



Transport Edinburgh

Edinburgh Trams

Lothian Buses

Tram Project Board Report on Period 10 Papers for meeting 13th January 2010

09:30am – 12:00pm following the tie Board meeting

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

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

In addition – for information only

Cllr Maggie Chapman
Andy Conway
Norman Strachan
Iain Coupar
Susan Clark

Cllr Tom Buchanan
Frank McFadden
Alan Coyle
Gregor Roberts

Dennis Murray
Ailie Wilson
Jim McEwan
Gill Lindsay

TRAM PROJECT BOARD

Transport Edinburgh

Edinburgh Trams

Lothian Buses

FOISA exempt
 Yes
 No

Contents	Page
Agenda Joint Tram Project Board / tie Board	4
Tram Project Board Minutes 16/12/09.....	5
Project Directors' Report	12
Papers for Consideration Period 10 2009/10.....	17
Primary Risk Register	23
Period 10 Transport Scotland Report Sections 2-7	30

Agenda Tram Project Board
Brunel Suite – Citypoint, 2nd Floor

13th January 2009 – 09.30am to 12.00pm following the tie Board meeting

Attendees:

David Mackay (Chair)	Cllr Phil Wheeler	Donald McGougan
Bill Campbell	Richard Jeffrey	Dave Anderson
Steven Bell	Stewart McGarrity	Graeme Bissett
Kenneth Hogg	Cllr Allan Jackson	Alastair Richards
Cllr Ian Perry	Cllr Gordon Mackenzie	Neil Scales
Marshall Poulton	Brian Cox	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 10
 - 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 February 2010
- 5 AOB

* (papers in pack)

Edinburgh Tram Network Minutes

STRICTLY PRIVATE AND CONFIDENTIAL

Tram Project Board

16th December 2009 (10:30 to 13:00)

tie offices – Citypoint II, Brunel Suite

Members:			
David Mackay (Chair)	DJM	Bill Campbell	WWC
Richard Jeffrey	RJ	Donald McGougan	DMcG
		Cllr Gordon McKenzie	GMcK
In Attendance:			
Steven Bell	SB	Marshall Poulton	MP
Stewart McGarrity	SMcG	Kenneth Hogg	KH
Brian Cox	BC	Cllr Ian Perry (Part Time)	IP
Graeme Bissett	GB	Cllr Phil Wheeler (Part Time)	PW
Andy Conway	AC	Cllr Allan Jackson	AJ
Alastair Richards	AR	Mandy Haeburn-Little	MHL
Dave Anderson	DA	Alasdair Sim (minutes)	AS
Neil Scales	NS		

Apologies:

Peter Strachan

1.0	Introduction, Review of Previous Minutes and Matters Arising	
1.1	DJM 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 18 November and the Minutes from this meeting were taken as read.	Note
2.0	Chief Executive's Summary	
2.1	<p>RJ presented a verbal update to the Board. The key points arising from these discussions are summarised below:</p> <p><u>Return of Buses, Taxis and Cycles to Princes Street</u></p> <p>It was a significant milestone for the whole team (client, contractor and stakeholders) that the opening of Princes Street was achieved as planned on 29 November 2009. It was acknowledged that this was a great boost to the City and this has been reflected in reporting across all forms of media. RJ noted that a great deal of knowledge has been acquired as a result of this construction process with regard to physical performance of the contractor, construction methodology, cost/time impacts/implications, as well as relationship management with a broad range of stakeholders.</p> <p>It was noted that the December/Christmas Embargo has offered respite to the City from construction works, and that this has been positively received from</p>	

	<p>the retail community and residents alike.</p> <p><u>Relationship with BSC</u></p> <p>It was noted that BSC's recent behaviour reflects a hardening of their tactical commercial position, and that despite some previously reported positive indications; the rate of on the ground production remains very poor (at around 0.6% per month) and 12.5% completion since May 2008. A significant ramp up in production would be necessary to achieve the desired opening for revenue services date.</p> <p>Agreement has yet to be reached on a set of On Street Supplemental Agreements (OSSA) for the remaining tram construction works between Haymarket and Newhaven, and BSC have indicated that they are not prepared to commence works without these.</p> <p>RJ discussed a range of strategic options to addressing these concerns, noting that he had undertaken discussions with other client groups who have worked with Bilfinger Berger on projects around the world as part of this exercise.</p> <p>The Board approved the necessary additional and robust steps to be taken in the short term to target and enforce the full range of commercial mechanisms available within the Contract.</p> <p>The Board instructed the CEO to investigate the withdrawal of the offer to BSC approved at the 18/11/09 TPB, for an interim award of 9 months relief and 6 months costs (refer to Section 3.3).</p> <p>RJ reported that he has taken steps to dedicate commercial resources to deploy the agreed strategy, including the services of Tony Rush who has a considerable reputation in the construction industry; specialising in disputes and claims. Further papers will be prepared on the longer term strategic options for the Board to consider.</p> <p>DMcG noted that both Transport Scotland and The Scottish Government should be kept informed on the agreed approach, DJM confirming that this was the case.</p>	
<p>3.0</p>	<p>Building the Tram</p>	
<p>3.1</p>	<p><u>HSQE</u></p> <p>SB referred the Board to the statistics outlined in the Project Director's report in the Board Papers.</p>	
<p>3.2</p>	<p><u>Overview of Progress (Infraco)</u></p> <p>No further discussion on BSC progress.</p>	
<p>3.3</p>	<p><u>Overview of Progress (Utilities)</u></p> <p>SB reported that the Carillion workscope has now been closed down and that Clancy Docwra have been engaged to complete the utilities diversions at Haymarket and York Place to Annandale Street. These works will start up after the December Embargo.</p> <p>It was acknowledged that the outstanding claims in relation to the Carillion Contract are unlikely to be resolved by negotiation, and that a formal route to resolution is anticipated.</p> <p>Works at Edinburgh Airport (being undertaken by Farrans) are 98% complete with some scheduled connections works taking place in the New Year at the request of BAA. The Section 1A Utilities diversions are ongoing to programme with Farrans working on Ocean Drive, and Clancy Docwra undertaking a package of work to divert utilities at Lindsay Road, also on programme at</p>	

