



## **Transport Edinburgh**

### **Edinburgh Trams**

### **Lothian Buses**

## **Tram Project Board Report on Period 11 Papers for meeting 10<sup>th</sup> February 2010**

**09:30am – 12:00pm**

### **Distribution:**

#### **Members and attendees**

David Mackay (Chair)  
Marshall Poulton  
Bill Campbell  
Steven Bell  
Kenneth Hogg  
Cllr Ian Perry

Cllr Phil Wheeler  
Stewart McGarrity  
Cllr Allan Jackson  
Cllr Gordon Mackenzie  
Brian Cox  
Peter Strachan  
Mandy Haeburn-Little

Donald McGougan  
Richard Jeffrey  
Dave Anderson  
Graeme Bissett  
Alastair Richards  
Neil Scales  
Alasdair Sim (Secretary)

#### **In addition – for information only**

Cllr Maggie Chapman  
Andy Conway  
Norman Strachan  
Iain Coupar

Cllr Tom Buchanan  
Frank McFadden  
Alan Coyle  
Gregor Roberts

Dennis Murray  
Ailie Wilson  
Susan Clark  
Gill Lindsay

TRAM PROJECT BOARD

**Transport Edinburgh**

**Edinburgh Trams**

**Lothian Buses**

FOISA exempt

Yes

No

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**Agenda Tram Project Board**

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

**10<sup>th</sup> February 2009 – 09.30am to 12.00pm following the tie Board meeting**

**Attendees:**

David Mackay (Chair)

Bill Campbell

Steven Bell

Kenneth Hogg

Cllr Ian Perry

Marshall Poulton

Cllr Phil Wheeler

Richard Jeffrey

Stewart McGarrity

Cllr Allan Jackson

Cllr Gordon Mackenzie

Brian Cox

Donald McGougan

Dave Anderson

Graeme Bissett

Alastair Richards

Neil Scales

Mandy Haeburn-Little

Susan Clark

Alasdair Sim (Minutes)

Apologies:

- 1 Review of Previous Minutes and Matters Arising
- 2 5 Key Business Priorities (Richard Jeffrey)
  - 2.1 Building the Tram (Steven Bell)
    - Project Director Progress Report Period 11
    - Change Requests & Risk Drawdown
    - Additional Papers for TPB Consideration \*
  - 2.2 Preparing for Operations (Alastair Richards)
  - 2.3 Building the Brand (Mandy Haeburn-Little)
  - 2.4 Building the Team (Richard Jeffrey)
  - 2.5 Preparing for the Future (Richard Jeffrey)
- 3 Governance (Graeme Bissett)
- 4 Date of next meeting – 10 March 2010
- 5 AOB

\* (papers in pack)

**Edinburgh Tram Network Minutes**

**STRICTLY PRIVATE AND CONFIDENTIAL**

**Tram Project Board**

**13<sup>th</sup> January 2010 (09:30 to 12:00)**

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

<b>Members in Attendance:</b>			
Richard Jeffrey	RJ	Bill Campbell	WWC
Cllr Gordon McKenzie	GMcK	Donald McGougan	DMcG
<b>In Attendance:</b>			
Brian Cox (Deputy Chair)	BC	Marshall Poulton	MP
Steven Bell	SB	Kenneth Hogg	KH
Stewart McGarrity	SMcG	Cllr Ian Perry	IP
Graeme Bissett	GB	Cllr Allan Jackson	AJ
Alastair Richards	AR	Bob Cummins (Part Time)	BYC
Dave Anderson	DA	Mandy Haeburn-Little	MHL
Peter Strachan	PS	Alasdair Sim (minutes)	AS

**Apologies:**

David Mackay, Cllr Phil Wheeler, Neil Scales

<b>1.0</b>	<b>Introduction, Review of Previous Minutes and Matters Arising</b>	
1.1	BC opened the meeting and acknowledged the apologies for those members unable to attend.	
1.2	There were no outstanding matters arising from the previous TPB meeting on 16 December and the Minutes from this meeting were approved as read.	Note
<b>2.0</b>	<b>Chief Executive's Summary</b>	
2.1	RJ presented a verbal update to the Board, noting that limited progress on progressing commercial discussions with BSC has been possible during Period 10, largely due to a combination of the 2 week Christmas/New Year Break and the severe weather conditions experienced in the first week of January 2010. He was able to confirm however, that the commercial strategy as agreed and instructed by the TPB at the meeting of 16 December 2009 was now being implemented.	
<b>3.0</b>	<b>Building the Tram</b>	
3.1	<p><u>HSQE</u> BYC provided a report on HSQE matters. The key points arising from these discussions were:</p> <p><i>Deliver a Tram Safely</i></p> <ul style="list-style-type: none"> <li>▪ Additional temporary warning signage has been installed on Princes Street to advise cyclists of the presence of tram tracks. CEC/tie will</li> </ul>	

	<p>monitor incidents in this regard and keep this signage in place as appropriate.</p> <ul style="list-style-type: none"> <li>▪ MP/MHL to liaise regarding Road Safety Partnership briefings and visits to schools as necessary. BYC to further research the experience of other cities with regard to cycle/tramway interfaces.</li> <li>▪ SB noted that a specific cycling study has been completed by SDS sub consultants and this report has been presented to CEC as part of the design approvals package. SPOKES, the cycling lobby group was fully consulted as part of the preparation of this report.</li> <li>▪ The RIDDOR Accident frequency rate on the project is now 0.12, which is a significant improvement on the contractual target. Whilst this is encouraging and is approaching the industry best practice of 0.1, the project should continue to strive for improvements in this area.</li> <li>▪ PS asked that the targets for safety tours/inspections should be modified for downtime periods (such as the Christmas break) to reflect achievable targets. This was endorsed by the Board and SB/BC to action.</li> </ul> <p><i>Deliver a Safe Tram</i></p> <ul style="list-style-type: none"> <li>▪ BSC are showing small signs of improvement in providing evidence of IDC reviews.</li> <li>▪ A successful meeting on wheel/rail interface was held during P10 with the ORR.</li> <li>▪ BYC reported that a paper on the next stage of delivering a 'Readiness for Operational Strategy' will be presented to the BROR sub-committee during Period 11, and a recommendation to the TPB will follow on thereafter. This proposal was supported by the Board.</li> <li>▪ IP queried the process to transfer assets from <b>tie</b> responsibility to the operating company. AR described the Safety Verification Process and the obligations for commissioning/testing under ROGS and agreed to provide the Board with a flowchart outlining the stages to be followed and where the responsibilities lie.</li> </ul> <p><i>Code of Construction Practice</i></p> <ul style="list-style-type: none"> <li>▪ SB confirmed that a series of team briefings for all construction staff/contractors and suppliers took place on 7th January 2010.</li> <li>▪ A series of briefings with local business groups and key stakeholder representatives are to be undertaken in advance of major works commencing. MHL to co-ordinate.</li> </ul>	<p>BYC</p> <p>SB</p> <p>AR</p> <p>MHL</p>
3.2	<p><u>Overview of Progress (Infraco)</u></p> <p>SB presented the latest construction progress figures to the Board. In line with commitments made in November 2009, there has been some evidence of mobilisation on off-street works, but overall, progress remains slow and behind programme.</p> <p>Work is ongoing with BSC to agree a revised construction programme, and it is expected that a first draft will be available from mid February. There are commercial matters outstanding which will influence programme delivery, and these were covered under the briefing provided by RJ as described in Section 3.5 herein.</p>	

	SB confirmed that the notifications process to start testing the approved locations for building fixings (to support the OLE) has commenced.																			
3.3	<p><u>Overview of Progress (Utilities)</u></p> <p>SB reported that utilities works have recommenced after the December embargo in Haymarket, the York Place corridor and in Leith Docks/Lindsay Road. There have been some weather related delay on traffic management switches, but these have been rescheduled for the weekend of 16/01/10. This will include the closure of Broughton Street, which remains one of the areas where ground has yet to be broken, and as such a residual risk remains over uncharted or as yet unknown complexities in diverting the required utilities.</p> <p>In response to a query on works in the Forth Ports estate, SB confirmed that the required licences are in place to allow both utilities and track works to proceed, and DA confirmed that CEC are engaged in high level discussions with Forth Ports over S75 arrangements.</p>	DA																		
3.4	<p><u>Change Requests and Risk Drawdown</u></p> <p>SB referred the Board to the approved change orders arising during Period 10, these are within the Project Director' delegated authority and are summarised below:</p> <table border="1" data-bbox="305 888 1317 1129"> <thead> <tr> <th>Reference</th> <th colspan="2">Purpose &amp; Value</th> </tr> </thead> <tbody> <tr> <td>COP188</td> <td>Edinburgh Park Private Utilities</td> <td>£161,022</td> </tr> <tr> <td>COP226</td> <td>Chancelott Mill Land Renunciation</td> <td>£100,000</td> </tr> <tr> <td>COP225</td> <td>Edinburgh Park Bridge Approach Ramps (credit item for duplicated change order)</td> <td>-£185,000</td> </tr> <tr> <td>COP227</td> <td>SDS relocation to Edinburgh Park</td> <td>£28,000</td> </tr> <tr> <td></td> <td></td> <td>£104,022</td> </tr> </tbody> </table> <p><b>The Board noted the Change Control Status at Period 10.</b></p>	Reference	Purpose & Value		COP188	Edinburgh Park Private Utilities	£161,022	COP226	Chancelott Mill Land Renunciation	£100,000	COP225	Edinburgh Park Bridge Approach Ramps (credit item for duplicated change order)	-£185,000	COP227	SDS relocation to Edinburgh Park	£28,000			£104,022	
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3.5	<p><u>Relationship with BSC</u></p> <p>RJ updated the Board on ongoing commercial negotiations with BSC, and provided a position overview under the following general areas:</p> <ul style="list-style-type: none"> <li>▪ Design Changes (BDDI to IFC)</li> <li>▪ On Street Works</li> <li>▪ Off Street Works</li> <li>▪ Programme</li> </ul> <p>A detailed discussion on the DRP/adjudication process was undertaken, and it was noted that it is too early in the process to establish a clear precedence on some of the points of principle disagreement. It was noted that adjudication determinations are not legally binding.</p> <p>RJ reported that discussions are ongoing with BSC regarding an alternative On Street Supplemental Agreement (OSSA), and as things currently stand, BSC have indicated that they will not commence on street works without this in place, which in turn imports risk into concluding an agreed programme.</p> <p>RJ then went on to detail the proposed commercial strategy going forward together with the timetable to prepare detailed options for the March TPB.</p> <p><b>This was supported by the Board.</b></p>																			

## Transport Edinburgh

### Edinburgh Trams

#### Lothian Buses

FOISA exempt

 Yes No

<b>4.0</b>	<b>Preparing for Operations</b>	
4.1	<u>TRAMCO &amp; DPOFA</u> AR reported that there are now 15 No. trams in production, and that 2 No. trams are in transit to the dynamic testing facility in Wildenrath ,Germany, with tests planned for March 2010. Opportunities for a press visit to be explored. AR confirmed that the TUPE transfers to Edinburgh Trams Ltd have now been concluded, and that the DPOFA assignment has now been finalised. The OJEU procurement process for a revenue collection system is underway, with 15 firms expressing interest. It was confirmed that the system specifications allow for integration with bus as well as heavy rail systems as required. DA noted that it may be worthwhile setting up meetings to discuss future integration opportunities with colleagues in other Local Authorities in Scotland as appropriate.	MHL
<b>5.0</b>	<b>Building the Brand</b>	
5.1	MHL reported on press coverage during the period to 8 January 2010 and referred the Board to the Media Analysis Paper. There was little media coverage of note during the Christmas/New Year break. MHL presented a slide show outlining the responses to a stakeholder questionnaire on the Winter Festival/Edinburgh Sparkles campaign – the results of which were generally positive. In the early part of 2010, targeted communications will be focussed on the upcoming works in the West End; Leith Walk and York Place, but these will be led by progress on the commercial matters discussed in RJ's briefing.	
<b>6.0</b>	<b>Building The Team</b>	
6.1	No updates were provided at this time.	
<b>7.0</b>	<b>Governance</b>	
8.1	GB referred the Board to the Governance paper presented in the TPB pack, confirming that Phase 1 process has been concluded. GB confirmed in response to an IP query that Edinburgh Trams Ltd, is a shell company under the ownership of Lothian Buses, that has been transferred to TEL to accommodate the operations staff under TUPE.	
<b>8.0</b>	<b>AOB</b>	
8.1	WWC reported that Lothian Buses have been required to participate in a Competitions Commission review of Local Bus Services. The final report is due in January 2012, and may import some risk to operating a fully integrated bus/tram system. The BROR sub-committee will be kept informed as this review proceeds, and the TPB will be provided with periodic updates as necessary.	WWC
<b>9.0</b>	<b>Date of Next Meeting</b>	
9.1	BC thanked the Board for their participation and confirmed that the date of the next meeting will be <b>Wednesday 10<sup>th</sup> February 2010</b> commencing at <b>09:30hrs.</b>	
9.2	The meeting closed at 12:05.	

Prepared by Alasdair Sim on 14<sup>th</sup> January 2010



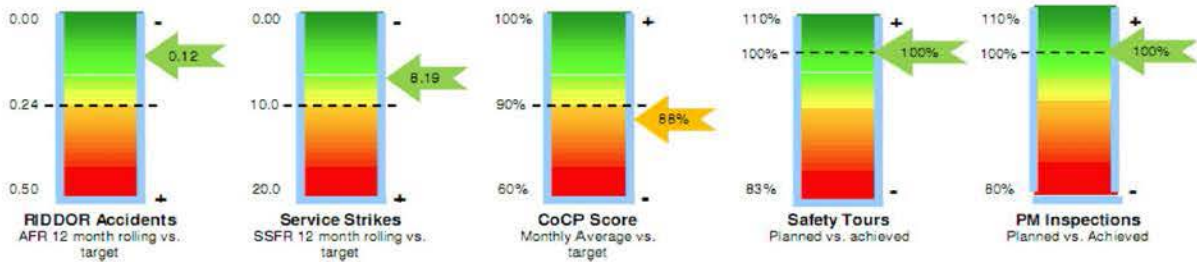
# Building The Tram Project Director Report

## Period 11 09/10

### HSQE – Period 11

Deliver a Tram Safely:

HS&E ACCIDENTS and INCIDENTS SUMMARY											
Total	Total Hours	>3 day	Major	Injury	NM/Unsafe Condition	Service Damage	ENV	RTA	MOP	AFR	SFR
Period	64,779	0	0	1	16	4	2	0	1	0.00	6.17
13 period rolling	1,659,566	1	1	30	246	136	16	9	58	0.12	8.19



As for Period 10 there has been a reduced amount of construction work carried out during Period 11 due to the Christmas holiday and lack of on-street work progression. There have been no reportable accidents during Period 11; however there was one minor injury.

Despite the slow start to 2010 there have been new sites opened up across the City by the new Utilities contractor, Clancy Docwra. A number of excavations have been carried out, reopening areas previously backfilled by Carillion as well as a number of new areas. To date during Period 11 there have been two significant service strikes, one for BSC and one for Clancy Docwra.

The number of **tie** PM inspections planned vs. completed has improved since last period.

Two incidents occurred within the Network Rail Corridor during Period 11 where BSC used lifting equipment out with the agreed Work Package Plan and failure to comply with Network Rail “failsafe” requirements, **tie** have instigated an investigation with BSC and this report will be finalised by close of Period 12.

Deliver a Safe Tram:

Section	Activity	Data Checked					
		Interdisciplinary Design Check	Hazards	Inspection and Test Plan System	Design Variation/Change	As-Builts	Asset Register
Gogarburn Depot	Drainage	0	On Hold	1	0.5	1	N/A
Russell Road Retaining Wall	Piling	0.5	On Hold	0.5	1	1	N/A
Guided Busway	Drainage/Track Welding	0.5	On Hold	1	1	1	N/A
<b>PD</b>	<b>Total (y)</b>	1	0	2.5	2.5	3	0
	<b>Max Possible Total (y)</b>	3	0	3	3	3	0
<b>Total to date</b>	<b>Percentage P10</b>	28%	69%	91%	63%	78%	50%
	<b>Percentage P11</b>	27%	68%	90%	66%	80%	50%

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

# Transport Edinburgh

## Edinburgh Trams

### Lothian Buses

FOISA exempt

☐ Yes

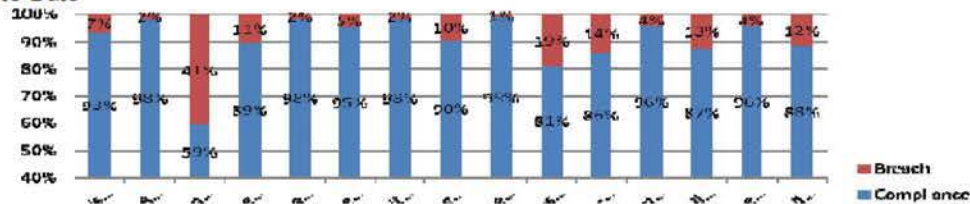
☐ No

There has been little movement or improvement in the evidence provided by BSC proving that the design has been subject to a full Inter-Disciplinary Design Check. To help establish if BSC are improving their integrated approach to design and construction a detailed audit was held for the 28<sup>th</sup> & 29<sup>th</sup> January.

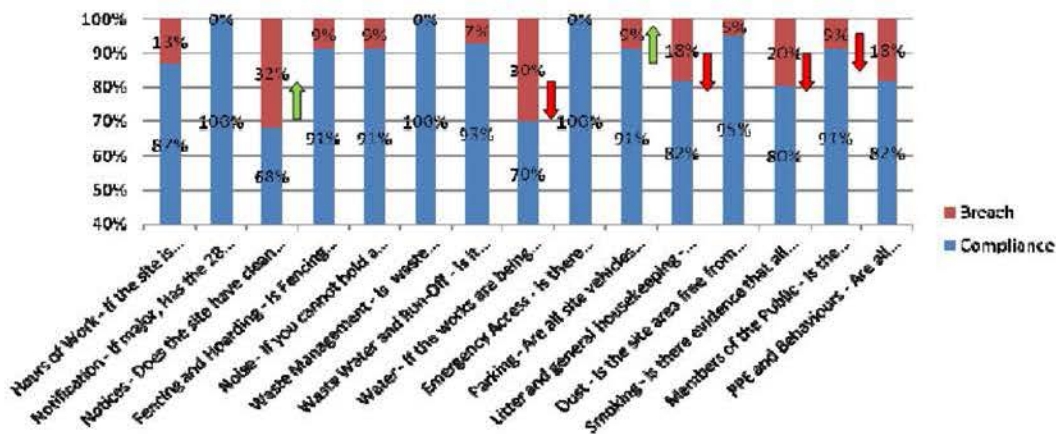
**tie** witnessed BSC informally audit their subcontractors *completion* records for Princes Street, and an interim records pack had been issued to **tie** for information but it was agreed that **tie** would not accept any information until it was formally issued by BSC with the appropriate assurance signatures i.e. BSC Project Director. **tie** will be monitoring the progress of the compilation of records on a weekly basis.

#### Code of Construction Practice Period 11

##### Period to Date



##### Period 11



CoCP compliance continues to be monitored by **tie**, on the whole there has been little movement in the period, however there has been an improvement in the number of information notices posted and car parking but a decrease in compliance with water run-off, smoking and PPE. These are being actioned specifically with, in the main, Clancy Docwra and Farrans.

#### Progress

The cost, programme and risk information in this Period 11 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. Work is ongoing to this end, and the current expectation is that the first outputs from this will be available during week 1 of Period 12.

Overall progress remains behind the master programme, primarily due to:

- Finalisation of the agreement of change delaying the commencement of work;
- Incomplete utility diversions in the On-Street sections caused in part by traffic management constraints ;

## Transport Edinburgh

### Edinburgh Trams

#### Lothian Buses

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Yes  
 No

- Slow mobilisation of INFRACO, including lack of formal sub-contracts being in place;
- Content i.e. Work Package Plans, Method Statements etc;
- Requirement for re-design of temporary works;
- Design slippage since novation of design to INFRACO (now recorded in v51A of the design programme);
- Design changes as a result of the Prior and Technical Approvals process; and
- Consortium integrated design programme and validation.

#### Dispute Resolution (Infraco)

Two further DRP's were commenced during the Period. Additionally a strategic review of the commercial and contract issues is underway with a recommendation targeted for the March Tram Project Board.

#### Commercial Update (MUDFA)

Agreement of the final account with Carillion is progressing and a summary of the items being address is below:

Changes - CUS still require to provide significant substantiation. Progress has been made in the period in respect of agreeing the value of changes and further meetings have been set up to conclude discussion in the next period. It is anticipated however that a number of entitlement issues will not be agreed and may require senior management discussions with Carillion to conclude.

Re-measurement of Works – Re-measurement of Work Sections is now complete and discussions and meetings are ongoing to identify and close the gap between **tie's** assessment of the value and Carillion's application for payment. The target for completion of this exercise is the end of February 2010. Again it is anticipated that some entitlement issues will remain and will require to be discussed separately.

Disruption Claim – Carillion have submitted further back up in the period and Acutus are concluding their assessment of entitlement for the St Andrews Square Section of the works. Their interim assessment reports that the value that is attributable to the disruption for this section of the work is a fraction of that claimed by Carillion.

