11	Section 5B Busgate	BSC	14	Possible trip hazards throughout the temporary footway surrounding the site	Trip hazards removed / repaired	Complete 11/03/11

## 8 Stakeholders & Communications

### Media / Press Activity

During Period 13 the Media team received a variety of enquiries regarding the project which subsequently resulted in news items at both local and national news outlets.

A Joint Mediation statement was agreed by all the parties involved in the mediation talks and distributed by ourselves on behalf of all the agencies. The statement was issued due to the high levels of media interest that the process has had over the weeks preceding the talks. While the mediation process is still ongoing the statement outlined that there had been "a very constructive engagement and have established a mutual understanding of the key issues that have been impeding the progress of the Edinburgh Tram project." Beyond this statement, all parties have committed to making no further comment at this time. The statement was distributed to a wide range of local, national and trade publications and was widely reported.

The Sunday Herald continued its critical coverage of the project this period by reporting on three separate points of information for the same edition released to them under the Freedom of Information Act. The main story was based around the drafting of the Audit Scotland Report and the comments that had been made by executives of Edinburgh Trams prior to publishing. The story implied that we had influenced the report and that the resulting final Audit Scotland review of Edinburgh Trams was watered down. Our response to this was that it was normal practice for agencies to get sight of reports such as these prior to publishing and that Audit Scotland were under no obligation to accept any of the changes proposed.

The second Sunday Herald article concerned the recruitment process for our Director of Communications and also the money that Edinburgh Trams contributed to the city wide Edinburgh Sparkles winter campaign. Separate comments were provided for each of these enquiries.

Transport for London announced a shortlist of candidates to tender for leasing of surplus tram vehicles to the Croydon tram system. This was picked up by the Evening News locally and several trade publications which were all contacted and given statement to the effect that this was part of our commitment to explore all options going forward but was not a firm commitment to the tendering process at this stage.

This Croydon story was compounded by comments in a trade publication which stated that a decision had been taken to only complete the tram route to Haymarket. We took several calls regarding this, with confusion over whether this was an announcement following mediation – which we stated was not the case. An explanation was given that this option of phased construction was had been discussed in the past and that no decisions had been taken yet on this.

Weekend working to carry out remedial work on the Princes Street road surface was covered again by the Evening News as well as the latest Tram Subcommittee meeting which focussed on the ongoing discussion surrounding air quality in the city centre as a result of traffic displacement by the trams.

## Branding

The new This Is My Edinburgh artwork is displayed on Haymarket House along with the existing Edinburgh Trams and Economic Development banners.

We are working with the International Science Festival to install banners on ten of the Princes Street OLE poles throughout April. Work also continues on joint branding initiatives with Film Festival, West End Village and legalised advertising sites in Leith Walk.

Additionally, we have been contacted by CEC events to discuss possible opportunities to work together for the Armed Forces Day celebrations being held in Edinburgh from Friday, 24 to Sunday, 26 June and possible collaboration with the Film Festival.

## Partner and Stakeholder Communications

One notification was delivered to stakeholders and key partners during Period 13 regarding on street work which was due to be carried out in their area:

- Princes Street and George Street - Remedial Work on Princes Street X 137

The notification was issued to traders on Princes Street and George Street regarding the latest work on Princes Street to repair the road surface. George Street traders were included in this round of notifications due to the traffic diversion put in place, which saw westbound buses, taxis and cyclists rerouted to George Street and temporary bus stops put in place between South St David Street and Charlotte Square. More works are scheduled to take place over the coming weeks to complete further remedial work along some eastbound sections of Princes Street.

Engagement with school pupils continues through the Scottish Business and Communities "Think ahead to work" initiative. The initiative is designed to give school kids of Senior Primary school age a taste for what type of jobs there in the working world and get them thinking about what subjects to study at Secondary school. Edinburgh Trams has attended two of these events during Period 13, at Forrester High School and Leith Academy. The Tramformers school programme is still in the early stages of development and designs for new promotional material are currently in production.

The mobile tram exhibition has proved to be very successful having been placed for two week periods in the St James Centre and Gyle Shopping Centre. The St James Centre alone recorded 285,000 visitors for the shopping centre over the same two week period.

Communication continues on a regular basis between businesses and residents to keep them informed of the progress being made in the ongoing contractual dispute and about when works could possibly recommence. A presentation was given to the Changeworks on the three key areas of our external communications strategy, explaining our use of and the power of social media, engagement with stakeholder groups and our thinking behind building the Edinburgh Tram brand.