#### Utility works

Progress on Utilities works during Period 11 may be summarised as follows:

- Following agreement and sign-off of final contracts and programme, planned and actual progress figures for remaining On-Street sections will be included from Period 13.
- Progress going forward will be concentrated around the Haymarket and the York Place to Picardy sections of the route.
- Carillion works (MUDFA) between Constitution Street and Newhaven are complete, and Farrans have been awarded the remainder of the Section 1A utilities diversions which re-commenced w/c 4/01/10.
- Clancy Docwra are progressing the remaining utility work scope in the City Centre to complete the remaining works at – Haymarket, Shandwick Place, and York Place to Annandale Street.
- Outstanding BT Cabling related works are underway in St Andrew Square and Leith Walk.
- Farrans started works on non MUDFA Utilities in the Forth Ports area, and Clancy Docwra are undertaking diversion works at Lindsay Road.
- SGN restricted commissioning works at Lindsay Road until collateral warranty in place. **tie** are working with SGN and the contractor to resolve.
- MUD works at Airport are 98% complete, and due to a BAA requirement a return visit will be required February 2010.

#### Tram works (INFRACO)

Progress in the Period for INFRACO works reflects a total cumulative completion of 13.8%, an increase of 0.7% against a plan of 4.1%, reflecting the lack of progress from BSC for on-street works. This is symptomatic of the ongoing dispute with BSC regarding agreement on the terms of a supplementary agreement for on-street works and commercial issues off street.

Progress Off-street has continued or commenced at a number of locations:

## Transport Edinburgh

### Edinburgh Trams

#### Lothian Buses

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- Yes  
 No

- Works ongoing on Haymarket Viaduct and despite recent problems with the arrival on site of a non-compliant crane which was not secured in a failsafe manner, progress is to programme.
- Piling recommenced on W4 of RRRW and although obstructions have been encountered, 27 no piles have been successfully bored and concreted.
- Works to the Wanderers RFC Clubhouse commenced in the period.
- Weather conditions had a severe effect on progress to the Guided Bus Way, however BSC have now installed 1350m of rail and sleepers on the outer loop with 1300m welded, 500m installed to final line and level with 250m concreted.
- Both Carricknowe and Edinburgh Park Bridges are progressing and construction of the abutment No.5 of Edinburgh Park Bridge is now underway.
- A8 Underpass – piling rig was delayed as a result of adverse weather conditions. The rig will be set up start week commencing 01.02.10 with piling programmed for 4<sup>th</sup> February 2010.
- Little progress made at Depot due to weather conditions, however site now cleared and areas tied to allow various sections to be tackled.
- Hilton Car Park works substantially complete (temporary conditions) with remaining work planned to commence after main corridor work.
- Commenced earthworks on the 11<sup>th</sup> January 2010 at Eastfield Avenue (Hilton Hotel) southwards towards Park and Ride. Good progress being made.
- Burnside Road works substantially completed although problem with wearing course delaying handover. Asphalt to be removed and replaced which will delay completion until week commencing 01.02.10.

Further points to note in the Period are:

- BSC were asked to review trackform in six areas, with initial response not being positive. BSC advised by tie to construct as IFC in Section 2A and to provide further detail on the remaining sections.
- A number of audits commenced under Clause 104. Topics being Design, Trackform, Structures, Programme, and Sub Contractor Procurement.
- Problems continue with BSC failing to provide necessary information in weekly / four weekly reports.



Gogar Depot Internal Works

# Transport Edinburgh

Edinburgh Trams

Lothian Buses

FOISA exempt

- Yes
- No



Gogar Depot External Works



Gogarburn Bridge



Edinburgh Park Viaduct

## Transport Edinburgh

### Edinburgh Trams

#### Lothian Buses

FOISA exempt

Yes

No

#### Tram works (INFRACO)

Good progress continues to be made with delivery of the trams by CAF in accordance with the tram delivery schedule. The first two trams are at the Siemens test track at Wildenrath in Germany undergoing dynamic testing, the third and fourth trams are in the factory undergoing factory acceptance testing and work is progressing at various stages on the production line on the remaining trams up to the 17th tram.

Draft Operations and Maintenance manuals have been received and are being reviewed.



#### *Preparing for operations*

The BROR committee is providing the governance for these activities, which has seen the TUPE transfer of the Transdev Edinburgh employees into the Edinburgh Trams team, and the OJEU procurement launched for the ticketing equipment for the tram system, to link it with the existing Lothian Buses ticketing system.

Significant effort is being made on programming and planning the preparing for operations activities, including recruitment and training of both operations and maintenance staff.

The maintenance of completed infrastructure assets is being raised as an area that requires some focus for improvement.

#### **Cost**

We continue to reflect an outturn estimate of £533.3m, including £6.2m for the cancellation of Phase 1b. However, given the commercial uncertainties with Infraco and continuing delays to the project it is now considered unlikely that the full scope of Phase 1a will be completed within the available funding envelope of £545m. Until the key issues are resolved through the contractual and legal process, it will not be possible to accurately forecast a revised budget outturn.

A detailed costs and forecast briefing was presented to Transport Scotland on 18/01/10.

Key cost related items to note in Period 11 are:

- The budget for ETP in 2009/10 established in April 2009 is £150.1m (£153.3m inc 1b), which was produced linking the **tie** re-baselined programme to Infraco construction milestones. **tie** are now escalating all key issues to Dispute Resolution Procedure (DRP) and other contractual measures following the failure of mediation to provide an acceptable outcome.
- The P11 forecast outturn figure for 2009/10 is £114.5m – unchanged from P10.
- The latest forecast (£114.5m) 2009/10 includes costs of £3.2m which relate to the demobilisation of Phase 1b Infraco construction contract. A payment of £3.2m was made to the Infraco Contractor in August.
- Funding allocated by TS to the project in 2009/10 was £149m. The TS share of this year's updated forecast (£114.5m) is £105.0m, giving available headroom of £44.0m.

**Actual YTD P11 & forecast P12-P13 FY09/10**

<b>£m</b>	<b>YTD P11</b>	<b>Forecast P12-P13,09/10</b>	<b>Total FY09/10</b>
Infrastructure and vehicles	67.4	15.8	83.2
Utilities diversions	10.5	0.7	11.2
Design	2.0	0.6	2.6
Land and compensation	0.8	0.0	0.8
Resources and insurance	13.9	2.8	16.7
<b>Base costs</b>	<b>94.6</b>	<b>19.9</b>	<b>114.5</b>
Risk allowance	0.0	0.0	0.0
<b>Total Phase 1a</b>	<b>94.6</b>	<b>19.9</b>	<b>114.5</b>

Note: Base costs include £3.2m for ph1b in 2009/10.

- ETP COWD in FY09/10 to Period 11 is £94.6m (Period 10 - £87.7m) against budget £122.6m (excl 1b). The key drivers for the -£28.0m variance are: the timing of Infraco works costs planned in 2009/10 offset by MUDFA spend incurred over the original 09/10 budget plan.
- As previously reported and agreed with CEC and TS, initial milestones under the Infraco and Tramco contracts in the aggregate amount of £24.2m, 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 2009/10 and future years.

**Risk & Opportunity**

There were eight risk reviews held in Period 11. One item was closed on the Infraco concerns register. There were eight draw downs on the risk allowance approved in the period totaling £976,587. These are detailed later in this report. This leaves a risk and contingency balance of £1,149,021 (based upon the approved Project Risk Allowance at Financial Close).

The QRA which was in place at Financial Close was reviewed and amended in Period 9 08/09. A further review of the QRA was carried out in Period 13 08/09 and Period 1 09/10, with the results presented as a range of possible outcomes. The revised range of numbers was used to inform a range of numbers for the overall budget.

The Project Risk Allowance at financial close was £30,336,196. Drawdowns to the end of Period 11 09/10 now total £29,187,175. Remaining risk balance based on the approved QRA is £1,149,021.

**Communications & Customer Service**

The media activity has been limited to a small, but robust number of enquiries relating to the current dispute. In particular, focus has been around the recent adjudication however, reports have been on the whole speculative rather than factual, and have not been particularly prominent. Further focus has centred around works due to commence over the coming few weeks including the Broughton Street, Shandwick Place, Haymarket, Leith Walk and York Place/Dublin Street areas in particular.

## **Transport Edinburgh**

### **Edinburgh Trams**

#### **Lothian Buses**

FOISA exempt

Yes

No

Gateway signage is in the process of being planned for the Gogar Tram Depot, with the desire of placing a full sized image of the tram vehicle along a section of the depot frontage.

Updates for St Andrews Square, Haymarket and Broughton Street have all been delivered during Period 11 and give an update to the programme of works due to commence in each area. A number of update notifications have been sent to residents and businesses along Ocean Drive and Lindsay Road for works that are due to commence or are ongoing in their area. Ocean Drive notices included information on the start date for track laying, bridge works at Tower Bridge and BT cabling works. A final notice has also been distributed to the residents of Tower Place regarding the inspection of their premises prior to the works on Tower Bridge.

There were 11401 visits to the [www.edinburghtrams.com](http://www.edinburghtrams.com) website, a further drop from Period 10. This drop was anticipated and reflects a reduction in the amount of new information posted in this period and that no new podcasts were released. Despite this drop in traffic to our main website, the number of followers on twitter has risen to 538 against last period's

The logistic team are now working on Haymarket Terrace as a consequence of the various traffic diversions around the area as well as the general Haymarket to Palmerston Place works. Broughton St/Picardy Place now has a logistic presence to cover the closure of Broughton St at York Place. This is likely to remain in place until the end of February/early March.

The incoming correspondence for Period 11 has dramatically increased since Period 10. Period 10 logged a total of 199 contacts, while Period 11 experienced an increase of 217 contacts, bringing its total correspondence to 416. Two reasons for this increase can be seen in the fact that there were no contacts at all during the final week of Period 10 due to the holiday period, and also because of our reduced state of working in the run up to Christmas and over the festive period.



FOISA exempt

- Yes
- No

## Period 11 2009/10 – Papers for Consideration

**Paper to: TPB****Meeting date: 10<sup>th</sup> February 2010****Subject: Project Change Control Update – Period 11, 2010/11****Preparer: Mark Hamill****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 10, £28.2m had been drawn down from the original risk allowance of £30.3 at Financial Close. In Period 11, an additional £976,587 has been drawn down.

The table below summarises the approved project changes that have financially impacted the project risk allowance since Financial Close in May 2008.

<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>
Changes to end Period 10	28,210,588	-28,210,588	0
<b>Position at end Period 10</b>	<b>509,891,399</b>	<b>2,125,608</b>	<b>512,017,007</b>
Period 11 Changes	976,587	-976,587	0
<b>Position at end Period 11 (CAB)</b>	<b>510,867,986</b>	<b>1,149,021</b>	<b>512,017,007</b>

**Changes Approved in Period 11**Edinburgh Park Bridge South Abutment (COP224 - £9,495)

Soft ground was identified below the formation level of the South Abutment. This change is the cost to excavate and backfill to the depth and specification identified in a subsequent BSC Technical Query. These works were an exclusion identified within Schedule Part 4.

Drainage Review Eastfield Avenue (COP232 - £1,065)

At a design options review meeting it was confirmed that the alternative design option to discharge the track drainage to Culvert 3 was not feasible. On this basis TNC 054, sent before under cover of INF CORR1703/MP was withdrawn. BSC are therefore entitled to abortive Estimate costs under Clause 80.13.2.

Existing Services (CW/Th) A8 Underpass Gogarburn Retaining Walls W14A, W15a, 158 15C (COP234 - £20,324)

Under the Infracore Pricing Assumption (Schedule Part 4), utility diversions/enabling works are considered a change for which **tie** is liable.

Baird Drive retaining wall (COP239 - £578,530)

Issued For Construction drawings show the embankment changed to a retaining wall as a result of Network Rail's request to move the tram track 3m north from the positions depicted in the Base Date Design Information drawings. This is **tie**'s assessment and may be amended as the issue (Design Change) progresses through the DRP process.

Tower Bridge Amendments (COP240 - £+2,706)

The value represents the nett effect of various amendments to the scope of Tower Bridge. The main drivers are the deletion of the North Walkway, the addition of ducts and the addition of ramps/walls at either side of the structure.

Balgreen Retaining Wall (COP241 - £230,554)

Issued For Construction drawings show the embankment changed to a retaining wall as a result of Network Rail's request to move the tram track 3m north from the positions depicted in the Base Date Design Information drawings. This is **tie's** assessment and may be amended as the issue (Design Change) progresses through the DRP process.

Utility Conflicts (COP195 - £69,272)

This change is for the provision of SDS Resources to take the current Conflicts Schedule & superimpose on to the MUDFA As-Built drawings (in their current state), together with existing services (non MUDFA) to produce separate co-ordination drawings to highlight potential conflicts with the Infraco scope. This will ensure Infraco's construction programme is not compromised.

MUDFA Design - Update Utility Drawings (COP247 - £70,053)

As a consequence of the agreement for CUS to leave the project in late 2009, several areas of utility diversion works are incomplete. The work sections identified for this change are: Haymarket (incl West Maitland St), York Place (Broughton St to North St. Andrew St) and Annandale St to Picardy Pl. As CUS have departed the project, the incomplete sections will be carried out by other contractors. To ensure these contractors have the best design information available at commencement of their works and to avoid unnecessary delays, SDS are being requested to update the original IFC drawings. This work is additional to SDS's contract.

FOISA exempt

- Yes
- No

**Decision(s) / support required**

The TPB is requested to:

- 1. Note the Project Change Control status at Period 11

**Proposed**

Name:Mark Hamill

Date: 10 February 2010  
Title: Risk & Insurance Manager

**Recommended**

Name:Steven Bell

Date: 10 February 2010  
Title: Tram Project Director

**Approved**

..... Date: .....  
David Mackay on behalf of the Tram Project Board

## Primary risk register

FOISA exempt

Yes  
 No

0910 - Period 11 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 project time; parliamentary processes, contractor issues.	Delay to completion of project	Increased out-turn cost due to delay plus revenue loss	S Bell	High - 25.00		DRP on programme management (EOT1)	Complete	Complete	30-Oct-09	S Bell
							Liason between tie/BSC programme managers	On Programme	On Programme	30-Dec-11	T Hickman
							Programme Management Panel process	On Programme	On Programme	30-Dec-11	F McFadden
							Weekly tie/BSC commercial meetings	On Programme	On Programme	30-Dec-11	M Paterson
1077	Base Date Design Information to Issued For Constructions (BDDI-IFC). Lack of visibility of design changes between November 2007 and May 2008	Tramworks price based on a design which may have been altered. Unclear who authorised design change.	Additional cost and programme delay	S Bell	High - 25.00		Establish a process which will act as a control mechanism for design changes. (If one exists already then ensure process is complied with)	Complete	Complete	30-Jun-09	T Glazebrook
							Intensive Mediation Marathon 29/6/09 to 6/7/09 to try and resolve issues.	Complete	Complete	30-Jun-09	S Bell
							Mediation resulted in no overall agreement on BDDI - IFC although it gave useful background information. Strategy paper to be presented to TPB on 29 July to seek approval for way forward including utilising necessary contract mechanisms (DRP, audit etc)	Complete	Complete	14-Aug-09	S Bell
							Of the issues previously highlighted as going through DRP, 1 has been ruled in favour of tie, 2 have been agreed, 2 have been ruled in BSC's favour and this is being reviewed by tie. Further issues are due to enter DRP in December 09 and January 10.	On Programme	Complete	31-Jan-10	S Bell
							Resolution Strategy approved - 1st DRP to go 10th August, audit requests to BSC for information going w/c 3.8.09	Complete	Complete	10-Aug-09	S Bell
1091		Excavation of soft, unsuitable material below Earthworks outline	Additional cost	F McFadden	High - 25.00		Donaldsons to carry out surveys	Complete	Complete	30-Jul-09	C Neil
							Extent of soft ground being investigated. External specialist advice deployed.	On Programme	On Programme	31-Mar-10	M Paterson

0910 - Period 11 Primary Risk Register

Risk Description										
1101	Unreasonable behaviour of BSC commercial management	Unrealistic estimates being submitted for potential changes	Programme delay while disputes regarding estimates are resolved	F McFadden	High - 25.00	Additional resource from TNT	Complete	Complete	30-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.	On Programme	On Programme	30-Dec-10	M Paterson
1104	Design changes following utility diversions	Utilities affected by subsequent kerb realignments (primarily westside of Leith Walk)	Re-diverting of utilities with additional cost and programme delay	G Barclay	High - 25.00	Following identification of conflicts potential solution such as protection measures to be identified	On Programme	On Programme	1-Jun-10	C Neil
						Utility conflicts being identified	On Programme	On Programme	1-Jun-10	C Neil
1094	Roads throughout works require full depth reconstruction	Roads throughout works require full depth reconstruction	Programme impact plus additional costs. £1.5m cap applies to only 4 areas.	F McFadden	High - 24.00	Carry out surveys to confirm extent of roads requiring full depth reconstruction	Complete	Complete	30-Jun-09	C Neil
						Suite of options from surveys to be reviewed and agreement reached	On Programme	On Programme	1-Apr-10	M Paterson
44	SDS contractor does not deliver the required prior and technical approval consents in line with SDS V31	Delay to IFC drawings beyond V31 Programme	Delay to programme with additional resource costs and delay to infraco. Impact upon risk balance.	D Sharp	High - 23.00	Evaluation of prior approval programme	Complete	Complete	31-Oct-08	D Sharp
						Fortnightly Meetings of Approvals Task Force	On Programme	On Programme	31-Mar-10	D Sharp
						Hold fortnightly Roads Design Group	Complete	Complete	31-Dec-07	T Glazebrook
						Informal consultation prior to statutory consultation	Complete	Complete	31-Mar-09	T Glazebrook
						Integrate CEC into tie organisation/accomodation (office move)	Complete	Complete	4-Jun-07	T Glazebrook

0910 - Period 11 Primary Risk Register

Risk Description									
279	Third party consents including Network Rail consent are denied or delayed	Delay to programme; Risk transfer response by bidders is to return risk to tie; Increased out-turn cost if transferred and also as a result of any delay due to inflation.	D Sharp	High - £3.00	Additional EMC modelling to give better info to NR	Complete	Complete	31-Dec-07	C Kerr
					CEC Planning - mock application by SDS	Complete	Complete	31-Dec-07	T Glazebrook
					Draft depot and station change proposals to NR	Complete	Complete	31-Jan-08	A Sim
					Fortnightly meetings of Approvals Task Force	On Programme	On Programme	31-Mar-10	D Sharp
					Identify fallback options	Complete	Complete	31-Aug-07	T Glazebrook
					Monitoring and tracking through the 3rd party rep	Complete	Complete	30-Jun-09	D Sharp
					Monitoring of BBS - 12 week look ahead	On Programme	On Programme	14-Jul-11	R Bell
					Obtain critical consents prior to financial close	Complete	Complete	31-Jul-08	T Glazebrook
52	Political and/or Stakeholder objectives change or require design developments that constitute a change of scope; Planning Department requires scope over and above baseline scope in order to give approval (may be as a result of lack of agreement over interpretation of planning legal requirements).	Programme delay as a result of re-work; Programme delay due late receipt of change requirements and lack of resolution; Scope/cost creep (dealt with through change process); Project ultimately could become unaffordable.	D Sharp	High - £27.00	Close working relationship with CEC and stakeholders	On Programme	On Programme	31-Jan-11	D Sharp
					Weekly critical issues meeting	Complete	Complete	31-Jul-08	T Glazebrook
928	Major single safety incident (including a dangerous occurrence) during construction	Delay (potentially critical) due to HSE investigation and rework. PR risk to tie and stakeholders.	F McFadden	High - £1.00	All Site Staff to get CSCS or equivalent	On Programme	On Programme	30-Jan-11	C McLauchlan
					Develop and Implement Incident Management Processes	Complete	Complete	27-Apr-07	T Condie
					HSQE Audits, site inspections and Management Safety Tours to be carried out	On Programme	On Programme	31-Dec-10	B Cummins
					Safety Induction to be carried out for all site staff	On Programme	On Programme	31-Dec-10	B Cummins
					Site Supervisors to be appointed by tie	Complete	Complete	28-Feb-07	S Clark
					The tie "Safety" bus is being used to deliver safety talks & culture surveys to the contractors workforce.	Complete	Complete	31-Dec-09	B Cummins



0910 - Period 11 Primary Risk Register

Risk Description										
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	GPR surveys in areas where there are likely to be services	Complete	Complete	1-Apr-07	T Glazebrook
						Infraco trial holes where applicable.	Complete	Complete	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-May-10	C Neil
977	Legal challenge. Extension of statutory consultation process. Large number of objections. TRO process is subject to a public hearing process.	Delay in achievement of TRO(s) due to a large number of public objections and/or a legal challenge to using a TTRO to construct Infraco.	Requirement to start construction using TTROs	D Fraser	High - 20.00	Comms strategy to include provision of process and drawings on website for public viewing	Complete	Complete	30-Sep-09	S Clark
						TRO strategy approved by board, discussion to be held with CEC head of transport to reduce risk of legal challenge.	Complete	Complete	31-Oct-09	S Clark
						TRO Strategy to CEC Transport, Infrastructure and Environment Committee on 22 Sept 09	Complete	Complete	22-Sep-09	D Fraser
						Use of TTROs to undertake construction of permanent works in advance of permanent TROs being approved.	On Programme	On Programme	30-Jan-11	A Sim
1103	Design changes following utility diversions.	Unknown non-compliant utility diversions in relation to proximity to the DKE and/or other utilities	Re-diverting of utilities with increased cost and programme impact	G Barclay	High - 17.00	Based on 1% of contract value £25m utility costs may be recovered	On Programme	On Programme	1-Jun-10	G Barclay

## **Period 11 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

### 2.1 Overall

The cost, programme and risk information in this Period 11 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. Work is ongoing to this end, and the current expectation is that the first outputs from this will be available during week 1 of Period 12.

Overall progress remains behind the master programme, primarily due to:

- Finalisation of the agreement of change delaying the commencement of work;
- Incomplete utility diversions in the On-Street sections caused in part by traffic management constraints ;
- Slow mobilisation of INFRACO, including lack of formal sub-contracts being in place;
- Failure of INFRACO to submit preparatory paperwork in a timely manner and of a suitable content i.e. Work Package Plans, Method Statements etc;
- Requirement for re-design of temporary works;
- Design slippage since novation of design to INFRACO (now recorded in v51A of the design programme);
- Design changes as a result of the Prior and Technical Approvals process; and
- Consortium integrated design programme and validation

Agreement was reached without furthering the DRP process on the MUDFA Rev 8 dispute and this comes with a commitment to develop a new mitigated programme. This will be prepared during the first quarter of 2010 with a first draft of this prepared by early February 2010. This is significant as it should deliver a programme upon which costs & programme can be re-baselined and give certainty for our Stakeholder communications.

The **tie** live programme currently predicts an Open for Revenue Service date in very early January 2013. This has slipped 13 calendar days since the last period. Progress continues at Haymarket viaduct although following site clearance activities during Period 10 between Haymarket & Roseburn further works for trackform has stalled.

There has been no further Infraco works on-street due to a lack of agreement on programme going forward. Utility Diversions continue at Haymarket, Leith Walk, York Place and Newhaven. Alternative delivery arrangements are in place to mitigate further slippage.

Section	Description	Contract Programme Rev.01	BSC Forecast (P10/11)	BSC Movement in Period (Cal Days)	tie Live Forecast (P11) Rev.01**
Section A	Depot completion	01-Jun-10	03-Jun-11	17	19-Apr-11
Section B*	Test Track Available	01-Jul-10	19-Dec-11	-42	11-Jan-12
Section C	All Phase 1a Construction complete	10-Mar-11	15-Aug-12	-50	05-Jul-12
Section D	Open for Revenue Service	06-Sep-11	11-Feb-13	-50	01-Jan-13

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

\*\* V51A information used.

As per previous period reporting **tie** retain an unapproved recalibrated baseline programme which reflects an Open for Revenue Service date of 23 Feb 2012.

The table below remains as was previously reported and as well as the recalibrated baseline programme it also reflects a completely unmitigated programme as a control scenario only. This is an unapproved delay to the Open for Revenue Service date. On a section by section basis there are "swings and roundabouts" identified in terms of improvement / degradation of delivery dates.

Area	Description	Unmitigated Finish	Re-baseline Finish
Section 1A	Newhaven Road to Foot of the Walk	03-MAY-12	08-SEP-11
Section 1B	Foot of the Walk to McDonald Road	10-JAN-12	09-SEP-11
Section 1C	McDonald Road to Princes Street west	28-MAR-12	06-SEP-11
Section 1D	Princes Street west to Haymarket	19-OCT-11	17-MAR-11
Section 2A	Haymarket to Roseburn junction	14-FEB-11	28-JUL-10
Section 5A	Roseburn Junction to Balgreen Road	20-MAR-12	17-JUN-11
Section 5B	Balgreen Road to Edinburgh Park central	23-JUN-11	04-FEB-11
Section 5C	Edinburgh Park Central to Gogarburn	24-OCT-11	20-JAN-11
Section 6A	Gogar depot	28-MAR-11	15-OCT-10
Section 7A	Gogarburn to Ingliston Park and Ride	07-JUL-11	11-MAR-11
Section 7B	Ingliston Park and Ride to Airport	26-JUL-11	11-MAR-11
Section A	Depot (ready to receive trams)	21-JAN-11	15-OCT-10
Section B	Test track	07-JUL-11	27-DEC-10
Section C	All construction complete	20-APR-12	27-AUG-11
Section D	Open for Revenue Service	17-OCT-12	23-FEB-12

## 2.2. Dispute Resolution

### Dispute Resolution (Infraco)

A summary on the DRP process at the end of Period 11 and outcomes is presented below:

DRP No	Subject	Nature of Dispute	Launched or planned	PD Mtg	Position Papers	CEO Meeting	Referral	Decision
5a	Gogarburn	BDDI to IFC	√	√	√	√	√	Decision made and under review
5b	Carrick Knowe	BDDI to IFC	√	√	√	√	√	
5c(B)	Russell Road	BDDI to IFC	√	√	√	√	√	Decision made and under review
A	MUDFA Rev 8	Programme	√	√	√	√		On hold
5e	Tower Bridge	BDDI to IFC	P11					
5h	Bankhead Drive	BDDI to IFC	P11					Under Review
5m	A8 Underpass	BDDI to IFC	P11					
5l	Section 7 Drainage	BDDI to IFC	P11					
5k	A8 Underpass Piles	Ground Conditions	P11					
5i	Baird Drive	BDDI to IFC	√	√	√	√		
5j	Balgreen Road	BDDI to IFC	√	√	√	√		

11	Phase 1b	Payment	P11				
Launched by tie							
Launched by BSC							

We continue in this report to reflect an outturn estimate of £533.3m (including Phase 1b). However, given the commercial uncertainties with BSC and continuing delays to the project it is now considered unlikely that the full scope of Phase 1a will be completed within the available funding envelope of £545m. Until the key issues are resolved through the contractual and legal process, it will not be possible to forecast accurately a revised budget outturn. It is also not possible at the present time to predict the conclusions of reviews of contingency option programme delivery options, including additional sources of funding.

**tie** has instructed works under a Clause 80.15 instruction for the 2 most recent DRP items; structures at Baird Drive and Balgreen Road Retaining Walls.

A strategic review of commercial and contractual options is underway and will be reported to the Tram Project Board in March.

**The contract with the BSC consortium prescribes a timetable for resolution of contractual disputes and it is expected that the budget and programme implications will become increasingly clear during early 2010.**

**Regular briefings will be provided to both CEC and Transport Scotland to keep them updated on progress and implications for the project programme and finances of all the above matters.**

#### Commercial Update (MUDFA)

Agreement of the final account with Carillion is progressing and a summary of the items being address is below.

Changes - CUS still require to provide significant substantiation. Progress has been made in the period in respect of agreeing the value of changes and further meetings have been set up to conclude discussion in the next period. It is anticipated however that a number of entitlement issued will not be agreed and may require senior management discussions with Carillion to conclude.

Re-measurement of Works – Re-measurement of Work Sections is now complete and discussions and meetings are ongoing to identify and close the gap between **tie's** assessment of the value and Carillion's application for payment. The target for completion of this exercise is the end of February 2010. Again it is anticipated that some entitlement issues will remain and will require to be discussed separately.

Disruption Claim – Carillion have submitted further back up in the period and Acutus are concluding their assessment of entitlement for the St Andrews Square Section of the works. Their interim assessment reports that the value that is attributable to the disruption for this section of the work is a fraction of that claimed by Carillion.

## ***2.3. Design***

### **IFC Design**

V51A was submitted to **tie** on 25/01/10 approximately 12 weeks later than planned date of 02/11/09. It has been noted that there is a significant increase in the number of activities due to the inclusion of Siemens design. BSC issued a pdf. version of the V51A programme to **tie** on 15/01/10, however it was an additional 10 days before the primavera files were issued. The result of this delay has meant that **tie** has been unable to carry out a full detailed analysis of the programme for inclusion in this update. It has been noted that there is a significant increase in the number of activities due to the inclusion of Siemens design. The last issue of the IFC programmed is due for issue on 19Aug10 (OLE Poles Section 7)

V51A data has been used to inform the Live programme updates, except where additional design knowledge has become apparent. **tie** will include the additional activities in the Period 12 update.

- IFCs – Phase 1a: 93 issued out of 148
- Murrayfield Accommodation Works - 4 left to be submitted (the RBS Gogarburn Tramstop, Modifications to Murrayfield TS retaining Wall, Gogar Interchange, Canopy & Boundary Treatment at Airport Kiosk) and 4 left to be granted; (Additional PAA in v51a are not included in the figures above as there was not sufficient time to review them before the report needed to be compiled)
- There has been an increase to the number of Technical Approvals granted (from an increased no. of TAA's), three remaining to be submitted 11 left to be granted;
- Structures approvals are progressing well (from an increased no. of TAA's) – 7 to date remain to be approved and all but 1 of the original structures have been approved (Murrayfield Stop RW);
- Roads approvals - One area remains outstanding for 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 1B, 1D, 1C3, 5B & 5C 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.

Design approvals status in Period 11 is summarised below:

Phase 1a only	Number required		Number	
	v31	V51A*	Submitted	Granted
Prior Approvals	49	56	53 (95%)	52 (93%)
Technical Approvals	71	88	85 (97%)	77 (89%)

\* The additional Approvals from V50 have been included, however additional activities from v51a are not included in the figures above as there was not sufficient time to review them before the report needed to be compiled)

There is little evidence of better management of SDS by BSC, and the lack of support in supplying the Design programme only helps to strengthen this opinion coupled with the poor design performance. The approvals task force has been supplemented by a Design Progress and Design Issues meeting to provide additional management focus on design resolution.

It should be noted that this is a consortium issue to manage and **tie** will provide support in this respect. **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.

Reasons for design slippage are being reviewed and recorded twice monthly at the design taskforce meeting; which is focused on resolving outstanding design issues. **tie** is identifying and implementing opportunities to mitigate the impacts of this slippage.

## **2.4. Utility works**

Remaining Utilities works re-commenced during Period 11 following the December embargo. (this excludes the remaining utility works being undertaken outwith the MUDFA contract between Constitution Street and Newhaven).

Progress remains as reported at the end of Period 10 as agreement still required on Clancy Docwra programmes to allow progress to be calculated. This will be reported on in full in Period 12.

Progress on Utilities works during Period 11 is as follows:

- Following agreement and sign-off of final contracts and programme, planned and actual progress figures for remaining On-Street sections will be included from Period 13.
- Carillion works (MUDFA) between Constitution Street and Newhaven are complete, and Farrans have been awarded the remainder of the Section 1A utilities diversions which recommenced w/c 4/01/10.
- Clancy Docwra are progressing the remaining utility work scope in the City Centre to complete the remaining works at – Haymarket, Shandwick Place, and York Place to Annandale Street and Lindsay Road.
- Outstanding BT Cabling related works are underway in St Andrew Square and Leith Walk.
- SGN restricted commissioning works at Lindsay Road until collateral warranty in place. **tie** are working with SGN and the contractor to resolve.
- MUD works at Airport are 98% complete, and due to a BAA requirement a return visit will be required February 2010.

### ***2.5. Tramworks (INFRACO)***

Progress in the Period for INFRACO works reflects a total cumulative completion of 13.8%, an increase of 0.7% against a plan of 4.1%, reflecting the lack of progress from BSC for on-street works.

The only on-street works in progress are related to snagging items along Princes Street and the surrounding area. There has been no further Infraco works on-street due to a lack of agreement on programme going forward.

Progress Off-street has continued or commenced in the following locations (%'s are for full structure).

<b>Item</b>	<b>% Comp Rev 1</b>
Haymarket viaduct –	38.0%
Russell Road Retaining Wall (W4) (piling works)	15%
Carricknowe bridge (both North and South abutments)	40%
Edinburgh Park viaduct – approach ramps	85%
Depot building steelwork and cladding erection.	16%
Gogarburn bridge – bridge deck finishes and approach ramps	84%
Hilton Hotel Car park	100%

- Works progressing at Haymarket viaduct with Pier 4 and internal retaining wall for completion of bridge piers and superstructure
- Site clearance and earthworks for Trackworks between Haymarket and Roseburn completed but no start made for excavation to trackform.
- Trackworks continue to progress at the Guided Busway.
- Works continues off street on a number of sites inc Edinburgh Park Bridge, Carrick Knowe Bridge, and the Depot.

#### Success in the Period/Progress in Period 11

- Works ongoing on Haymarket Viaduct and despite recent problems with crane progress is as programmed.
- Piling recommenced on W4 of RRRW, obstructions being encountered however 27 no piles have been successfully bored and concreted.
- Works to the Wanderers Club house commenced in the period.

- Weather conditions had a severe effect on progress to the Guided Bus Way, however BSC have now installed 1350m of rail and sleepers on the outer loop with 1300m welded, 500m installed to final line and level with 250m concreted.
- Carricknowe and Edinburgh Park Bridges are progressing to programme. Abutment to No.5 of Edinburgh Park Bridge now underway.
- A8 Underpass – piling rig delayed, combination of missed window for rig and extreme weather conditions. Rig now due week commencing 01.02.10 with piling programmed for 4<sup>th</sup> February 2010.
- Little progress made at Depot due to weather conditions, however site now cleared and areas tidied to allow various sections to be tackled.
- Hilton Car Park works substantially complete (temporary conditions) with remaining work planned to commence after main corridor work.
- Commenced earthworks on the 11<sup>th</sup> January 2010 at Eastfield Avenue (Hilton Hotel) southwards towards Park and Ride. Good progress being made.
- Burnside Road works substantially completed although problem with wearing course delaying handover. Asphalt to be removed and replaced which will delay completion until next week (w/c 01.02.10).

#### Issues in Period

- BSC asked to review trackform in six areas, with initial response not being positive. BSC advised by tie to construct as IFC in Section 2A and to provide further detail on remaining sections.
- Number of audits commenced under Clause 104. Topics being Design, Trackform, Structures, Programme, and Sub Contractor Procurement.
- BSC have failed to commence with On Street works, the requirement of OSSA is the stated reason.
- Problems continue with BSC failing to provide necessary information in weekly / four weekly reports.

Work has continued on a number of worksites including:

#### **Section 1C/1D: City Centre Princes Street**

- Remaining Snagging progressing in period 11

#### **Section 2: Haymarket to Roseburn Junction**

- Grahams recommenced on Haymarket Viaduct 05/11/2009. Work on the viaduct continued throughout the period.
- Work to the viaduct continued up to 22 December 2009 and continued to progress the base slab for the new internal retaining wall. Pier 1 base slab was poured 26/01/10.
- Site clearance complete prior to track works

#### **Section 5A Roseburn to Balgreen Road**

- Russell Road Retaining Wall W4 - Cased piling rig delivered to site 05/01/2010 to recommence piling to RW W4. Rig assembled from 06 to 08 Jan 2010. Piling to RW W4 recommenced on Tue 12/01/10 and continued throughout the period. Piles to retaining wall units 16, 17 and 18 completed during the period.
- Murrayfield Wanderers Clubhouse Accommodation works – works commenced w/c 05/01/10 and continued during the period

#### **Section 5B Balgreen Road to Edinburgh Park Central:**

- Carricknowe Bridge South abutment wingwalls poured.
- Guided Busway – Track installation continued during the period
- Bankhead Drive – No works by BSC during the period.
- Edinburgh Park Bridge- Expanded commenced construction of the north approach ramp on 18/01/10.
- First section of robust kerb on span 7 poured.

#### **Section 5C Edinburgh Park Central to Gogarburn:**



- A8 Underpass: Pile guides to upper section of Phase 2 completed 15<sup>th</sup> January 2010. Traffic switch from Eastbound to Westbound carriageway commenced 4<sup>th</sup> January 2010 and completed 24<sup>th</sup> January 2010. Pile guides completed for piling rig mobilisation 1<sup>st</sup> February 2010.

#### Section 6 Gogar Depot

- Depot Steelwork installation completed. Roof Cladding 95% completed
- Drainage works in Depot building commenced and scheduled for completion February 2010.
- Perimeter beam and base slab works commenced with first pour completed. 1st floor accommodation slab pours completed.

#### Section 7 Gogarburn to Edinburgh Airport

- Gogarburn Bridge: West Abutment ground beam cast 20<sup>th</sup> November 2009. No works since due to design interface issue on with OLE foundations on East Abutment ground beam and problems with concrete cube strength to in-situ stitch pour on bridge deck.
- Hilton Hotel Car Park: Works completed.
- EAL Construction Phase A: Works commenced 11<sup>th</sup> January 2010.

Progress is being monitored against the Revision 1 programme. The summary milestones against the agreed INFRACO contract and the short term Rev 1 programme milestones are shown in the table below. This is the highest number of construction milestones completed in a period to date.

Milestones	Period 11		Cumulative (Short-Term)		Contract Planned to P11
	Planned	Actual	Planned	Actual	
Prelims	2	2	63	63	63
Construction	7	6	100	99	812

The Revision 1 programme incorporates the agreed 38 business days (seven weeks plus three days) EOT variation to the contract programme as in the table below. As had been the case in the contract programme progress, the common denominator in the Revision 1 programme remains that every activity in the programmes has a work content generated against it which translates into a weighting, allowing accurate reporting of progress.

Period 11 2009-10	Period		Delta	Cumulative		Delta
INFRACO PERIOD 11 PROGRESS (Contract Rev.01 Programme)	Plan	Actual		Plan	Actual	
Section 1a Newhaven to Foot of the Walk	4.1%	0.0%	-4.1%	45.5%	0.0%	0.0%
Section 1b Foot of the Walk to McDonald Road	1.1%	0.0%	-1.1%	52.5%	1.4%	-0.1%
Section 1c McDonald Road to Princes Street West	7.4%	0.0%	-7.4%	40.7%	0.0%	-10.8%
Section 1d Princes Street West to Haymarket	3.9%	2.9%	-1.0%	89.2%	42.1%	-3.5%
Combined Sections 1A-1B-1C-1D (On-Street) Newhaven Road to Haymarket	4.4%	0.5%	-3.9%	53.4%	8.0%	-4.2%
Section 2 Haymarket to Roseburn Junction	2.2%	1.6%	-0.5%	100.0%	15.4%	0.0%
Section 5a Roseburn Junction to Balgreen Road	2.8%	0.0%	-2.8%	71.8%	4.3%	0.0%
Section 5b Balgreen Road to Edinburgh Park Central	5.6%	1.3%	-4.3%	83.5%	34.7%	0.0%
Section 5c Edinburgh Park Central to Gogarburn	4.2%	0.3%	-3.9%	81.4%	4.0%	0.0%
Section 6 Gogar Depot	2.5%	1.5%	-1.0%	96.6%	14.6%	0.0%
Section 7a Gogarburn to Edinburgh Airport	6.1%	0.0%	-6.1%	73.3%	32.8%	0.0%
Combined Sections 2A-5A-5B-5C-6A-7A (Off-Street) Haymarket to Edinburgh Airport	3.9%	0.7%	-3.2%	82.9%	17.9%	0.0%

<b>FULL ROUTE PHASE 1A NEWHAVEN ROAD TO EDINBURGH AIRPORT</b>	<b>4.1%</b>	<b>0.7%</b>	<b>-3.5%</b>	<b>70.6%</b>	<b>13.8%</b>	<b>-3.4%</b>
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<b>Section</b>	<b>Commentary</b>
<b>Section 1a Newhaven to Foot of the Walk</b>	No agreed programme for recommencing 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>	W/e 04/12/2009 Grahams recommenced work on the viaduct. Work on the viaduct continued throughout the period. Track works (Vegetation clearance) started from Dec09.
<b>Section 5a Roseburn Junction to Balgreen Road</b>	Temporary & permanent works re-design along with commercial resolution delaying various structures. All required consents in place for track installation. Russell Road Retaining Wall W4 - Cased piling rig delivered to site 05/01/2010 to recommence piling to RW W4. Rig assembled from 06 to 08 Jan 2010. Piling to RW W4 recommenced on Tue 12/01/10 and continued throughout the period. Piles to retaining wall units 16, 17 and 18 completed during the period. Murrayfield Wanderers Clubhouse Accommodation works – works commenced w/c 05/01/10 and continued during the period
<b>Section 5b Balgreen Road to Edinburgh Park Central</b>	Temporary & permanent works re-design along with commercial resolution delaying various structures. Progress in period is against S27 Edinburgh Park viaduct. All required consents in place for track installation. No work by Expanded w/e 08/11/2009, due to bad weather. South abutment wingwalls poured Thursday 21/01/10. Guided Busway – Track installation continued during the period, however no work was carried out w/e 08/01/2010 and w/e 15/01/10. Bankhead Drive – No works by in this period. <b>Edinburgh Park Bridge</b> – No work done at the south approach ramp during the period. Expanded commenced construction of the north approach ramp on 18/01/10. First section of robust kerb on span 7 due to be

Section	Commentary
	poured 25/01/10.
<b>Section 5c Edinburgh Park Central to Gogarburn</b>	A8 Underpass: Works to BT 6 way slew completed 4th December 2009. Pile guides to upper section of Phase 2 completed 15th January 2009. Traffic switch from Eastbound to Westbound carriageway commenced 4th January 2010 and completed 24th January 2010. Pile guides completed 3/2/10 for piling rig mobilisation 1st February 2010.
<b>Section 6 Gogar Depot</b>	Depot Building works structural steelwork completed 11th December 2009. Roof cladding 95% completed as of 18th December 2009. Drainage works in Depot building commenced 11/1/10 and scheduled for completion 2nd February 2010. Perimeter beam and base slab works commenced 14/1/10 with first pour completed 28th January 2010. 1st floor accommodation slab pours completed 14th January 2010.
<b>Section 7a Gogarburn to Edinburgh Airport</b>	Gogarburn Bridge: West Abutment ground beam cast 20th November 2009. No works since due to design interface issue with OLE founds on East Abutment ground beam and problems with concrete cube strength to in-situ stitch pour on bridge deck. Culverts 1,2 and 3 have been completed. Hilton Hotel Car Park: Works completed

### ***Tram construction (Tramco)***

Good progress continues to be made with delivery of the trams by CAF in accordance with the tram delivery schedule. The first two trams are at the Siemens test track at Wildenrath in Germany undergoing dynamic testing, the third and fourth trams are in the factory undergoing factory acceptance testing and work is progressing at various stages on the production line on the remaining trams up to the 17th tram.