## Website / Internet Communications

Visitor figures for [www.edinburghtrams.com](http://www.edinburghtrams.com) are similar to last period at 13,200 this period with a rise to 863 followers on facebook. Twitter has spiked to 1,402 followers, an increase of over 100 and has seen a boost in activity this period, particularly in terms of re-tweeting of information from our account as some traffic management and works information was issued. This indicates the appetite for construction information content within our following.

Despite facebook's systemic changes to their corporate 'pages' there has been a 9.1 percent increase in frequency for new users joining the page. Facebook metrics indicate that 22,982

people saw our posts and information this period, with 42 users actively providing feedback or comment and an overall increase of 86% in online dialogue last month. From analysis of our Facebook statistics we have a very clear picture of our most active audience and marketing will be based around this in the future.

Excluding the homepage at [www.edinburghtrams.com](http://www.edinburghtrams.com) the Local Updates pages have returned to top place in our most popular pages, with more than 6500 users accessing this information. The 'Story so Far' section of the site, a chronological archive of key documents and factual information has been sustained this period, coming in as the second most popular content page of the site after local updates.

#### **Internal Communications**

The project's internal newsletter, "Tramlines" is currently in the process of being put together for the April issue and will be published and distributed electronically to staff in the next reporting period. The newsletter provides us with a unique channel through which to communicate with employees who would not normally come into contact with different elements of the project.

The Joint Mediation Statement which was issued to the media was circulated electronically internally and to key stakeholders by way of an update on the mediation process.

#### **Freedom of Information Requests**

Period 13 has seen a sharp decline in the overall volume of Freedom of Information (FOI) Requests from Period 12s total of 17 requests for information. A total of 18 responses were given to different recipients during Period 13 resulting in only 9 FOI being carried forward to the next reporting period.

An enormous proportion of FOI requests continue to be from journalists, with one specific publication having lodged a total of 14 requests with the project over the last four weeks. A number of these have been subsequently covered as a news article while a few are resubmitted for further information. A number of requests have shown that there is an interest in aspects of the ongoing mediation process.

There are also three appeals for more information currently ongoing with the Scottish Information Commissioner, each of which is awaiting a decision.

#### **Customer Service Correspondence**

Throughout Period 13 Customer Service correspondence has seen a noticeable increase from Period 12, with overall correspondence reaching 252. The main channels of correspondence between the public and the Customer Service team remain via Phone and Email, which recorded increased totals from last period of 113 and 54 enquiries respectively. The one major difference is that the number of Face to Face meetings has spiked during Period 13, and can be directly attributed to drop-in meetings taking place between the Customer Relationship Manager and Princes Street businesses to make them aware of upcoming remedial works to the road surface. The spike therefore represents a total of 72 requests for information as a result of these meetings.

Information Requests continue to make up the majority share of correspondence with the Customer Service team and cover a wide range of topics. The remaining enquiries were filed under six other subject headings including Complaint (3), COCP Complaint (3), Land and Property (2), Business Support (1), Employment (3) and finally Positive Comments (6).



### HS&E ACCIDENTS and INCIDENTS SUMMARY

Total	Total Hours	>3 day	Major	Injury	NM/Unsafe Condition	Service Damage	ENV	RTA	MOP	AFR	SFR
Period	51,512	0	0	0	10	0	2	0	0	0.00	0.00
13 period rolling	1,251,468	0	2	11	142	13	11	6	18	0.16	1.04
<b>BSC</b>											
Period	31,666	0	0	0	10	0	2	0	0	0.00	0.00
13 period rolling	866,485	0	2	6	85	4	6	1	10	0.23	0.46
<b>OTHER TRAM</b>											
Period	655	0	0	0	0	0	0	0	0	0.00	0.00
13 period rolling	95,992	0	0	5	51	9	5	5	6	0.00	9.38