Draft Operations and Maintenance manuals have been received and are being reviewed.

#### *Preparing for operations*

The BROR committee is providing the governance for these activities, which has seen the TUPE transfer of the Transdev Edinburgh employees into the Edinburgh Trams team, and the OJEU procurement launched for the ticketing equipment for the tram system, to link it with the existing Lothian Buses ticketing system.

Significant effort is being made on programming and planning the preparing for operations activities, including recruitment and training of both operations and maintenance staff.

The maintenance of completed infrastructure assets is being raised as an area that requires some focus for improvement.

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## ***2.6. Preparing for Operations***

tie has launched a new workstream know as 'Preparing for Operations' .This is a joint initiative with TEL and is focussed on getting ready for the Testing & Commissioning phases as well as the operational introduction of trams. As part of the process, a new Committee (Benefits Realisation & Operational Readiness) has been set up and is reporting to the TPB, and an integrated programme is being developed by tie with assistance from TEL.

The process for acceptance of the Edinburgh Tram Project is designed to ensure that it is delivered in an acceptably safe, compliant and efficient manner. The objectives of the process are to ensure that the system performance, integrity, reliability, availability and safety are rigorously tested and that throughout all stages of the delivery process the many sub-systems and the overall system are validated and verified against the requirements and applicable standards.

## 2.7. Interface with other projects

The following table identifies the other projects ongoing within the city which may impact on the Tram project. This is reviewed on an ongoing basis both internally and in conjunction with TS to identify conflicts and mitigations. The most significant interface of concern is the Gogar interchange. **tie** has instructed the design change and this is underway.

External Projects	Promoter	Project Description	Potential Conflict	Tram Contract Dates		Project Dates		
<b>GREEN</b> - No conflict anticipated but being monitored. <b>AMBER</b> - Managing any conflict. <b>RED</b> - Conflict which causes programme concern / unknown effect on tram programme.				Start	Finish	Start	Finish	Comments
New Hotel adjacent Ocean Terminal	Ocean Points Development Limited	New build hotel	Potential conflict with Infraco dependent on timescales. To be monitored.	Sep-09	Apr-12	TBA	TBA	To be monitored.
Movement of Abnormal Loads	Sinclair Knight Merz	Transportation of turbines and 45 metre blade sections for <i>Fallago rig</i> wind farm via road transporters from Leith docks along Ocean Drive via Ocean Terminal frontage to Commercial Street, then East through Great Junction Street/Duke Street junction to Salamader Street	Conflict with tram works along required transportation route. Disruption to construction activities.	TBA	TBA	Jun-11	Dec-11	2 complete turbine movements expected each week for approx. 6 months
Former Bus & Tram Depot nr Shrub Place.	Fraser & Neave	Transformation of former Tram and Bus Depot into 121 room serviced apartments.	None identified. Dependent on timescales.	Now		TBA	TBA	To be monitored. Utility completion by end Aug09. Potential TM interface dependent on Infraco proposals
Shrubhill House	Unite	Transformation of former council social work headquarters into 200 bed hotel	None identified. Dependent on timescales.	Now		TBA	TBA	Awaits planning consent. To be monitored. Utility completion by end Aug09. Potential TM interface dependent on Infraco proposals
Baxter Place Development	Fitzpatrick Hotel Group	Conversion of existing building adjacent Greenside Lane and with frontage onto Leith Street	Proposal to divert existing utilities through basement of building. Also potential TM interface issues with Picardy Place construction.	Oct-09	Oct-11	TBA	Dec-10	

External Projects	Promoter	Project Description	Potential Conflict	Tram Contract Dates		Project Dates		Comments
GREEN - No conflict anticipated but being monitored. AMBER - Managing any conflict. RED - Conflict which causes programme concern / unknown effect on tram programme.				Start	Finish	Start	Finish	
St.James Centre Re-development	CEC / Henderson Global	Redevelopment of existing shopping centre.	Interface with Picardy Place junction re-construction and Cathedral Lane sub-station	Mar-10	Jan-12	2011	2016	Downgraded from red to amber as commencement of this project is now indicated towards the completion of Tramworks and therefore interfaces should diminish.
National Portrait Gallery		Major building construction and re-furbishment. The renovation of the external facades, the overhauling of the existing windows, the renewal of the existing rooflights and roof covering. Additionally, it is proposed that an external ramp is formed to the front main entrance to allow disabled access.	Interface with Infraco works on St Andrew Street / York Place	Mar-10	Oct-11	Oct-09	Nov-11	Decant complete June 09 Lane closures (west bound) on Queen street, to allow space for a large hiab to be positioned full time outside the premises (October 2009 onwards). Also two, three week periods in January & February 2010, when further closures were required to allow a large crane in to remove/reinstate the roof. Conflict with the Tram traffic management team looking at making the section of Queen Street, between North St David Street and Broughton Street one-way (part of the Leith Street, Princes Street, South St David Street, North St David Street gyratory).
St.Andrew Square Development	CEC	Demolition of existing buildings bordering South Side St.Andrew Square, South St David Street and Meuse Lane	Infraco Programme	Jan-10	Mar-10	TBA	TBA	Infraco activities will not commence until Jan 2010

External Projects	Promoter	Project Description	Potential Conflict	Tram Contract Dates		Project Dates		Comments
GREEN - No conflict anticipated but being monitored. AMBER - Managing any conflict. RED - Conflict which causes programme concern / unknown effect on tram programme.				Start	Finish	Start	Finish	
Waverley Steps	Transport Scotland	Refurbishment of existing Waverley Steps with inclusion of new escalators and elevators	<b>PRINCES STREET</b> Traffic management issues when Infraco in Princes Street should this project require deliveries, craneage or Traffic management in same time period	Feb-09	Nov-09	Jun-10	May-12	No conflicts expected.
Waverley Steps	Transport Scotland	Refurbishment of existing Waverley Steps with inclusion of new escalators and elevators	<b>ST.ANDREW STREET</b> Traffic management issues when Infraco in Princes Street should this project require deliveries, craneage or Traffic management in same time period	Jan-10	Mar-10 (Oct-10)	Jun-10	May-12	No conflicts expected.
Waverley Station Re-roofing	Transport Scotland	New roof and general upgrade to station interior	May be Traffic Management issues	Jan-10	Mar-10	Apr-10	Apr-14	No conflicts expected.
New Hotel in Haymarket	Tiger Developments	New build hotel		Jan-10	Sep-11	TBA	2012	No issue as Project cancelled as Planning Application rejected October 2009.
Haymarket Interchange	First Scotrail	Capacity Increase Project - Installation of new lifts and walkways from Haymarket Terrace	Utility diversions continue until late Jan.2010 Potential Interface with Infraco works at Haymarket junction commencing Jan.2010	Jan-10	Sep-11	Dec-11	Dec-12	No conflicts expected.
Haymarket Station Re-furbishment	Network Rail/Scotrail	Main Building refurbishment works	Any external works could conflict with TM for either or both MUDFA and Infraco and could conflict with Infraco construction works. Bridge to be installed from Haymarket terrace to Platform 0 to comply with DDA	Jan-10	Sep-11	Aug-09	Jan-10	May Gurney programme received during Aug09. No conflicts expected. TM requirements being monitored. Remaining utility works are to the east of the station/Haymarket junction. Infraco works not expected to commence until Jan 2010.
Haymarket Station	First Scotrail	Installation of new lifts and walkways from Haymarket Terrace	Construction of Haymarket viaduct	Jan-10	Sep-11	Jan-10	TBA	

External Projects	Promoter	Project Description	Potential Conflict	Tram Contract Dates		Project Dates		Comments
GREEN - No conflict anticipated but being monitored. AMBER - Managing any conflict. RED - Conflict which causes programme concern / unknown effect on tram programme.				Start	Finish	Start	Finish	
Haymarket Terrace	DTZ Surveyors	Common Repairs to buildings at 2-4-6-8-68 & 74 Haymarket Terrace	Scaffolding and external repairs	Jan-10	May-11	May-09	ASAP	Scaffold erected and building repairs underway between Infraco TM phases.
Airdrie - Bathgate	Transport Scotland	New track installation	Tram possessions mainly "piggy-backed" on A2B possessions which could be altered / cancelled.	TBA	TBA	Mar-09	Mar-10	Various possessions and RotR workings
New Hotel	NEL (New Edinburgh Park Ltd) / Whitbread	120 Bedroom Premier Inn Hotel	Construction traffic TM Interface	TBA	TBA	TBA	TBA	The site, located at the southern end of Edinburgh Park, is opposite the Park's dedicated railway station and tram stop.
RBS Tramstop - Gogarburn	RBS	Design by RBS - Build by Infraco	Design and consents not in place in a timely manner to allow Infraco to build to programme	Nov-10	Mar-11	TBA	TBA	Design and approvals progressing to programme. Confirmed that this will now be a generic tram stop design
Gogar Surface Station	Transport Scotland	New station to east of Gogar Depot	Approvals and Consents	Dec-09	May-11	Jul-10	Jul-11	Gogar Interchange Programme reviewed and updated in conjunction with both NR and TS

Colour code

Green	No conflict anticipated but being monitored
Amber	Managing any conflict
Red	Conflict which causes programme concern / unknown effect on tram programme

This has been sent to TS for their input for projects they are sponsoring and will continue to be reviewed by tie to identify any potential impacts on the Tram programme as early as possible in order to manage them. A wash-up session of the TS projects was carried out late December09 with TS. The next session will be arranged for after Rev 3 agreements.



## 2.8. Other

### Gogar Surface Station

#### Key issues/Decisions Required

1. Network Rail has still not resolved the sewer diversion route. As instructed by Transport Scotland, **tie** is not submitting the Prior Approval application until the location of the retaining wall is confirmed. Completion of the detailed design of the retaining wall is also on hold pending confirmation of the final location. A confirmed decision on the location of the retaining wall is needed by 12 February to avoid detailed design and technical approval of the retaining wall falling on the critical path to SDS production of IFC drawings.
2. **tie** understands that the Network Rail planning application is delayed due to Network Rail needing to resolve whether the traffic generated by the railway station requires signalling of the junction of the access road and the Gogar Roundabout. This is delaying **tie** securing Prior Approval for the tram elements of the interchange and thus IFC. IFC now forecast as 14 May 2010 based on CEC approval of Network Rail planning application on 29 April.
3. BSC has notified **tie** that the systems elements of the design will be complete in June 2010. **tie** accepts that there has been some change in scope for the systems design as a result of the circulation tower change option but is challenging June 2010 as a reasonable delivery date. **tie** will also consider potential mitigation measures if the systems design cannot be completed in line with the SDS design.
4. BSC has submitted a revised estimate for the Siemens design taking account of the central location of the Vertical Circulation Tower (VCT) which impacts on OLE and trackform design.
5. SDS has not yet submitted an estimate for the revised scope and is waiting for confirmation of the Retaining Wall location first.
6. Forecast outturn increased to £997k in line with revised estimate received from BSC and assumptions on SDS revised estimate. The forecast outturn will be revised in full in period 12 on receipt of SDS revised estimate. The forecast cost increase for design is driven by the change in scope from the original design that was priced by SDS and by the additional work supporting Network Rail in relation to the sewer diversion.
7. CEC will require an updated grant letter to allow **tie** to commit to the extra costs involved in completing the design. Commitment in writing to meet additional costs will be needed to coincide with the submission of the design for Prior Approval. An updated grant letter will be needed within 2 weeks of **tie** supplying a full revision of the cost estimate in Period 12.
8. Network Rail has not yet tabled the promised draft list of agreements together with their scope following the meeting in December 2009. **tie** cannot accept responsibility for any delay associated with agreements not being reached in line with the needs of the construction programme given Network Rail's lack of positive engagement on this issue.

#### Design progress

At the end of Period 11 **tie** assesses the design phase as 66% complete compared with 92% planned. Slippage arises primarily from the impacts on tram elements of the Gogar Interchange of the delays in Network planning application and confirmation of sewer relocation.

#### Cost reporting

Cost of work done to date is £580k versus the £810k originally forecast.

The forecast outturn has been increased from £880k to £997k.

A revised cost profile has been submitted with this report. The assumptions that underpin the revised forecast and profile are:

1. Amendment to Siemens costs per revised Siemens estimate submitted 19/1/2010
2. Siemens profile realigned to revised estimate and indicative finish date of June 2010
3. SDS has not submitted revised estimate for acceptance as position of retaining wall not finalised
4. Siemens estimate based on reduced rates negotiated by tie (-30%) and increased scope (+35%)
5. SDS forecast increased by tie by 35% in line with Siemens estimate - to be confirmed on receipt of SDS estimate expected in Period 12
6. SDS work re-profiled to account for additional cost and likely delay to IFC due to Network Rail delay to planning application - NR application assumed to be granted 29/4/10.

#### Period 11 progress and actions to recover slippage

Progress on the SDS elements of design was made in the first week of Period 11. However, the design has effectively been on hold during finalisation of the sewer location since then. SDS has continued to work on details of the planning drawings so that only the line of the wall remains to be finalised.

SDS has submitted revised runtime analysis incorporating the Gogar Interchange. The runtime analysis will be reviewed by tie in Period 12 and used to support revised patronage calculations for the Edinburgh Tram Network.

BSC has continued the development of Overhead Line and other systems design. BSC has confirmed that work on systems design will not be complete until June 2010. This has been reflected in a revised cost profile submitted with this report.

Earlier opportunities identified by tie to recover slippage have not been realised because of the continuing discussions on the final location of the sewer.

There are no further measures that tie can take to prevent slippage of the IFC date as the critical path lies through actions that are the responsibility of Network Rail.

#### Programme milestones

Activity	Planned	Period 6 forecast	P11 forecast / Actual
Complete prelim design of additional tram stop	10/8/09	18/9/09	30/9/09 (A)
Submit Structures Technical Approval application	19/11/09	8/1/10	5/3/10
Submit Prior Approval application	26/11/09	15/1/10	19/2/10
Receive Prior Approval	5/2/10	12/3/10	30/4/10
Receive Structures Technical Approval	5/2/10	8/3/10	30/4/10
IFC by SDS of civils design and outline systems design	26/2/10	22/3/10	14/5/10
IFC by Siemens of detailed systems design	-	-	June 2010

These dates assume that the position of the retaining wall is finalised by agreeing a solution in principle for the sewer and retaining wall with Network Rail and Scottish Water at the meeting on 4 February 2010 and that decision being ratified by the operations arms of Scottish Water and the Tram by 12 February 2010. They also assume that Planning Permission for the Network Rail elements of the Gogar Interchange is granted at the CEC Council meeting on 29 April 2010.

tie was ready to submit the Prior Approval application in line with the Period 6 forecast but has been held up by the delay with the sewer diversion. Delay to the completion of Prior Approval is determined by the finish date of the Network Rail planning application.

These 2 factors mean that there are no measures that **tie** can take to prevent this slippage as the critical path lies through actions that are the responsibility of Network Rail.

**tie** is challenging the June 2010 date for the completion of detailed systems design by Siemens. **tie** will also consider mitigation measures to reduce/eliminate impact of this on construction programme.

#### Integrated Programme Development

**tie** has reviewed the tram element of the programme and is submitting a revised contribution to the Integrated Programme at the start of Period 12.

#### Overall design co-ordination

Project management meetings have continued between **tie**, TS and NR and fortnightly conference calls have taken place between **tie**, NR and the respective designers.

The significant outstanding design co-ordination issues is the clearance between the 1500 mm sewer diversion and the retaining wall.

#### Tram design issues

BSC has identified a need to discuss the reduced headroom for the OLE through the tramstop with the Independent Competent Person. BSC is arranging a meeting with the **tie** engineering team so that BSC can present a proposal to the ICP with the support of **tie**.

#### Other agreements

**tie** has highlighted the need for various operating and commercial agreements between **tie** and Network Rail and has asked Network Rail to arrange initial meetings to discuss the scope of these agreements. Network Rail arranged a useful first meeting in early December but has not issued the promised initial scoping document for agreements. This is closely related to any progress on land transfer as appropriate servitudes must be included in the land transfer.

#### Scope of **tie** works

**tie** has devoted significant effort to involvement in frequent and detailed construction staging discussions with TS and Network Rail. This has taken place in response to TS requirements to get Network Rail moving with detailed design and procurement.

This goes beyond the scope of the original grant offer letter and is taking up significantly more **tie** staff time than was originally envisaged. We have discussed this issue with TS and TS has provisionally recognised that additional **tie** support is required.

In Period 11 BSC agreed to attend construction staging meetings and the first of these meetings took place. **tie** has agreed with Transport Scotland that these will be funded over and above the existing grant offer and emails are being exchanged to confirm the detail so that Transport Scotland can issue an amendment to the grant offer.

The scope of **tie** works also does not include any external legal costs in relation to land or agreements and it is likely that **tie** will need legal advice in relation to agreements with Network Rail. **tie** expects that the extent of this will become clearer once Network Rail tables some draft agreements for review.

#### Long-lead items / abortive works

**tie** has reviewed the long-lead items/abortive works previously identified against latest programme forecasts.

The switches & crossings for the east entry to the Depot have been ordered by BSC for the original ETN layout but not yet manufactured. BSC had originally stated confirmed that the lead time for this S&C is 6-8 months. Trackwork in this section is now expected to start in May 2011 meaning that a decision on the S&C would be needed by September 2010 at the latest. However, BSC has just confirmed that a decision is needed by end February 2010.

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On 4 February BSC asked for confirmation of the OLE pole heights to be ordered through the Gogar Interchange area by 22 February 2010.

For both of these items **tie** is urgently pursuing with BSC confirmation of:

- (a) possible courses of action
- (b) costs and risks associated with each option
- (c) whether there are subsequent milestone dates at which the risk increases significantly

**tie** will present this information to Transport Scotland as early as possible in Period 12.

Drainage for the earthworks at the Depot is currently being installed to the west of the Depot Access Bridge. No date has been confirmed by BSC for drainage installation at the Gogar Interchange site east of the Depot Access Bridge. BSC undertook at the latest construction staging meeting to confirm the sequence of construction and the drop-dead date for a decision on construction in this area. **tie** will update Transport Scotland each period (or more urgently if necessary).

**tie is continuing with the implementation of the existing ETN scheme unless otherwise instructed by Transport Scotland.**

## **Other Reporting Streams Progress**

The following sections describe progress on other areas of the project during Period 11.

### **Temporary traffic regulation orders (TTROs)**

- The closure of Broughton Street at the junction with York Place was implemented without incident on the 16<sup>th</sup> January 2010. It is anticipated that this closure will remain in place until March 2010.
- Traffic arrangements on Clifton Terrace involving the diversion of buses onto Roseberry Crescent/Landsdowne Crescent and Grosvenor Street were also implemented without incident on 16 January to facilitate completion of utilities diversions in the area.

### **Traffic regulation orders (TROs)**

- The Council decision made on 22 September 2009 in support of the TRO process triggered commencement of TRO1.
- The Statutory Consultation process commenced on 12 October 2009, this process being limited to 7 Statutory Consultees only at this stage. This process concluded on 12 November, with no showstoppers identified, although a number of comments raised by L&B Police and Lothian Buses will require to be addressed in TRO2.
- On the 09<sup>th</sup> Feb 2010, the Council will make the final decision to place TRO 1 on Public Deposit. It is anticipated that the outcome of the objections will be reported to CEC in July or September.
- TRO 2 will follow the making of TRO 1. TRO 2 will reflect the complete design and issues that have arisen from TRO 1.

### **Network Rail**

- Carrick Knowe – NWR during the period accepted the WPP & Form C for the construction of the crane platform to place the deck beams.
- First Scotrail Depot – SI commenced on site on the 23/11 in and around the depot with the agreement of FSW and NWR.
- First Scotrail Depot –Scotrail have supplied details of all the previous SI undertaken by Scotrail & Network Rail.
- All works on the Rail Corridor are currently running late to both Contract and Version 2 Programmes, BSC reporting 21% of works complete on Rail Corridor.

### ***Network Rail Immunisation***

- BSC has completed their update of this document and their Independent Safety Advisor is reviewing it.
- The study recommends modification of 12 off NR track circuits however BSC assures **tie** that only 9 off are recommended for modification and the study will reflect that when it is formally submitted following approval by their ISA.
- Volker Rail is proceeding with the design of FETR solution and has carried out a site survey on NR infrastructure during this period.
- Issues in the Period include; Re-issue of the Psophometric Voltage Calculation document is overdue due to BSC limited resource being prioritised elsewhere, and the EMC Field Survey document is overdue due to BSC limited resource being prioritised elsewhere.
- Immunisation development is remains at 88% complete and the implementation solution 1% complete. Volker Rail are obtaining clarification on technical issues with NR. They have queried whether longer than 1000 metre tracks need to be cut to facilitate FETR. NR is expected to perform FETR simulation over the next period to assure Volker Rail that there is no need to cut long track circuits.

### **Third party interfaces**

- Forth Ports – Licences have been executed with Forth Ports to allow all tram and utilities works to proceed in the Leith Docks area. Discussions have not yet been concluded between CEC and Forth Ports regarding a renegotiated S75 arrangement.
- Haymarket car park compensation – **tie** have agreed compensation with NR. **tie** continue to discuss with TS the additional compensation payable to First ScotRail, as a result of the extension of the FSR franchise from Nov 2011 to Nov 2014. It is believed that this should have been

- allowed for in the franchise extension discussions between TS and FSR. **tie** have taken the matter up directly with TS and are awaiting a confirmed position from TS;
- Building fixings – There is now no impediment to BSC starting the process to progress with the building fixing installations and work is due to start in February.
  - Interfaces are being managed to ensure that the SRU accommodation works and events are cohesive. **tie** have now agreed approach to the design and construction of the works with SRU.

#### **Burnside Road Realignment**

- The wearing course of the new road has deteriorated and requires significant remedial works which need to be completed prior to Handover to BAA. The handover is expected to be completed by 14/02/10
- The works are otherwise significantly complete with snagging works and final commissioning remaining.
- The Asset Integration documentation will be completed with the as-built drawings and the final commissioning documents.
- Planned Completion Date was 12<sup>th</sup> January 10 and will be amended on review of the Contractor remedial works programme.
- BAA has requested a set of 2-way traffic lights be installed at each end of the single lane section of the new road to control traffic in the event of a barrier system failure. The mitigation initially anticipated involving manning of the barriers however the BAA resources may not be available. **Tie** has requested an estimate from the Contractor which will be issued to BAA for acceptance.

#### **MUD Works at Edinburgh Airport**

- The foul main tie-ins were completed and the walkway reinstated by 6.00am on 19<sup>th</sup> January 10.
- The Asset Integration/As-built documentation was issued to BAA on 8<sup>th</sup> December 09. This is being updated with the HV and the foul main as built details for issue to BAA.

#### **Section 1 Utilities**

- C4 agreements with Scottish Power, Scottish and Southern Energy, BT, Tele West and GEO are all to be agreed.
- Scottish Water are still to approve the protection proposals including the adoption of the sewer design at Ocean Drive.
- The way-leaves through ADM Milling are in the process of being finalised and these documents have been approved by Forth ports and are awaiting signed off by ADM.
- The licence with ADM is in place and works commenced as of 30<sup>th</sup> November. The tender works exclude all diversions in plates 11-17 and there remains substantial utility works in plates 14-17 to resolve.
- Clancy Docwra are processing with the relocation of utilities out of Lindsay road. BT and GEO cable diversion works will dictate the programme and are expected to be completed in Q1.

#### **Murrayfield Pitches (Souters)**

- Lessons learned session yet to be held following which a Close out report will be prepared. Hand-over meeting with SRU currently being arranged by **tie** for late January / early February.

#### **Invasive Species**

- Guarantee received from TCM covering the Russell Road area to Roseburn Street (this guarantee includes the plant removal carried out during December 2009). Currently issues regarding possible live Japanese Knotweed at the Roseburn Junction, to be discussed and followed up with TCM.

#### **Cemetery Wall on Constitution Street**

Pricing for the works to the Cemetery Wall removal and rebuild were produced at the end of Period 11 – **tie** presently reviewing.

### 3 Headline cost report

#### 2.9. Current financial year

	FY 09/10			FY 09/10			FY 09/10			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			
Total Project COWD	6.858	13.714	-6.857	94.586	122.589	-28.003	114.503	150.072	-35.569	328.615	204.694	533.309
Other Funding	0.566	1.132	-0.566	7.810	10.122	-2.312	9.454	12.391	-2.937	27.133	16.901	44.034
Demand on TS	6.291	12.582	-6.291	86.776	112.467	-25.691	105.049	137.680	-32.632	301.482	187.793	489.275

Note: The FY09/10 "Budget" figures in the table above do not include £3.2m for ph1b costs in 09/10 but the "Actual" and "Forecast" figures do include this amount. These ph1b costs were budgeted as "below the line".

- We continue in this report to reflect an outturn estimate of £533.3m. However, as previously reported, given the continuing commercial uncertainties with the Infraco 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.
- Regular briefings are being provided to both CEC and Transport Scotland to keep them updated on progress and implications for the project programme and finances of all the above matters (last TS cost briefing 18<sup>th</sup> January 2010).**
- The budget for ETP in 2009/10 established in April 2009 is £150.1m (£153.3m inc 1b), which was produced linking the tie re-baselined programme to Infraco construction milestones. Tie are now escalating all key issues to Dispute Resolution Procedure (DRP) and other contractual measures following the failure of mediation to provide an acceptable outcome.
- The P11 forecast outturn figure for 2009/10 is £114.5m – unchanged from P10.
- Funding allocated by TS to the project in 2009/10 was £149m. The TS share of this year's updated forecast (£114.5m) is £105.0m, giving available headroom of £44.0m.

#### Actual YTD P11 & forecast P12-P13 FY09/10

£m	YTD P11	Forecast P12-P13,09/10	Total FY09/10
Infrastructure and vehicles	67.4	15.8	83.2
Utilities diversions	10.5	0.7	11.2
Design	2.0	0.6	2.6
Land and compensation	0.8	0.0	0.8
Resources and insurance	13.9	2.8	16.7
<b>Base costs</b>	<b>94.6</b>	<b>19.9</b>	<b>114.5</b>
Risk allowance	0.0	0.0	0.0
<b>Total Phase 1a</b>	<b>94.6</b>	<b>19.9</b>	<b>114.5</b>

- Key sensitivities to the latest milestone forecast to P11-P13 09/10 are:

- On Street: Haymarket to Shandwick Place -£206k risk and Balfour Street -£78k
- Other Milestones: NR Immunisation -£100k risk
- It should be noted that there is £1,256k of change forecast in Periods 12 & 13 of 2010/11.

There will be slight variances in the values of change forecast (+/-) as we move through P12 & 13 as and when the value of these changes are valued and agreed with the Infraco.

- ETP COWD in FY09/10 to Period 11 is £94.6m (Period 10 - £87.7m) against budget £122.6m (excl 1b). The key drivers for the -£28.0m variance are: the timing of Infraco works costs planned in 2009/10 offset by MUDFA spend incurred over the original 09/10 budget plan.

As previously reported and agreed with CEC and TS, initial milestones under the Infraco and Tramco contracts in the aggregate amount of £24.2m, 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 2009/10 and future years.

## 2.10. Current financial year profile

### Profile for FY09/10

£m	Q1 (p1-3)	Q2 (p4-6)	Q3 (p7-10)	Q4 (p11-13)	Total FY09/10
Infrastructure and vehicles	15.8	18.5	28.5	20.4	83.2
Utilities diversions	3.2	4.3	2.2	1.5	11.2
Design	0.7	0.4	0.6	0.8	2.6
Land and compensation	0.6	0.1	0.1	0.0	0.8
Resources and insurance	2.9	3.5	6.1	4.1	16.7
<b>Base costs</b>	<b>23.2</b>	<b>26.9</b>	<b>37.6</b>	<b>26.8</b>	<b>114.5</b>
Risk allowance	0.0	0.0	0.0	0.0	0.0
<b>Total Tram</b>	<b>23.2</b>	<b>26.9</b>	<b>37.6</b>	<b>26.8</b>	<b>114.5</b>

- A full reforecast of the Infraco 2009/10 cost profile was produced in period 10. In the absence of any updated agreed programme from the Infraco contractor, the reforecast has been informed by linking the latest **tie** programme to Infraco construction milestones and taking a best view of what is likely to be achieved in the year. The realigned base costs and risk have then been linked against this programme.

## 2.11. Total project anticipated forecast cost

### Re-baselined Phase AFC and profiling

£m	Cum FY07/08	Actual 08/09	FY 09/10	FY 10/11	FY 11/12	AFC
Infrastructure and vehicles	30.7	45.4	83.2	113.9	29.4	302.5
Utilities diversions	18.4	33.4	11.2	-3.5	0.0	59.4
Design	24.4	4.7	2.6	1.8	0.6	34.1
Land and compensation	16.8	1.7	0.8	0.7	0.8	20.9
Resources and insurance	42.8	15.8	16.7	13.3	11.7	100.2
<b>Base costs (inc 1b)</b>	<b>133.1</b>	<b>101.0</b>	<b>114.5</b>	<b>126.1</b>	<b>42.5</b>	<b>517.1</b>
Risk Allowance	0.0	0.0	0.0	16.2	0.0	16.2
<b>Total</b>	<b>133.1</b>	<b>101.0</b>	<b>114.5</b>	<b>142.3</b>	<b>42.5</b>	<b>533.3</b>

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

- The table above reflects the base costs and risks aligned to the **tie** re-baselined programme (Feb-12), and is informed by the re-alignment of the Infraco milestones schedule for 2009/10 in-line with the latest live programme and assessment of deliverables. The AFC above includes an unapproved increase of £15.1m to the project risk allowance. The approved cost estimate for delivery of Phase1a of the project remains at £512m. The phasing of the £533.3m has been updated in period 10 by **tie**, and will be further updated when there is an updated agreed programme with the Infraco contractor.
- An updated forecast profile for 2010/11 and future years was presented to Transport Scotland on 18<sup>th</sup> Jan-10 at Buchanan House** following a full review of construction deliverables in 2010/11 with Infraco Project Managers, the Infraco Director and Tram Project Director.



## 4 Time schedule report

### 2.12 Report against key milestones

In advance of developing agreement with BSC, tie has developed an unapproved recalibrated baseline programme which reflects an Open for Revenue Service date of 23 Feb 2012. A completely unmitigated programme as a control scenario only has also been produced which shows a date of 17 Oct 2012. However, the live programme has been used to generate the milestone data below and this is based on all current information fed into the master programme. This indicates an open for revenue service date of late December 2012.

*(The agreed baseline programme reference for this project is that at Financial Close leading to revenue service in July 2011.)*

Milestones	Baseline programme date	BSC Rev 2 programme – unapproved *	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	02 Apr 07A
TRO process commences	14 Dec 07A		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	Mar-10	22-Feb-09A
Tramco / INFRACO – award following CEC / TS approval and cooling off period and SDS novation.	28 Jan 08	14 May 08A	14 May 08A
Construction commences	14-Apr-08	14-May-08A	14-May-08A
First track installation commences – on street	03-Nov-08	09-Jun-09	Jun 2009A
Carrick Knowe Bridge commences	21-Aug-08	31-Mar-09	19-Aug-08A
A8 underpass commences	08-Aug-08	12-Jan-09	28-Aug-08A
Haymarket viaduct commences	08-May-08	18-Jun-09	01-Sep-08A
Edinburgh Park viaduct commences	06-Aug-08	02-Dec-08	01-Sep-08A
Tram mock-up delivered	Oct 2008		Nov 2008A
Demolition of Wanderers clubhouse	25-Aug-08	01-Jun-09	05-Jan-10A
Edinburgh Park viaduct complete	24-May-09	14-Oct-09	Apr-10
Princes Street re-opened	01-Aug-09	15-Jun-10	29-Nov-09A
NR immunisation complete	Nov 2009		Sep-10
Utilities works complete (including telecoms)	Nov 2008	Sep-09	Sep-10
All demolition work complete	22-Aug-08	Sept-10	May-10
All Issue for Construction (IFC) drawings delivered (inc Gogar interchange design)	21-Jan-09	08-Oct-09 (not inc Gogar interchange)	Aug-10
Haymarket viaduct complete	08-Dec-08	07-Jan-10	Jul-10
All consents and approvals granted	18-May-09		Aug-10
Design assurance complete	20-Jan-09		Aug-10
1 <sup>st</sup> Tram delivered	09-Apr-10	09-Apr-10	09-Apr-10
Carrick Knowe bridge complete	11-May-09	24-Dec-10	Nov-10
A8 underpass complete	14-Jul-09	30-Sep-10	Dec-10
Roseburn viaduct commences	20-Jan-09	20-Oct-09	Jun-10
TRO process complete	01-Dec-09		Jul-10
Driver recruitment commences	July 2010		Oct-10
1 <sup>st</sup> OHL installed (Commence Section 2)	11-Dec-09	Dec-10	Nov-10
1 <sup>st</sup> section (other than depot) complete ready for energisation (2)	25-June-10	May-11	Dec-10
Commission Section 2 (Haymarket to Roseburn junction)	11-Jan-10	Dec-11	Dec-10
Final tram delivered	17-Jan-11	May-12	17-Jan-11

Milestones	Baseline programme date	BSC Rev 2 programme – unapproved *	Actual / current forecast date tie live prgm
Driver training commences (depot only)	Dec-10	Jun-11	Jan-11
Commission Section 6 (depot)	25-Mar-10	Jun-11	Aug-11
Roseburn viaduct complete	20-Apr-10	Jun-09	Jun-11
Test track complete	23-Apr-10	16-Aug-11	Jan-12
Commission Section 7 (Gogar to Edinburgh Airport)	25-June-10	Oct-11	Jan-12
Commission Section 1 (Newhaven to Haymarket)	11-Mar-11	May-12	Jul-12
Commission Section 5 (Roseburn junction to Gogar)	09-Nov-10	Feb-12	Jul-12
Driver training commences (excludes depot)	Nov 2010	Aug-11	Aug-12
System testing complete off street	09-Dec-10	Mar-12	Aug-12
Construction Line 1a complete	17-Jan-11	05-Apr-12	Jul-12
System testing complete on street	16-Feb-11	May-12	Aug-12
Letter of “no objection” from Independent Competent Person to commence tram running	17-Apr-11	May-12	Oct-12
Shadow running starts	18-Apr-11	Jul-12	Oct-12
Shadow running complete	July 2011	Oct-12	Jan-13
Letter of “no objection” from Independent Competent Person to commence revenue service	July 2011	Oct-12	Jan-13
Open for revenue service	July 2011	October 2012	Jan-13

\*BSC Rev 2 programme is not an agreed Contract programme

**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.

### 2.13. Key issues affecting schedule

tie and BSC have now entered into an agreed timetable to build and prepare a revision 3 programme. The first draft was received 1<sup>st</sup> February 2010 with a programme workshop schedule for 3<sup>rd</sup> February to review.

### 2.14. 12-Week look-ahead

Until the revised programme 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.

Milestones	Actual / current forecast date
1C3 – Telecoms Works St Andrew Square to Princes Street West recommence	04-Jan-10A
2A – Haymarket viaduct recommence	04-Jan-10A
5A W4 Russell Road retaining wall piling recommence	04-Jan-10A
5C – A8 Underpass –Combined phase ½ recommence	04-Jan-10A
1C Utility Diversions between Picardy Place and St Andrew Square continue	05-Jan-10A
5A Demolition of Wanderers Clubhouse continue	05-Jan10A
5B Trackworks Balgreen Rd Saughton Road North	05-Jan10C
1A – Continue Utility Diversions Newhaven to Ocean Terminal	06-Jan-10A

Milestones	Actual / current forecast date
1B – Telecoms Works Jane Street to McDonald road	20-Jan-10S
1A – Newhaven Rd to Ocean Terminal – ch 0000-0160 – Roadworks	01-Feb-10S*
1A – Newhaven Rd to Ocean Terminal – ch 0000-0160 – Trackworks	01-Feb-10S*
1A – Newhaven Road Tramstop	01-Feb-10S
1D – Haymarket ch 1250-1125 – Roadworks Phase 1	01-Feb-10S*
2A –Trackworks Haymarket to Roseburn Junction -1135m	01-Feb-10S
5A Construct New Scotrail Carpark	01-Feb-10S
5C W16 Commence Gyle Stop RW	01-Feb-10S
5C S32 Commence Depot Access bridge	01-Feb-10S
5C Trackworks Depot Stop to Gogarburn	01-Feb-10C
6 Depot Earthworks	01-Feb-10C
7 Burnside Road construction	14-Feb-10F
1A3 Commence Temporary Platforms and Demolition Tower Place bridge	08-Feb-10S
6 Depot Building Pits	08-Feb-10S
1A – Commence Utility Diversions Bernard Street to Foot of the Walk	09-Feb-10S
6 Depot Building Steelwork	09-Feb-10F
1B – Leith Walk – ch 350-100 – Roadworks	15-Feb-10S*
1C1 – Telecoms Works McDonald Rd to Picardy Place	15-Feb-10C
1D - Shandwick ch 850-440 - Roadworks Phase 1	15-Feb-10S*
1A – Commence Utility Diversions Port of Leith to Bernard Street	16-Feb-10S
1B - Leith Walk - ch 600-850 - Roadworks	01-Mar-10S*
7 W14/W15 Gogarburn RW	01-Mar-10S
1C2 – Telecoms Works Picardy Place to St Andrew Square	02-Mar-10C
1B Complete Utility snagging between Foot of the Walk and Balfour Street	08-Mar-10F
5A Murrayfield Stadium Accommodation Works (excludes clubhouse)	08-Mar-10S
7A S29 Gogar Underbridge	11-Mar-10F
5B Bankhead Drive TS	15-Mar-10S
1B Complete Utility snagging between Balfour Street and McDonald Road	17-Mar-10F
6 Depot Sub-station	22-Mar-10S
5A W18 Murrayfield TS RW	29-Mar-10S
1A Lindsay Rd Retaining Wall B	05-Apr-10S
1C3 – Track works Waverley bridge junction to South St Andrew Square	05-Apr-10S
5C Complete S27 Edinburgh Park Station bridge	06-Apr-10F
1D Complete Utility diversions Haymarket to Shandwick Place	07-Apr-10F
5A S20 Russell Road bridge Piling	12-Apr-10S
5B Trackworks Saughton Rd to Bankhead (Guided Busway)	20-Apr-10F

\* Subject to agreement on OSSA

A = Actual date

S = Forecast Start Date

F = Forecast Finish date

C = Continuing Works

## 5 Risk and opportunity

### *2.15. Review of risk register*

#### **Summary**

There were eight risk reviews held in the period. One item was closed on the Infraco concerns register. There were eight draw downs on the risk allowance approved in the period totaling £976,587. These are detailed later in this report. This leaves a risk and contingency balance of £1,149,021 (based upon the approved Project Risk Allowance at Financial Close).

#### **Risk and Opportunity Reviews**

The following reviews took place in the period:

<b>Date</b>	<b>Format of review</b>	<b>Attendees</b>	<b>Comments</b>
25/1/10	Depot Risk Review	Project Risk Manager Project Manager	Risks and Treatment Plans Reviewed
25/1/10	Signalling, Communication and Control (SCC) Risk Review	Project Risk Manager Project Manager	Risks and Treatment Plans Reviewed
26/1/10	Structures Risk Review	Project Risk Manager Project Manager	Risks and Treatment Plans Reviewed
26/1/10	Network Rail Risk Review	Project Risk Manager Project Manager	Risks and Treatment Plans Reviewed
27/1/10	Roads and Drainage Risk Review	Project Risk Manager Project Manager	Risks and Treatment Plans Reviewed
26/1/10	Sections 1C & 1D Risk Review	Project Risk Manager Project Manager	Risks and Treatment Plans Reviewed
27/1/10	High-level Infraco Risk Review	Project Risk Manager Infraco Director	Risks and Treatment Plans Reviewed
27/1/10	Utilities Risk Review	Project Risk Manager Mudfa Construction Director	Risks and Treatment Plans Reviewed

#### **Risk Register**

The Primary Risk Register is attached at Appendix D. The Primary Risk Register contains those high impact risks which are impacting (or have the potential to impact) the project at this moment in time. In addition, the potential risks identified in regard to programme slippage are being reviewed periodically and will form part of the updated QRA. There are 46 risks in the risk register. The top five project risks are listed on the following pages.