### EXECUTIVE SUMMARY

- There were no reportable accidents during the period. The rolling 13 Period AFR is at 0.15, better than the KPI of 0.24 for the project.
- A report was received of a cyclist allegedly suffering a fractured arm after falling from her bicycle when the wheels became caught in the tram tracks on Princes Street. An insurance claim was also received relating to an alleged tripping incident that occurred in December 2010.
- CoCP compliance was recorded at 94% during Period 13. Non-compliance issues related to damaged fences, litter and potential trip hazards on temporary footpaths.
- 100% of planned PM joint inspections were carried out during Period 13. 50% of planned safety tours were carried out during Period 13.
- A paper was presented to the board on the Cycle incidents on Princes Street summarising action taken already and further action to be taken pending a Stage 3 Road Safety Audit.
- After being requested by **tie** to carry out a Road Safety Audit on all roads returned to public use, BSC formally declined to carry this out. **tie** subsequently procured a Road Safety Audit for Princes Street from a third party. The audit report is expected at the end of this period.
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- Negotiations to date between **tie**/CEC have failed to reach any agreement on CEC adopting maintenance accountabilities for semi-permanent TM installations formed from Visirail/Redipave products as installed by **tie**. Presently **tie** has no ongoing inspection and maintenance regime in place for these installations other than the initial handover inspection to CEC.

# Deliver the Tram Safely

Company Report – Period 13<sup>10/11</sup>

## HS&E INSPECTIONS SUMMARY *(a summary of significant inspection findings can be found in appendix B)*

Project Running Totals	HS&E Tours	HS&E PM Inspection
Number planned	2	4
Number achieved	1	4

## HSQ&E KEY ACHIEVEMENTS

- There were no reported incidents associated with increased pedestrian traffic around the Haymarket construction site during 2 international rugby events at Murrayfield during Period 13.
- No incidents involving MOPs have occurred to date during 2011, other than cyclists.
- Bob Cummins delivered a paper on Princes Street Cycling Incidents to the Tram Project Board. This summarised actions already taken and those presently being taken to maintain a safe environment. The Board noted the contents of the paper and approved the identified actions.

## KEY ISSUES – POINTS TO NOTE

- Concerns over the circumstances of anomalous earth loop impedance readings on the Gogar Depot electrical installation remain unresolved. Whilst BSC checks, witnessed by **tie**, have demonstrated that there appears to be no ongoing issue, the possibility of an intermittent failure has not been fully discounted. BSC have undertaken to arrange a further meeting with Scottish Power, attended by **tie** to fully explore other possible causes.
- CEC Head of Transport had formally raised quality control and safety concerns over shallow traffic signal cables and associated reinstatement work allegedly carried out by **tie** at George Street/Hanover Street junction. **tie** have investigated the concerns and found that the issues relate to shallow ducts that pre-existed the work undertaken by **tie**. Details were communicated to CEC and documented within TQ processes at the time of the tram related works being carried out. Details of the output of the **tie** investigation are being communicated to CEC.
- **tie** are undertaking work to verify that properly documented site release checks have been completed for all work areas that have been released back to public access. This is critical to how any subsequent MOP accident claims are handled within respective CEC / **tie** processes.
- Remedial work on road markings visibility issues at York Place were completed during the period.
- BSC have developed a suitable and sufficient fire risk assessment for Gogar Depot building, thereby resolving concerns formally raised by **tie**.
- A **tie**/BSC meeting was held to review the effectiveness of the Work Section Plan approach to managing and controlling H&S issues at work sites with no Network Rail involvement. The concept which has been trialled at Gogar depot will be used at other locations when site work starts.
- There is concern over the adequacy of BSC's control of its sub contractors as evidenced by a number of recent non-compliance issues relating to Permits to Commence Work, and provision of adequate welfare facilities. On each occasion the issues were identified by **tie** personnel rather than BSC. These concerns have been raised by **tie** at formal BSC/**tie** health and safety meetings.

## SIGNIFICANT RISKS FOR THE NEXT PERIOD

RISK	ACTION
<ul style="list-style-type: none"> <li>• Gas/water/telecom utility diversions and remedial works at various locations.</li> <li>• Heavy lifting during wheel lathe equipment delivery and installation at depot.</li> </ul>	<ul style="list-style-type: none"> <li>• Tie HSQE checks to ensure compliance with pre-start protocols and work site establishment.</li> <li>• Tie HSQE to raise requirement for LOLER awareness with both tie PMs and BSC HSQE.</li> </ul>