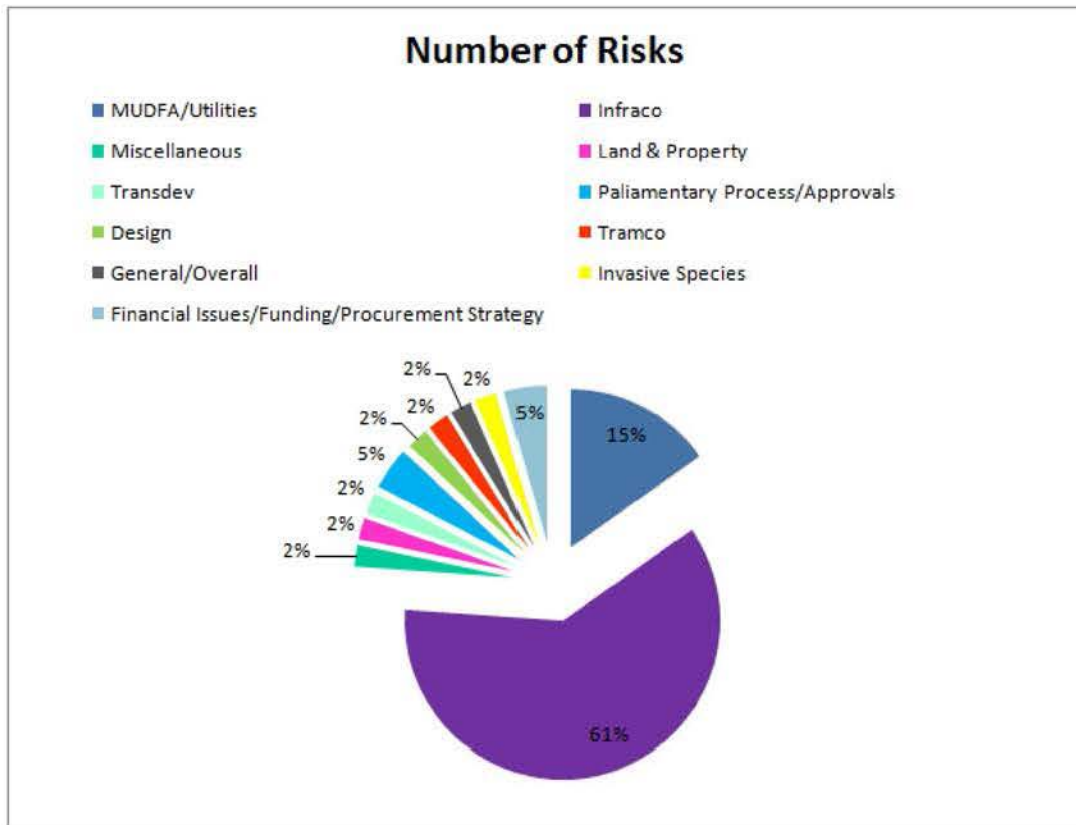
Top 5 Risks - Period 11 0910

Risk Description											
ARM Risk ID	Cause	Event	Effect	Risk Owner	Significance	Black Flag	Treatment Strategy	Previous Status	Current Status	Due Date	Action Owner
543	General delay to programme with various causes e.g. failure to obtain approvals on time, parliamentary processes, contractor issues.	Delay to completion of project.	Increased out-turn cost due to delay plus revenue loss	S Bell	High - 25.00		DRP on programme management (EOT1)	Complete	Complete	30-Oct-09	S Bell
							Liason between tie/BSC programme managers	On Programme	On Programme	30-Dec-11	T Hickman
							Programme Management Panel process	On Programme	On Programme	30-Dec-11	F McFadden
							Weekly tie/BSC commercial meetings	On Programme	On Programme	30-Dec-11	M Paterson
1077	Base Date Design Information to Issued For Constructions (BDDI-IFC). Lack of visibility of design changes between November 2007 and May 2008	Tramworks price based on a design which may have been altered. Unclear who authorised design change.	Additional cost and programme delay	S Bell	High - 15.00		Establish a process which will act as a control mechanism for design changes. (If one exists already then ensure process is complied with)	Complete	Complete	30-Jun-09	T Glazebrook
							Intensive Mediation Marathon 29/6/09 to 6/7/09 to try and resolve issues.	Complete	Complete	30-Jun-09	S Bell
							Mediation resulted in no overall agreement on BDDI - IFC although it gave useful background information. Strategy paper to be presented to TPB on 29 July to seek approval for way forward including utilising necessary contract mechanisms (DRP, ...)	Complete	Complete	14-Aug-09	S Bell
							Of the issues previously highlighted as going through DRP, 1 has been ruled in favour of tie, 2 have been agreed, 2 have been ruled in BSC's favour and this is being reviewed by tie. Further issues are due to enter DRP in December 09 and January 10.	On Programme	Complete	31-Jan-10	S Bell
							Resolution Strategy approved - 1st DRP to go 10th August, audit requests to BSC for information going w/c 3.8.09	Complete	Complete	10-Aug-09	S Bell

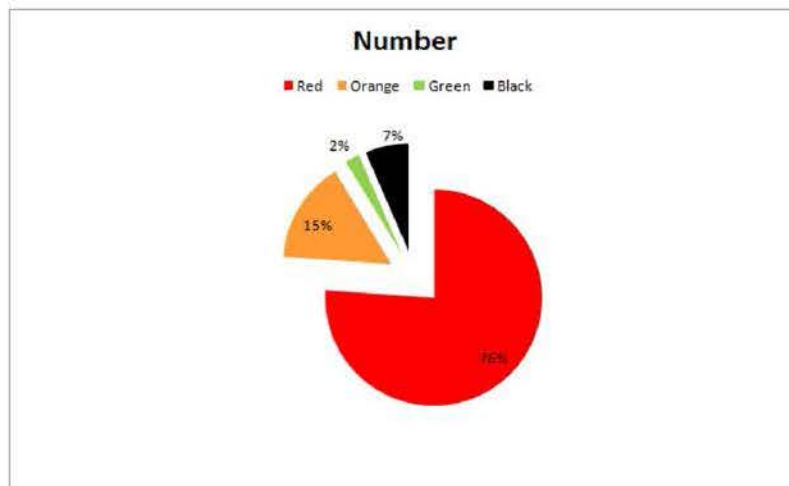
Top 5 Risks - Period 11 0910

Risk Description												
ARM Risk ID	Cause	Event	Effect	Risk Owner	Significance	Black Flag	Treatment Strategy	Previous Status	Current Status	Due Date	Action Owner	
1091		Excavation of soft, unsuitable material below Earthworks outline	Additional cost	F McFadden	High - 25.00		Donaldsons to carry out surveys	Complete	Complete	30-Jul-09	C Neil	
							Extent of soft ground being investigated. External specialist advice deployed.	On Programme	On Programme	31-Mar-10	M Paterson	
1101	Unreasonable behaviour of BSC commercial management	Unrealistic estimates being submitted for potential changes	Programme delay while disputes regarding estimates are resolved	F McFadden	High - 25.00		Additional resource from TNT	Complete	Complete	30-Jul-09	M Paterson	
							Agreed with BSC for independent evaluation to get benchmark	Complete	Complete	30-Jul-09	M Paterson	
							All estimates to be scrutinised by the commercial team and, where appropriate, challenge made to BSC. Additional resource (T&T) being used to check estimates to reduce delay.	On Programme	On Programme	30-Dec-10	M Paterson	
1104	Design changes following utility diversions	Utilities affected by subsequent kerb realignments (primarily westside of Leith Walk)	Re-diverting of utilities with additional cost and programme delay	G Barclay	High - 25.00		Following identification of conflicts potential solution such as protection measures to be identified	On Programme	On Programme	1-Jun-10	C Neil	
							Utility conflicts being identified	On Programme	On Programme	1-Jun-10	C Neil	
1094		Roads throughout works require full depth reconstruction	Programme impact plus additional costs. £1.5m cap applies to only 4 areas.	F McFadden	High - 24.00		Carry out surveys to confirm extent of roads requiring full depth reconstruction	Complete	Complete	30-Jun-09	C Neil	
							Suite of options from surveys to be reviewed and agreement reached	On Programme	On Programme	1-Apr-10	M Paterson	

The risks within the Project Risk Register are categorised below.



The ratings of the risks are illustrated below.



**New risks and concerns**

The Project Risk Manager, in conjunction with the relevant director, agrees which concerns are escalated to risks and are added to the Project Risk Register.

**Infraco**

One item on the Infraco Concerns Register was closed in the period :

	Risk description			
	Risk Number	Cause	Risk Event	Effect
Section 7	94	Utility diversion design did not accommodate pre-earthworks drainage	Potential clash between pre-earthworks drainage and utilities	Delay to programme, extension of time claim. Additional costs.

This item was closed as agreement has been reached with BSC regarding changes on this piece of work.

The following five concerns were added in the period by the the Infraco Director and the project manager for Sections 1C and 1D.

	Risk description			
	Risk Number	Cause	Risk Event	Effect
Section 1C & 1D	119	Due to delays BSC subcontractors are paying staff off	Lack of available suitable and competent resources for BSC	Poor workmanship. Programme delay
Section 1D	120	Listed wall on crescents at Shandwick Place	BSC have yet to resolve the issue of the walls around the crescents on Shandwick Place which require to be rebuilt for the construction of the OLE bases and other works	Programme delay
Section 1C & 1D	121	OLE bases to be installed on footpaths where collars and utilities exist	Obstacles prevent construction of OLE bases	Programme delay, additional cost
General	122	Utility works being transferred to Infraco	Insufficient funds are available to be transferred from MUDFA to cover the cost of outstanding utility works.	increased unbudgeted cost
General	123	Allowances made in MUDFA account for betterment	Misalignment in calculation of betterment between tie and SUCs results in lower payments being received from SUCs than what has been previously been budgeted	increased unbudgeted cost



## Transport Edinburgh

### Edinburgh Trams

#### Lothian Buses

FOISA  
exempt  
 Yes  
 No

### 2.16. 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	Action Name	Due	Active	Complete	Late	Next 3 periods
A Richards	901	657	Infraco/Tramco/operator to implement.	31/03/2010	Yes	No	No	Period 13
B Campbell	999	656	Bus concessionary fare support scheme currently under review. New proposals for bus and tram will be submitted in autumn 2009.	30/03/2010	Yes	No	No	Period 13
C Neil	1076	645	Tramworks PMs attendance at Traffic Management meetings. Weekly meetings between the Tramworks and Utilities PMs. 4-weekly between Tramworks/Utilities management meetings. Identification of programme clashes between Tramworks and Utilities works tracked.	31/03/2010	Yes	No	No	Period 13
D Sharp	271	559	Assure the quality and timing of submissions	31/03/2010	Yes	No	No	Period 13
D Sharp	44	467	Fortnightly Meetings of Approvals Task Force.	31/03/2010	Yes	No	No	Period 13
D Sharp	279	636	Fortnightly Meetings of Approvals Task Force.	31/03/2010	Yes	No	No	Period 13
D Sharp	271	637	Fortnightly Meetings of Approvals Task Force.	31/03/2010	Yes	No	No	Period 13
F McFadden	914	573	SDS to obtain consent for design in accordance with programme requirements - SGN and Scottish Power. Complete with exception of plates 1-10 and 15-17 the redesign of the affected utilities at Plamerston Place.	31/03/2010	Yes	No	No	Period 13
M Blake	164	42	In conjunction with MUDFA, undertake trial excavations to confirm locations of Utilities and inform designer. York Place to Picardy Place and particularly Broughton St Junction IFC design incompatible with congested utilities	31/03/2010	Yes	No	No	Period 13
M Blake	139	42	In conjunction with MUDFA, undertake trial excavations to confirm locations of Utilities and inform designer. York Place to Picardy Place and particularly Broughton St Junction IFC design incompatible with congested utilities	31/03/2010	Yes	No	No	Period 13
M Paterson	1091	667	Extent of soft ground being investigated. External specialist advice deployed.	31/03/2010	Yes	No	No	Period 13
M Paterson	1094	673	Suite of options from surveys to be reviewed and agreement reached	01/04/2010	Yes	No	No	Period 1
W Biggins	911	628	Liase with Scottish Power to agree and approve method of crossing tunnel.	31/03/2010	Yes	No	No	Period 13

### 2.17. Cost Quantative Risk Analysis

The QRA which was in place at Financial Close was reviewed and amended in Period 9 08/09. A further review of the QRA was carried out in Period 13 08/09 and Period 1 09/10, with the results presented as a range of possible outcomes. The revised range of numbers was used to inform a range of numbers for the overall budget.

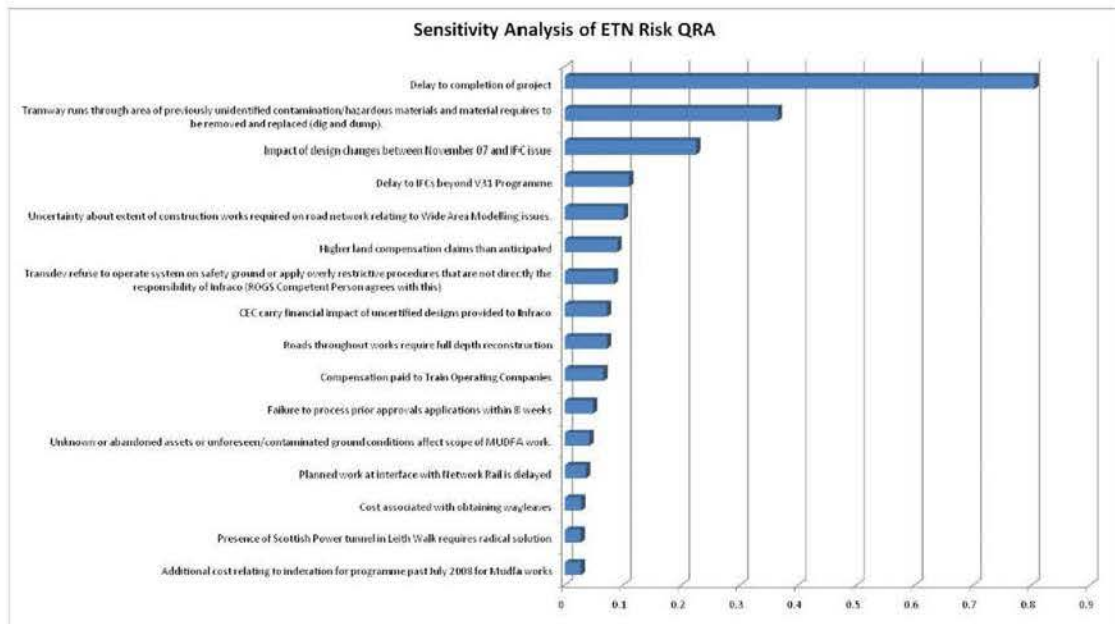
The Project Risk Allowance at financial close was £30,336,196. Drawdowns to the end of Period 11 09/10 now total £29,187,175. Remaining risk balance based on the approved QRA is £1,149,021.

Risk drawdown

The following table illustrates the drawdown applications on the project risk and contingency allocations in Period 11.

Description	Owner	Value (£)
Edinburgh Park Bridge South Abutment	Mike Paterson	-9,495
Drainage Review Eastfield Avenue	Mike Paterson	-1,065
A8 Underpass Gogarburn Retaining Walls, Existing Services	Mike Paterson	- 20,324
Baird Drive retaining wall	Mike Paterson	-578,530
Tower Bridge Amendments	Mike Paterson	2,706
Balgreen retaining wall	Mike Paterson	-230,554
Utility Conflicts	David Carnegie	-69,272
MUDFA Design - Update Utility Drawings	David Carnegie	- 70,053
<b>Total</b>		<b>976,587</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.

# Transport Edinburgh

Edinburgh Trams

Lothian Buses

FOISA  
exempt  
 Yes  
 No

## 2.18. Schedule QRA

**tie** is currently working with the supplier of Active Risk Manager (ARM – the risk management software which **tie** uses) with a view to integrating Primavera and ARM so that a schedule risk analysis can be developed. A schedule QRA will be created following agreement of the recalibrated programme.

### Opportunities

#### Highlights

The following opportunities have progressed well and commercial agreement needs to be reached as to any cost or programme savings, as the opportunity has been agreed in principle with Siemens. The project manager requires assistance in confirming these details. There are further savings possible in each of the opportunities below regarding civils costs however these have not been discussed with BB.

Discipline	Opp Number	Opportunity Event	Opp owner
Track	29	50metre radius curve at Gogar - at the moment the trackform will be embedded. Opportunity to convert to ballasted.	W Biggins
Track	34	ERs identified 43 sets of breathers and expansion joints around structures throughout network. BSCs proposal is to install 5 sets. Saving of cost of 38 sets.	W Biggins
BT Cabling	36	£250k cabling programme planned for Hope St junction. IF BT can be convinced to leave in situ then this will represent a saving.	GB/CN
Network Rail	37	tie have paid NR risk fee totalling £510k to date with potential to increase to £900k. Possibility of (a) recouping the spend or (b) saving the remainder	GB/CN
Track	40	Change rail section in all tramstops (in the off street section) from grooved to S49 rail. This would provide a cost and productivity saving.	W Biggins
Track	42	Section 5Y (within 5B) - opportunity to remove asphalt, which has been noted as a requirement by CEC planner in the section from east side of Edinburgh Pk tram halt to Edinburgh Pk viaduct approach, and continue the S49 on track ballast from the pedestrian crossing to the approach to Edinburgh Pk viaduct. (removes 100m of grooved rail with crossover and 2 transition slabs and improves productivity)	W Biggins
Track	43	Re-railing points - 15 no identified in ERs for the depot area. These could be removed with resultant saving in cost and productivity	W Biggins
Track	44	Ground Improvement layer - adopt BAM's preliminary design for the floating slab developed to incorporate the noise and vibration measures.	W Biggins
Track	45	Edinburgh Pk green track - soft ground through Edin Pk limits what can be installed. Opportunity is to change trackform to ballasted. Substantial cost saving as civils cost will be less.	W Biggins
Depot	46	Eliminate soil nailing in preference for 1:2 batter. This would provide a mitigated cost increase	A Scott
Track	54	Opportunity to convert from direct fix to Rheda City C trackform at Approach to South Gyle Access Bridge (49m) East side of Bankhead Stop (33m) Eastern ramp at Edinburgh Park Station Bridge (72m) East Side of Castle Gogar Access Rd (679m) Departure side of IPR stop (104m) Gyle Tramstop to south side of A8 (165m)	W Biggins

## 6 Health, safety, quality and environment

### 2.19. H&S accidents and incidents, near misses, other or initiatives

HS&E ACCIDENTS and INCIDENTS SUMMARY											
Total	Total Hours	>3 day	Major	Injury	NM/Unsafe Condition	Service Damage	ENV	RTA	MOP	AFR	SFR
Period	64,779	0	0	1	16	4	2	0	1	0.00	6.17
13 period rolling	1,659,566	1	1	30	246	136	16	9	58	0.12	8.19



As for Period 10 there has been a reduced amount of construction work carried out during Period 11 due to the Christmas holiday and lack of on-street work progression. There have been no reportable accidents during Period 11; however there was one minor injury.

Despite the slow start to 2010 there have been new sites opened up across the City by the new Utilities contractor, Clancy Docwra. A number of excavations have been carried out, reopening areas previously backfilled by Carillion as well as a number of new areas. To date during Period 11 there have been two significant service strikes, one for BSC and one for Clancy Docwra.

There has been a reduction in the number of interactions with members of the public during Period 11. To date, no MOP incidents have been reported against Clancy Docwra.

Due to the incident during Period 10 involving Clancy Docwra excavating too close to a gas main, there is ongoing monitoring of works by tie and assurances are being given to SGN.

The number of **tie** PM inspections planned vs. completed has improved since last period.

Two incidents occurred within the Network Rail Corridor during Period 11 where BSC used lifting equipment out with the agreed Work Package Plan and failure to comply with Network Rail "failsafe" requirements, **tie** have instigated a number of inspections and an investigation with BSC. The report will be finalized by close of Period 12. A simple guidance is being produced by BSC.

#### Environment

There was an environmental incident involving the pumping out of an excavation onto the roadway. **tie** to investigate Clancy Docwra's drainage and discharge plan.

The guarantee was received from TCM covering the removal/treatment of invasive species from Russell Road to Roseburn Street. Copy of guarantee formally submitted to BSC.

A formal letter was sent to BSC requesting the re-submittal of the Project Environmental Plan; including associated documents i.e. Invasive Species Plan and Drainage Plans.

An IEMA visit took place 21<sup>st</sup> January. Presentations given by **tie** and BSC and site visit carried out. Delegates included amongst others, Scottish Water, Scottish and Southern, Mott MacDonald and Herriot-Watt University.

**Deliver a Safe Tram (Quality)**

Section	Activity	Data Checked					
		Interdisciplinary Design Check	Hazards	Inspection and Test Plan System	Design Variation/Change	As Built	Asset Register
Gogarburn Depot	Drainage	0	On Hold	1	0.5	1	N/A
Russell Road Retaining Wall	Piling	0.5	On Hold	0.5	1	1	N/A
Guided Busway	Drainage/Track Welding	0.5	On Hold	1	1	1	N/A
<b>PD</b>	<b>Total (y)</b>	<b>1</b>	<b>0</b>	<b>2.5</b>	<b>2.5</b>	<b>3</b>	<b>0</b>
	<b>Max Possible Total (y)</b>	<b>3</b>	<b>0</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>0</b>
<b>Total to date</b>	<b>Percentage P10</b>	<b>26%</b>	<b>69%</b>	<b>91%</b>	<b>63%</b>	<b>76%</b>	<b>50%</b>
	<b>Percentage P11</b>	<b>27%</b>	<b>69%</b>	<b>90%</b>	<b>66%</b>	<b>80%</b>	<b>50%</b>

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

There has been little movement or improvement in the evidence provided by BSC proving that the design has been subject to a full Inter-Disciplinary Design Check. There is evidence however, that for the inspection at Russell Road, the Piling operation had been subjected to an Inter-Disciplinary review meeting where all parties were present.

To help establish if BSC are improving their integrated approach to design and construction a detailed audit took place on the 28<sup>th</sup> & 29<sup>th</sup> January. The audit explored what steps BSC have taken to date to produce an integrated design for specific areas of the project, namely Leith Walk and Gogar Landfill.

Initial discussions regarding the SVS of Princes Street works have taken place but due to pending audits on BSC/SDS this exercise has been postponed until Period 13/01.

**tie** witnessed BSC informally audit their subcontractors *completion* records for Princes Street. An interim records pack had been issued to **tie** for information but it was agreed that **tie** would not accept any information until it was formally issued by BSC with the appropriate assurance signatures i.e. BSC Project Director. **tie** will be monitoring the progress of the compilation of records on a weekly basis.

After a discussion with BSC regarding the close out of the Project Hazard Log, it has been agreed to remove it from the weekly inspection as there has been little or no change for specific activities since the start of the inspections. BSC will provide a 4 weekly verbal commentary on the holistic progress of close out of the hazard log.

From the inspections carried out during Period 11 there was no evidence of IDR/IDC for the depot drainage but BSC were able to provide evidence of an IDR workshop for Russell Road.

BSC quality checks (ITP's) were in place and being utilised for the drainage but only partially utilised for the works at Russell Road.

BSC have been able to demonstrate good progress with as-builts for the areas checked.

**Action to be taken**

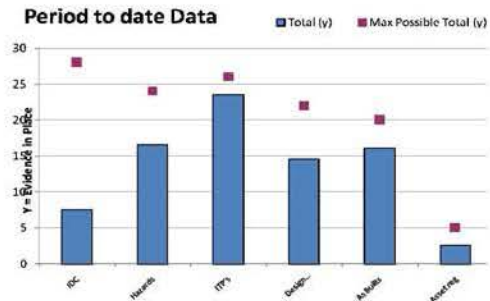
Design integration audit planned for 28<sup>th</sup> and 29<sup>th</sup> January.

**tie** will monitor the weekly progress of the compilation of the Princes St documentation.

**tie** plan to audit BSC Princes Street documentation mid February.

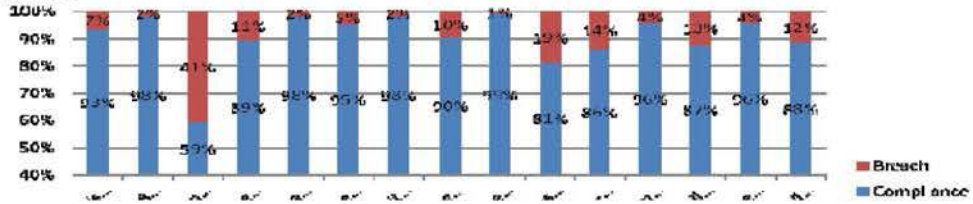
SVS of Princes Street will be pursued

**Period to date Data**

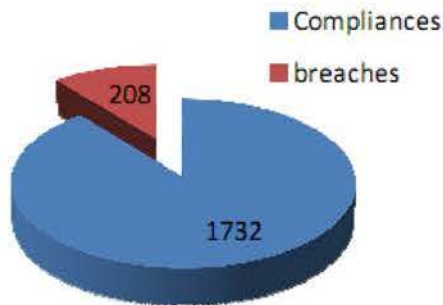
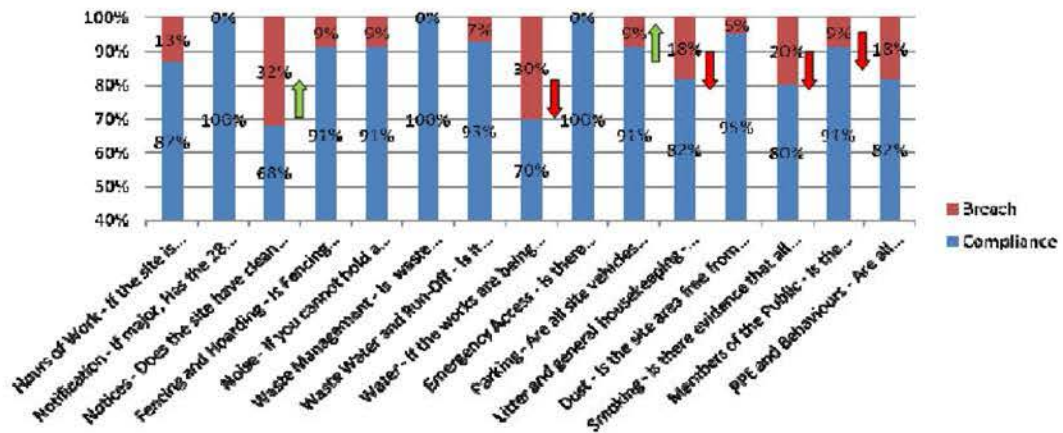


**Code of Construction Practice Period 11**

Period to Date



Period 11



CoCP compliance continues to be monitored by **tie**, on the whole there has been little movement in the month, however there has been an improvement in the number of information notices posted and car parking but a decrease in compliance with water run off, smoking and PPE. These are being actioned specifically with, in the main, Clancy Docwra and Farrans.

## 7 Stakeholder and Communications

### Media / Press Activity

The media activity has been limited to a small, but robust number of enquiries relating to the current dispute. In particular, focus has been around the recent adjudication however, reports have been on the whole speculative rather than factual, and have not been particularly prominent. Further focus has centred around works due to commence over the coming few weeks including the Broughton Street, Shandwick Place, Haymarket, Leith Walk and York Place/Dublin Street areas in particular.

Media reporting has been shifted to a more negative tone in relation to the dispute resolution process; however we have undertaken a number of mitigation measures where inaccurate or misleading information has been published.

Our main focus remains with highlighting progress mainly on off-street works of the trams project. Further media coverage can be expected during the coming reporting period as further updates outlining planned works along the route are issued to local residents, businesses and the press. This is particularly going to be increased when a number of key traffic routes within these areas are closed for tram works. However, extensive liaison work continues with local communities as well as the local press to provide as much detail and advance notice as possible in relation to the planned works. We can also expect to see some further speculation in the press regarding the dispute as the resolution process continues to run its course out with of the public view.

Over the coming weeks and months we will continue to focus on the progress of the ambitious programme of works, particularly on the off-street sections including, Carrick Knowe Viaduct, Burnside Bridge at the Airport; Haymarket Viaduct, Edinburgh Park Viaduct, Gogarburn Bridge and Gogarburn Depot.

### Public Information Planning

Gateway signage is in the process of being planned for the Gogar Tram Depot, with the hope of placing a full sized image of the tram vehicle along a section of the depot frontage. The hope with this signage is to raise the profile of the Depot's purpose and for promotion of the project and its various partners.

A sub-group is currently progressing with options for the branding of the Edinburgh Tram livery, a vital visual component of the final tram vehicle and the image of the service.

Signage for Edinburgh Park is being considered ahead of the tram works stage of construction for this section of the route. The signage will be for public information and awareness of the projects route through the business park area and the service that we will provide.

TRO information is also due to be placed throughout February at around 600 locations across the city, while signage for Dublin Street is to be erected during Period 12.

### Partner and Stakeholder Communications

Updates for St Andrews Square, Haymarket and Broughton Street have all been delivered during Period 11 and give an update to the programme of works due to commence in each area.

A number of update notifications have been sent to residents and businesses along Ocean Drive and Lindsay Road for works that are due to commence or are ongoing in their area.

## **Transport Edinburgh**

### **Edinburgh Trams**

#### **Lothian Buses**

FOISA  
exempt  
 Yes  
 No

Ocean Drive notices included information on the start date for track laying, bridge works at Tower Bridge and BT cabling works. A final notice has also been distributed to the residents of Tower Place regarding the inspection of their premises prior to the works on Tower Bridge.

Transformer visits to tram work sites are in the process of being arranged at the moment and will take place in the next few months. Workshops are also being conducted by members of the Communications team as part of a careers workshop programme. The next workshop will take place on February 23<sup>rd</sup> to a group of Primary 7s at Firhill High School.

A Photo Update of the project has been produced which gives a visual account of the works progress from 2009. Pictures which feature in the update include the reopening of Princes Street, the construction of Gogar Depot alongside images of the track laying on the guided busway. Several pictures also illustrate the progress being made on off road structures such as the viaducts at Edinburgh Park and Burnside. We have received good feedback on the update as it provides excellent insight into the project. The update will be produced bi-monthly in order to track the progress of different sections of the route.

The following meetings were held with stakeholder groups during period 11 to discuss our upcoming works in 2010 and mitigation measures to reduce the effects of the work on individual businesses:

- West End Traders
- An assortment of Leith Walk businesses
- Lothian Assessors

Edinburgh Trams was represented by the Communications team at the Holyrood Communications Infrastructure Conference 2010.

Aside from the meetings listed above, constant communication between businesses and residents continued on a daily basis.

#### **Website / Internet Communications**

There were 11401 visits to the [www.edinburghtrams.com](http://www.edinburghtrams.com) website, a further drop from Period 10. This drop was anticipated and reflects a reduction in the amount of new information posted in this period and that no new podcasts were released.

Despite this drop in traffic to our main website, the number of followers on twitter has risen to 538 against last period's 475. Facebook membership broke the 500 mark this period, reaching 520.

Video podcast views remain high at 2060 for the existing downloads available from [www.edinburghtrams.com](http://www.edinburghtrams.com). Despite this, there has been a drop in referrals to the parent site from new video postings on our social media sites, contributing to the overall reduction in traffic.

RSS feeds, which actively push information to users were accessed 4,109 times this period – remaining fairly constant despite the overall reduction in user traffic this period. This indicates that people who have signed up to alerts still elect to read these and follow associated links.

"Local Updates" on construction work, traffic management and the route alignment remain in first place for RSS alerts this period.

#### **Logistics**



## **Transport Edinburgh**

**Edinburgh Trams**

**Lothian Buses**

FOISA  
exempt  
 Yes  
 No

The logistic team are now working on Haymarket Terrace as a consequence of the various traffic diversions around the area as well as the general Haymarket to Palmerston Place works.

Broughton St/Picardy Place now has a logistic presence to cover the closure of Broughton St at York Place. This is likely to remain in place until the end of February/early March.

Specific areas where there are still mass barriers and coning, notably sections of Leith Walk and Princes St, are still being maintained by the team with cleaning duties being carried out every alternate day.

### **Freedom of Information Requests**

Freedom of Information Requests for Period 11 are as follows. Currently there are 5 FOI requests in the process of being compiled, while there are 2 FOI requests with the Information Commissioner. Eight requests have been completed over the last few weeks.

### **Customer Service Activity**

The incoming correspondence for Period 11 has dramatically increased since Period 10. Period 10 logged a total of 199 contacts, while Period 11 experienced an increase of 217 contacts, bringing its total correspondence to 416. Two reasons for this increase can be seen in the fact that there were no contacts at all during the final week of Period 10 due to the holiday period, and also because of our reduced state of working in the run up to Christmas and over the festive period. The reason for this was because of the Christmas embargo on city centre working and our goodwill gesture to the rest of the city that we removed our worksites.

Emails and Phone calls remain the main channels of enquiry for this period logging 198 and 150 contacts respectively. Face to Face correspondence has featured more as a channel for public enquiry than Period 10, however only logged 49 contacts. As worksites begin again over the coming months the need to liaise directly with businesses and residents through our Tram Construction Advisors will attribute to F2F contacts increasing each Period. The remaining contacts were received via Letters, of which there were 19.

Information Requests managed to accumulate a massive 358 contacts for Period 11 which were concerned with a range of issues. This left 58 contacts to be distributed across the remaining subjects of correspondence. Four Complaints were logged for Period 11, mainly concerning the installation of traffic diversions. One complaint however was regarding the pavement access for a mobility scooter. Two main areas of enquiry were noted for incoming correspondence, with Building Fixings and the public seeking Employment on the project being logging 21 and 15 contacts each.

**Customer Service Figures**

a) Transport Scotland - Monthly Customer Service Report 03/01/2010 - 29/01/2010

Item	Volume Month	Volume (Cumulative from 21/11/08)	Performance (Month)	Performance (Cumulative)	Target Performance
Telephone response	194	3674	96	97	90% in 30 seconds
Telephone Same day resolution	184	3536	95	96	Info only
Email acknowledgement	154	2033	100		100% acknowledged within 24 hours
Email response			100	99	90% resolution in 7 days
Email same day resolution	141	1844	93	91	Info only
Letter acknowledgement	8	161	100		100% acknowledgement within 24 hours
Letter response			100	95	100% resolution in 7 days
Total Enquiry Volumes	356	5868			
Website update	153	1152	100	100	Weekly

b) Out of Standard/Work in Progress statement at month end 29 Jan. 2010

		Volume of WIP @ m/end	Oldest date	Oldest Issue	Handled By
M/e 29 Jan. 2010	Email	1	27/01/2010	Design of tram vehicle	Alastair Richards
	Letters	0	N/A	N/A	N/A
	Calls	2	26/01/2010	Lining work in Haddington Place	Graeme Younger

c) Monthly Notifications Performance 03/01/10 to 29/01/2010 and Cumulative from 21 November 2008

0 Major notifications – all for utility and in standard  
 9 Minor notification – 7 for utility and 5 in standard. Two for Tram works and 1 in standard  
 0 Emergency notifications

**Transport Edinburgh**  
**Edinburgh Trams**  
**Lothian Buses**

FOISA  
 exempt  
 Yes  
 No

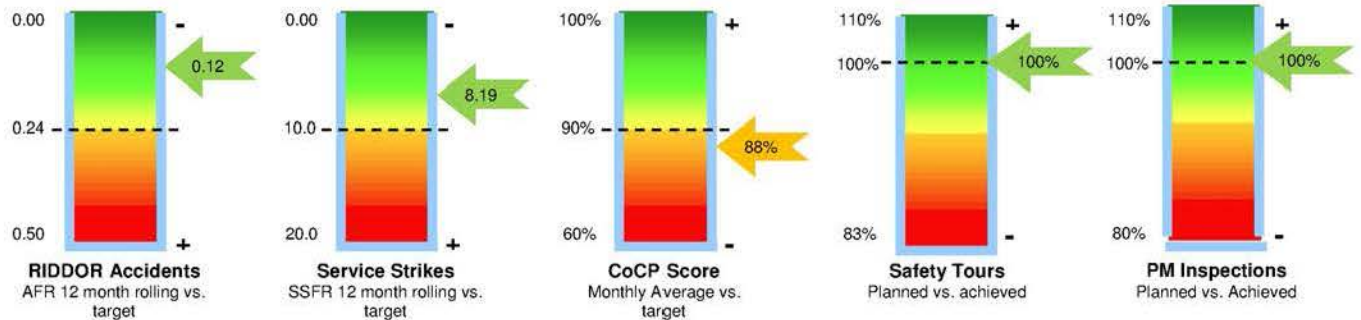
Notification Type		Work Site	Utilities	Tram works	Total	% in Standard
Major works	Month	Notifications	0	0	0	
		In Standard	N/A	N/A	N/A	N/A
	Cumulative	Notifications	10	5	15	
		In Standard	4	2	6	67
Minor Works	Month	Notifications	7	2	9	
		In Standard	5	1	6	67
	Cumulative	Notifications	87	34	121	
		In Standard	73	25	98	81
Emergency	Month	Notifications	0	0	0	
		In Standard	N/A	N/A	N/A	N/A
	Cumulative	Notifications	14	0	14	
		In Standard	14	0	14	100



# Deliver the Tram Safely

Company Report – Period 11 09/10

HS&E ACCIDENTS and INCIDENTS SUMMARY											
Total	Total Hours	>3 day	Major	Injury	NM/Unsafe Condition	Service Damage	ENV	RTA	MOP	AFR	SFR
Period	64,779	0	0	1	16	4	2	0	1	0.00	6.17
13 period rolling	1,659,566	1	1	30	246	136	16	9	58	0.12	8.19
BSC	Total Hours	>3 day	Major	Injury	NM/Unsafe Condition	Service Damage	ENV	RTA	MOP	AFR	SFR
Period	35,329	0	0	1	6	1	0	0	1	0.00	2.83
13 period rolling	823,024	0	0	16	70	33	8	1	26	0.00	4.01
Other Tram including MUD2	Total Hours	>3 day	Major	Injury	NM/Unsafe Condition	Service Damage	ENV	RTA	MOP	AFR	SFR
Period	10,000	0	0	0	10	3	2	0	0	0.00	30.00
13 period rolling	74,185	0	0	1	35	11	6	0	2	0.00	14.83
Carillion	Total Hours	>3 day	Major	Injury	NM/Unsafe Condition	Service Damage	ENV	RTA	MOP	AFR	SFR
Period	5,000	0	0	0	0	0	0	0	0	0.00	0.00
13 period rolling	524,657	1	1	13	137	92	2	8	29	0.38	17.54



**EXECUTIVE SUMMARY**

- As for Period 10 there has been a reduced amount of construction work carried out during Period 11 due to the Christmas holiday and lack of on-street work progression. There have been no reportable accidents during Period 11; however there was one minor injury.
- Despite the slow start to 2010 there have been new sites opened up across the City by the new MUDFA contractor, Clancy Docwra. A number of excavations have been carried out, reopening areas previously backfilled by Carillion and a number of new areas. To date during Period 11 there have been two significant service strikes, one for BSC and one for Clancy Dowcra.
- There has been a reduction in the number of interactions with members of the public during Period 11. To date, no MOP incidents have been reported against Clancy Docwra.
- Due to the incident during Period 10 involving Clancy Docwra excavating too close to a gas main, there is ongoing monitoring of works by **tie** and assurances are being given to SGN.
- The number of **tie** PM inspections planned vs. completed has improved since last period.
- Following the incidents with BSC placing plant out with agreed Work Package Plan and failure to comply with Network Rail "failsafe" requirements, **tie** have instigated a number of inspections and an investigation with BSC.



# Deliver the Tram Safely

Company Report – Period 11 09/10

HS&E INSPECTIONS SUMMARY <small>(a summary of significant inspection findings can be found in appendix B)</small>		
Project Running Totals	HS&E Tours	HS&E PM Inspection
Number planned	6	15
Number achieved	6	15

- | HS&E KEY ACHIEVEMENTS  |
|--|
| <ul style="list-style-type: none"> <li>• No reportable accidents</li> <li>• Back to work / CoCP briefing took place during the first week back to work. Approx 90 contractors briefed.</li> <li>• Site visit and presentation given by tie and BSC to IEMA (Institute of Environmental Management Assessment) visitors to the Tram Project.</li> <li>• The tie HSQE internal website was launched this period</li> </ul> |

## HS&E KEY ISSUES/ AREAS OF CONCERN/ GENERAL NOTES

- SGN have formally expressed concerns to tie regarding procedural non-compliance by tram contractors engaged on gas related activities. Following consultation with SGN it was agreed that the tie HSQE department will undertake supplementary site inspections to provide additional assurance to both SGN and tie that gas related activities are compliant with relevant gas operational procedures and safe systems of work. The output will also provide indicative information on the continuing adequacy of the various contractors' own inspection and test plan arrangements.
- Despite Clancy Docwra investigating and re-briefing operatives after the initial gas/SGN near miss, a second near miss was noted on 19.01.10 involving the pecking out of concrete with mini digger. Large concrete debris was seen to be falling onto an exposed 315mm gas main. tie senior management are meeting with Clancy senior management to discuss further.
- Clancy Docwra suspended work at Haymarket area due to lack of welfare/services due to severe weather (water supply frozen). Works recommenced later that day after an additional welfare unit was brought to site.
- There were two separate phone calls allegedly from a BSC subcontractor (Barr) to the H.S.E complaining about welfare, lighting and access at the depot site. tie has liaised with the HSE and BSC. A site visit was undertaken by tie H&S and the Infraco Director and no issues were identified relating to the complaint. All complaints have been closed out in with the HSE. tie have discussed with BSC how improvements can be made to encourage workers to report complaints direct to them.
- Scottish Water have commenced DOMs (water hygiene and control) audits on Clancy Docwra and Farrans. They have confirmed that both contractors comply with requirements. DOMs audits have also commenced on BSC.
- A contractor was engaged in construction by tie to install a temporary power supply to Haymarket Station. The contractor was not on the approved list and not given formal information about hazards prior to starting on site. Incident raised, work stopped until checks and approval given. Issue discussed with PM's and Infraco Director.
- Two recent incidents along the Network Rail Corridor highlighted lack of planning and supervision of lifting equipment. tie and BSC safety teams are investigating further to ensure that improvements will be made.