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		IDC	ITP's	Design Variation/Change	As Built	Asset Register
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- BSC had previously stated that they were aiming to deliver to **tie** a draft, informal, DAS for Section 6 by the end of February 2011. This was not delivered and is now expected during period 1.
- SVS audit TSA/10/004 on the Tram vehicle design will take place in Zaragoza on the 11<sup>th</sup> May 2011.
- SVS audit TSA/11/001 on **tie** SMS is currently being planned for 8<sup>th</sup> June 2011.
- TSA/10/03 SVS Audit Track and Civils re-scheduled to take place 9<sup>th</sup> March 2011; this date was declined by BSC. **tie** has requested a new date.
- **tie** assisted ETL with an independent audit of their SMS on the 17<sup>th</sup> March 2011. The audit went extremely well with no obvious gaps in the system identified.
- An audit of the BSC testing and Commissioning Plan and BSC's readiness for operation is to be carried out; details will be determined during period 1.
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  - Confirm soil bank proposals at Bankhead won't lead to sighting or trespass and vandalism problems,
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### 2.0 Deliver a Safe Tram Key Metrics

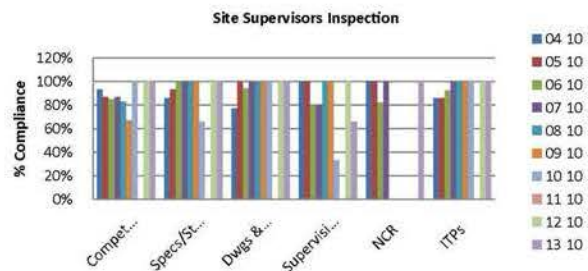
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- Period 12 Electrical Inspection – of the 7 findings raised 5 are now closed and 2 remain outstanding; electrical

commissioning programme not issue and electrical installation certificate not issued (BSC have advised that this is Work in progress and will not be issued until works are complete, it is however noted that the electricity is live). BSC provided a substantial amount of information to allow the closure of the 5 findings.

- BSC have issued 41 ITP's of these 38 are Level A. 3 Outstanding ITPs relate to works being carried out by Siemens. Advanced draft copy of updated ITP 24 has been issued – now includes columns. W Biggins has passed comments to BSC.
- NCR's 2 x raised by BSC during the period regarding leak in roof and unspecified equipment installed in the heavy store (raised during period 12).
- Issues regarding SDS completion of project as-built drawings (from CUS redline drawings) remain outstanding.
- Section 1A – Farrans: All handover packs except Scottish Water have been issued to the SUC's. It is expected that the SW packs will be issued prior to the end of period 13.
- Meeting held with Land Engineering 15/3/11 to discuss documentation requirements/outstanding issues. Tie advised that a full completion pack was required for each manhole, as was advised at tender stage. H&S file is fully in place and can be issued. tie agreed that in order to progress documentation issue; hand marked redline drawings would be accepted. Outstanding TQ's have been issued to SDS and SW for close out.
- Meeting held with BSC on 14<sup>th</sup> Jan 2011 re Haymarket Approvals Audit. BSC to return agreed responses to tie, this action remains outstanding from last period. All Clancy Dowcra updated completion information for Haymarket now issued to SUC's
- P Dobbin currently reviewing Clancy Dowcra packs for section 1C, upon completion, packs will be formally issued to SUC's (last week of period 13).
- Review/update of tie HSQE procedures, currently ongoing – a number of procedures have been re numbered /revised. Staff to ensure that the procedure as contained on the HSQE system is utilised; appropriate training will be given upon completion of the update.
- Ongoing discussion regarding the Body of Evidence documentation, the team (S Smith; C Kerr; R Nicol) are currently working with IT to developed to the system.
- A spot check was carried out, by the HSQE team on the handover information contained within tenders; a number of inconsistencies were noted – resulting in an addendum being sent to Crummocks. C Bartynek to brief all QS's on the requirements of the handover procedure. A further spot check will be carried out during period 1 to establish the extent of Site Release inspections that are being formally carried out.
- P Dobbin currently chasing Frontline construction for the issue of completion packs for the utilities works they have carried out.
- tie has requested an update on ITP status, re percentage completion from BSC. Currently BSC have not responded.
- HSQE/Engineering meeting to be arranged, during period 1 to discuss ROR's issued to BSC at Level B and the potential for outstanding mandatory comments not having been addressed.

### 3.0 Site Supervisors Inspection

- 1 supervisor's inspection carried out during period 13; Painting and Decorating at the Depot. The inspection was carried out in conjunction with the metrics inspection detailed above.



### 4.0 Deliver a Safe Tram – Required Action

- Ensure Clancy Dowcra completion packs for Section 1C are to SUC's
- Ensure that the completion pack information is received from Land Engineering and issued to SUC's
- Ensure remaining information is obtained for Farrans works at Section 1A and that all completion information is formally issued to SUC's
- SVS Audit – Track/Civils to be rescheduled.