## SIGNIFICANT RISKS FOR THE NEXT PERIOD

RISK	ACTION
<ul style="list-style-type: none"> <li>• Restart of Haymarket Viaduct – Grahams, contractor to BSC.</li> <li>• Continuation and start of Clancy Docwra works at sections 1C &amp; 1D.</li> <li>• New areas of work starting – BSC on-street works pending supplemental agreement, Haymarket/Shandwick place.</li> <li>• Other contracts – SRU, Gyle Utilities, Gogar Interchange etc.</li> <li>• Gas abandonments at Shandwick Place and Constitution Street.</li> <li>• Piling operations close to cast iron gas mains at Russell Road and Baird Drive.</li> </ul>	<ul style="list-style-type: none"> <li>• WPP reviewed, prestart checklist in place. Working close to Network Rail land.</li> <li>• Mini audit of Clancy Docwra planned for Period 12 to assess adequacy and success of start up.</li> <li>• WPP start on site checklist to be used. Prestart meeting to be set up prior to works commencing to discuss site management and set up specifically.</li> <li>• Health and Safety Pre-construction plans being developed. Prestart meetings will be held as appropriate</li> <li>• Notification to residents, appraisal of Clancy Docwra's Safe System.</li> <li>• Liaison with SGN and BSC regarding safe method and protection of main.</li> </ul>



# Deliver the Tram Safely

**Company Report – Period 11** 09/10

## ENVIRONMENTAL SUMMARY

*List any significant environmental events, initiatives, breaches etc*

- There was an environmental incident involving the pumping out of an excavation onto the roadway. **tie** to investigate Clancy Docwra's drainage and discharge plan.
- Guarantee received from TCM covering the removal/treatment of invasive species from Russell Road to Roseburn Street. Copy of guarantee formally submitted to BSC.
- Formal letter sent to BSC requesting the re-submittal of the Project Environmental Plan; including associated documents i.e. Invasive Species Plan and Drainage Plans.
- IEMA visit took place 21<sup>st</sup> January. Presentations given by **tie** and BSC and site visit carried out. Delegates included amongst others, Scottish Water, Scottish and Southern, Mott MacDonald and Herriot-Watt University.

## QUALITY SUMMARY

*List any significant quality events, initiatives, breaches etc*

- **tie** witnessed BSC informally audit their subcontractors completion records for Princes Street. An interim records pack had been issued to **tie** for information but it was agreed that **tie** would not accept any information until it was formally issued by BSC with the appropriate assurance signatures i.e. BSC Project Director.
- Douglas Ross, BSC Quality Manager left the project on the 8<sup>th</sup> January 2010. Arran Haynes will act as Quality Manager until a replacement is found.
- All CUS redline and L&M survey drawings received and passed to SDS.
- Further Q&E inspections arranged to be carried out at Farrans and Clancy sites 4<sup>th</sup> Feb 2010.
- BSC audit on Depot drainage to be carried out 27<sup>th</sup> Jan 2010.

## BEST PRACTICE

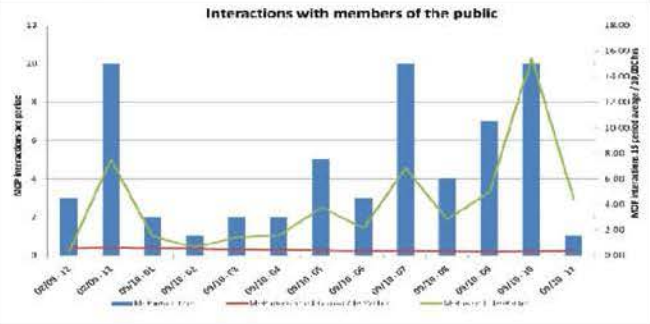
*List any significant quality events, initiatives, breaches etc*

- **tie** released its 4<sup>th</sup> Occupational Safety Standard on the use and installation of temporary pedestrian ramps, this has been distributed to all **tie** contractors and key staff.
- The Health and Safety Executive have interviewed **tie** and written an article for their in-house magazine. The article discusses the issues around the project and the good health and safety record achieved so far. Paul Colquhoun, **tie** Health and Safety Manager and Murray Provan, HSE Inspector are featured in the article.
- **tie** HSQE and senior management carried out a back to work briefing to **tie**, BSC and other contractors. The talk included reiterating the requirements of the CoCP.

## MEMBER OF PUBLIC INTERACTION SUMMARY

*List any significant interactions with members of the public, including RTA's, alleged incidents*

- There has only been one Member of Public incident recorded this period. The MOP brushed against a pedestrian crossing pole that had recently been painted and damaged his jacket.

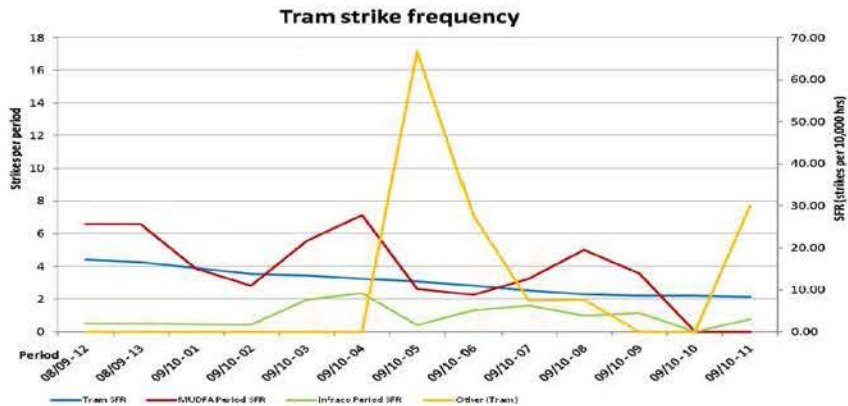
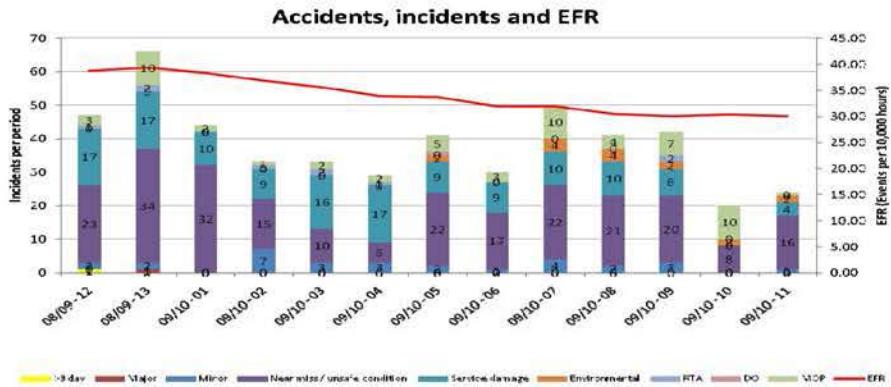


## GRAPHS



# Deliver the Tram Safely

Company Report – Period 11 09/10





# Deliver the Tram Safely

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## APPENDIX A SIGNIFICANT ACCIDENT / INCIDENT

<b>AIIR Ref:</b>	AIIR01110	<b>Serious/Significant</b>	<b>Yes</b>	<b>Action taken by tie (if required):</b>
<b>Contr Ref:</b>		<b>Description:</b>		
<b>Project</b>	Other Tram	When breaking out concrete from around a water main concrete spoil was observed to be falling on top of a nearby live gas main.		tie site supervisor stopped works until safe practices were put in place. tie HSQE to investigate with Clancy Docwra. Disciplinary warning to driver being considered by Clancy.
<b>Location:</b>	Palmerston Place junction			
<b>Date &amp; Time</b>	19-01-10 at 2.00pm			
<b>A/I type:</b>	Near Miss/Unsafe Condition	<b>Action taken by Contractor:</b>		
<b>Contractor</b>	Clancy Docwra	Works were stopped until plywood protection had been installed around the gas main. To prevent any similar incidents in the future the Clancy Docwra team will be given a Tool Box talk on safe practice while working on similar activities		
<b>tie PM:</b>	Michael Blake			

<b>AIIR Ref:</b>		<b>Serious/Significant</b>	<b>Yes</b>	<b>Action taken by tie (if required):</b>
<b>Contr Ref:</b>	N/A	<b>Description:</b>		
<b>Project</b>	Other Tram	Contractor working on site to install a temporary power supply to Haymarket Station. Contractor employed by tie. Contractor was not on the tie approved contractor list and was not provided with hazard information by tie as required by the CDM regulations. Although BSC's subcontractor was informed and given details of the work to be undertaken, BSC themselves as Principal Contractor were not informed that the contractor would be working on site.  Method statements had been checked by tie and local co-ordination with BSC subcontractor had taken place.		No further works are to be carried out until contractor is approved. Infraco Director is investigating reasons for process breach. Meeting held 25 <sup>th</sup> Jan 2010 to discuss further.
<b>Location:</b>	Haymarket Station			
<b>Date &amp; Time</b>	15.01.10			
<b>A/I type:</b>	Near Miss	<b>Action taken by Contractor:</b>		
<b>Contractor</b>	Babcock Rail	Contractor questionnaire issued to contractor, awaiting response		
<b>tie PM:</b>	Michael Blake			

<b>AIIR Ref:</b>	AIIR 01113	<b>Serious/Significant</b>	<b>Yes</b>	<b>Action taken by tie (if required):</b>
<b>Contr Ref:</b>		<b>Description:</b>		
<b>Project</b>	INFRACO	60t crawler crane delivered to site by BSC contractor Grahams. Crane jib length identified in WPP as 9m, actual jib length on crane on site 36m, therefore crane was not failsafe to the operational railway. Site personnel not briefed on WPP.  Work stopped by contractor after prompt from tie.		Site meeting held with BSC/NR. Investigation underway along with the incident at the guided bus-way. Report will be finalized by close of Period 12
<b>Location:</b>	Haymarket Viaduct			
<b>Date &amp; Time</b>	20-01-10 AM			
<b>A/I type:</b>	Near Miss/Unsafe Condition	<b>Action taken by Contractor:</b>		
<b>tie PM:</b>	Tom Cotter	Crane moved to a failsafe position, until crane is either removed from site or the jib length adjusted to ensure it can be operated in a failsafe manner.		
<b>Contractor:</b>	BSC			
<b>Sub Contr:</b>	Grahams			





# Deliver the Tram Safely

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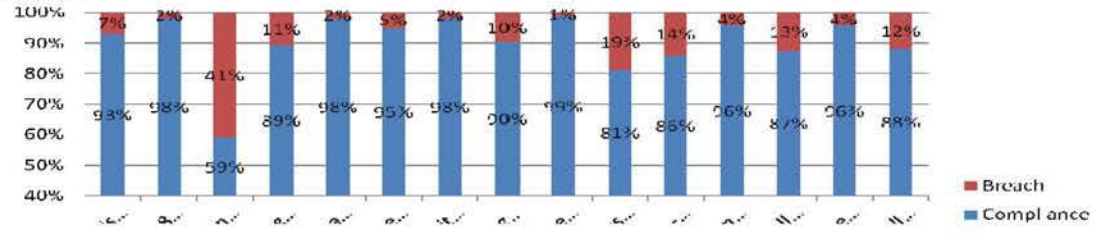
<b>AIIR Ref:</b>	01115	<b>Serious/Significant</b>	<b>Yes</b>	<b>Action taken by tie (if required):</b>
<b>Contr Ref:</b>	Infraco	<b>Description:</b>		
<b>Project</b>	Infraco Guided Busway	Pumping concrete on the Guided Busway in to the Outer loop from the inner works not covered by WPP BSC \$ AB&ABB#0536764 also pump not working in a failsafe to Network Rails Asset		Further investigation is taking place. A report will be finalized by end of period 12. Simple guidance on NR corridor to be circulated by BSC to staff.
<b>Location:</b>	Guided Busway			
<b>Date &amp; Time</b>	22/01 at 13.30			
<b>A/I type:</b>	Near Miss/Unsafe Conditions	<b>Action taken by Contractor:</b>		
<b>tie PM:</b>	W. Biggins	Works stopped on site by BSC after prompts from tie, meeting planned for Monday 25 <sup>th</sup> January with amended WPP to be submitted to include use of concrete pump and control measures to detail how the pump is to works fail safe to NWR asset.		
<b>Contractor:</b>	Siemens			
<b>Sub Contr:</b>	Border Rail			

<b>AIIR Ref:</b>	01117	<b>Serious/Significant</b>	<b>yes</b>	<b>Action taken by tie (if required):</b>
<b>Contr Ref:</b>		<b>Description:</b>		
<b>Project</b>	Infraco	BSC contractor, Graham have struck a cable and damaged the sheathing. Caller reported sheathing as "nicked". No injuries to any personnel. Power outage to Haymarket station due to repairs required. Although cable position was known the assumption of its depth was incorrect.		Further investigation is taking place with BSC. A report will be finalized by end of period 12.
<b>Location:</b>	Haymarket Viaduct Site			
<b>Date &amp; Time</b>	12:00 25-01-10			
<b>A/I type:</b>	Cable Strike	<b>Action taken by Contractor:</b>		
<b>tie PM:</b>	T Cotter	Scottish Power contacted to attend site to make repair. Area has been isolated until Scottish Power attend and make safe. BSC are carrying out investigation into circumstances surrounding incident.		
<b>Contractor:</b>	BSC			
<b>Sub Contr:</b>	Grahams			

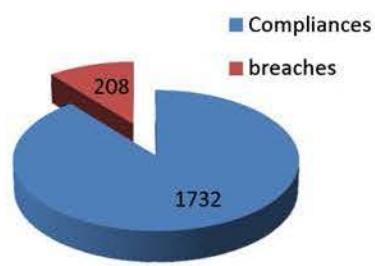
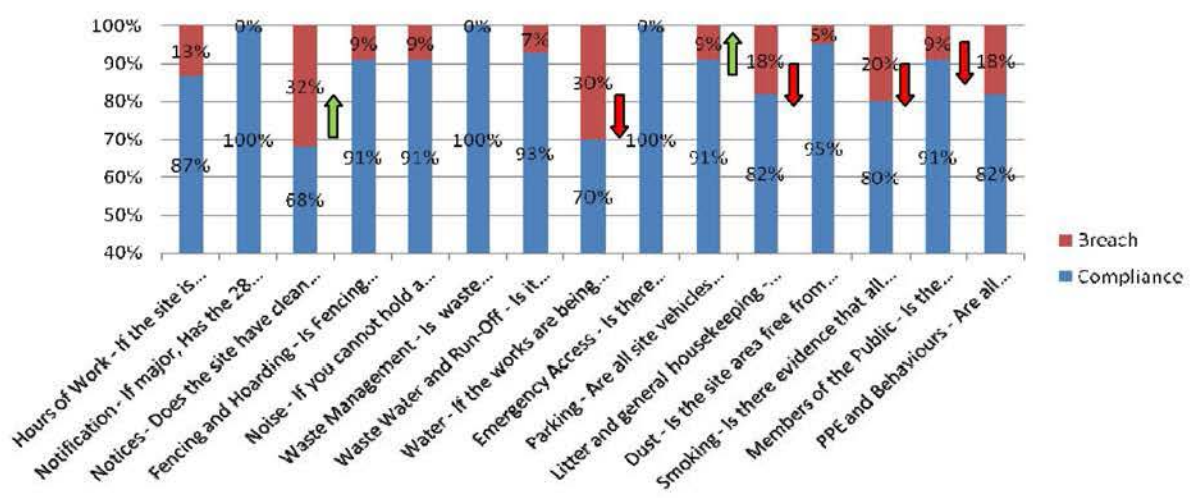
<b>AIIR Ref:</b>	AIIR01123	<b>Serious/Significant</b>	<b>Yes</b>	<b>Action taken by tie (if required):</b>
<b>Contr Ref:</b>		<b>Description:</b>		
<b>Project</b>	Other Tram	Clancy Docwra operatives whilst excavating have struck an 11KV Scottish Power cable during the removal of a bank of assumed redundant ducts. There are no customers reporting outages at time of incident, however, SP later reported a number of outages as a result of the repair.		tie will await Clancy Docwra findings and review the report.
<b>Location:</b>	York Place			
<b>Date &amp; Time</b>	12:00 28-01-10			
<b>A/I type:</b>	Cable Strike	<b>Action taken by Contractor:</b>		
<b>tie PM:</b>	M Blake	Clancy Docwra senior management are investigating this incident. It is the first Power cable strike for the Scottish division in a year of operation.		
<b>Contractor:</b>	Clancy Docwra			
<b>Sub Contr:</b>	N/A			

### APPENDIX B – INSPECTIONS

#### Period to Date



#### Period 11



**Overall compliance level is 88%**



# Deliver a Safe Tram

## Company Report – Period 11

Section	Activity	Data Checked					
		Interdisciplinary Design Check	Hazards	Inspection and Test Plan System	Design Variation/Change	As Built	Asset Register
Gogarburn Depot	Drainage	0	On Hold	1	0.5	1	N/A
Russell Road Retaining Wall	Piling	0.5	On Hold	0.5	1	1	N/A
Guided Busway	Drainage/Track Welding	0.5	On Hold	1	1	1	N/A
<b>PD</b>	<b>Total (y)</b>	1	0	2.5	2.5	3	0
	<b>Max Possible Total (y)</b>	3	0	3	3	3	0
<b>Total to date</b>	<b>Percentage P10</b>	26%	69%	91%	63%	76%	50%
	<b>Percentage P11</b>	27%	69%	90%	66%	80%	50%

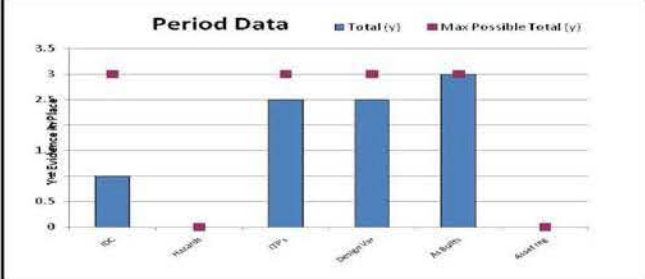
Key - Y = Evidence exists (1) N = No evidence exists (0) NA = Not applicable (-) P = Part evidence in place (0.5)

### 1.0 Deliver a Safe Tram Key Metrics

- There has been little movement or improvement in the evidence provided by BSC proving that the design has been subject to a full Inter-Disciplinary Design Check. There is evidence however, that for the inspection at Russell Road, the Piling operation had been subjected to an Inter-Disciplinary review meeting with all parties were present.
- To help establish if BSC are improving their integrated approach to design and construction a detailed audit was undertaken 28<sup>th</sup> & 29<sup>th</sup> January. The audit explored the steps BSC are taking to produce an integrated design for specific areas of the project, namely Leith Walk and Gogar Landfill. The audit was encouraging and progress has been made in some areas. Some comfort was gained that an integrated approach is being undertaken, however, progress remains slow.
- Initial discussions regarding the SVS of Princes Street works have taken place but due to pending audits on BSC/SDS this exercise has been postponed until Period 13/01.
- **tie** witnessed BSC informally audit their subcontractors *completion* records for Princes Street. An interim records pack had been issued to **tie** for information but it was agreed that **tie** would not accept any information until it was formally issued by BSC with the appropriate assurance signatures i.e. BSC Project Director. **tie** will be monitoring the progress of the compilation of records on a weekly basis.
- After a discussion with BSC regarding the close out of the Project Hazard Log, it has been agreed to remove it from the weekly inspection as there has been little or no change for specific activities since the start of the inspections. BSC will be carrying out a separate exercise to close out the hazard log and will provide a 4 weekly verbal commentary on the holistic progress of close out.
- From the inspections carried out during Period 11 there was no evidence of IDR/IDC for the depot drainage but BSC were able to provide evidence of an IDR workshop for Russell Road.
- BSC quality checks (ITP's) were in place and being utilised for the drainage but only partially utilised for the works at Russell Road.
- BSC have been able to demonstrate good progress with as-builts for the areas checked.

### 1.1 Deliver a Safe Tram – Required Action

- Design integration audit planned for 28<sup>th</sup> and 29<sup>th</sup> January.
- **tie** will monitor the weekly progress of the compilation of the Princes St documentation.
- **tie** plan to audit BSC Princes Street documentation mid February.
- SVS of Princes Street will be pursued

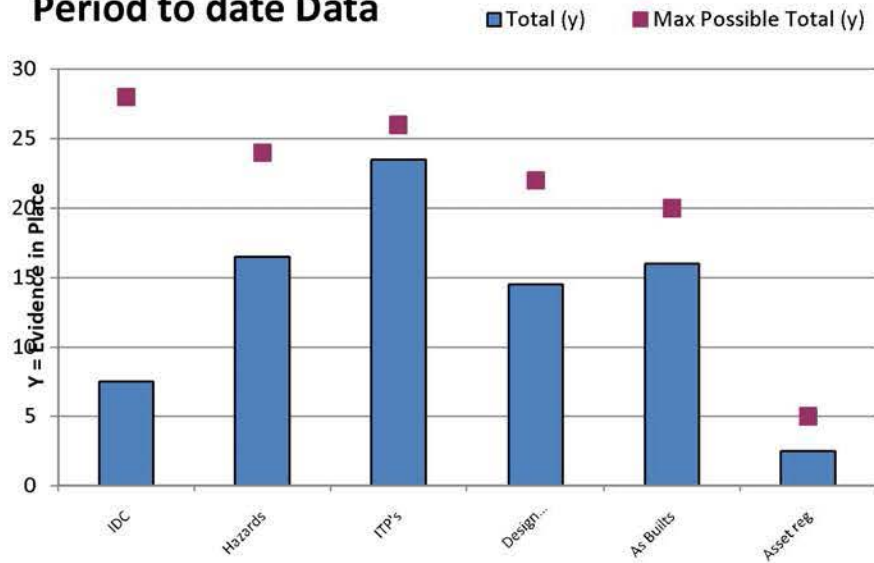




# Deliver a Safe Tram

## Company Report – Period 11

### Period to date Data



### Period Tracker