	<p>present.</p> <p>As agreed at the previous TPB, SB presented an overview of the expected betterment settlement assessments for each of the utilities providers. As agreement is reached with the relevant parties the risk associated with this revenue stream will reduce. SB to prepare a quarterly report to the Board for review.</p> <p>SB confirmed that there is some residual Scottish Water valve/chamber works to be completed at The Mound, this will not involve a closure of Princes Street and the works will be undertaken utilising local traffic management.</p>	<p>SB</p>																																													
<p>3.4</p>	<p><u>Change Requests and Risk Drawdown</u></p> <p>SB referred the Board to the approved change orders arising during Period 9, these are summarised below:</p> <table border="1" data-bbox="231 771 1366 1347"> <thead> <tr> <th>Reference</th> <th>Purpose & Value</th> <th></th> </tr> </thead> <tbody> <tr> <td>COP175</td> <td>Carrickknowe – works outwith the LOD</td> <td>£4,324</td> </tr> <tr> <td>COP185a</td> <td>Haymarket BDDI-IFC Increase</td> <td>£67,315</td> </tr> <tr> <td>COP202</td> <td>Network Rail Costs</td> <td>£644,128</td> </tr> <tr> <td>COP204</td> <td>Boundary Hedge At Gogarburn</td> <td>£5,369</td> </tr> <tr> <td>COP205</td> <td>Depot Access Road Specification</td> <td>£78,675</td> </tr> <tr> <td>COP206</td> <td>Ground level changes at Edinburgh Park Bridge</td> <td>£62,851</td> </tr> <tr> <td>COP207</td> <td>TRO Consultation Plans</td> <td>£23,480</td> </tr> <tr> <td>COP208</td> <td>A8 Underpass, existing 1-way BT service</td> <td>£22,847</td> </tr> <tr> <td>COP209</td> <td>Trail soil nailing – Russell Road Underbridge</td> <td>£44,718</td> </tr> <tr> <td>COP210</td> <td>Approach Ramps – Edinburgh Park Bridge</td> <td>£185,000</td> </tr> <tr> <td>COP213</td> <td>Design changes for MUDFA</td> <td>£3,527</td> </tr> <tr> <td>COP215a</td> <td>Lochside Avenue Junction to adoptable standard</td> <td>£40,071</td> </tr> <tr> <td>COP219a</td> <td>Depot Floor Pit for turntable</td> <td>£8,914</td> </tr> <tr> <td></td> <td></td> <td>£1,191,219</td> </tr> </tbody> </table> <p>The Board noted the Change Control Status at Period 9.</p> <p>SB referred the Board to a separate paper on Risk contained within the Board Papers.</p>	Reference	Purpose & Value		COP175	Carrickknowe – works outwith the LOD	£4,324	COP185a	Haymarket BDDI-IFC Increase	£67,315	COP202	Network Rail Costs	£644,128	COP204	Boundary Hedge At Gogarburn	£5,369	COP205	Depot Access Road Specification	£78,675	COP206	Ground level changes at Edinburgh Park Bridge	£62,851	COP207	TRO Consultation Plans	£23,480	COP208	A8 Underpass, existing 1-way BT service	£22,847	COP209	Trail soil nailing – Russell Road Underbridge	£44,718	COP210	Approach Ramps – Edinburgh Park Bridge	£185,000	COP213	Design changes for MUDFA	£3,527	COP215a	Lochside Avenue Junction to adoptable standard	£40,071	COP219a	Depot Floor Pit for turntable	£8,914			£1,191,219	
Reference	Purpose & Value																																														
COP175	Carrickknowe – works outwith the LOD	£4,324																																													
COP185a	Haymarket BDDI-IFC Increase	£67,315																																													
COP202	Network Rail Costs	£644,128																																													
COP204	Boundary Hedge At Gogarburn	£5,369																																													
COP205	Depot Access Road Specification	£78,675																																													
COP206	Ground level changes at Edinburgh Park Bridge	£62,851																																													
COP207	TRO Consultation Plans	£23,480																																													
COP208	A8 Underpass, existing 1-way BT service	£22,847																																													
COP209	Trail soil nailing – Russell Road Underbridge	£44,718																																													
COP210	Approach Ramps – Edinburgh Park Bridge	£185,000																																													
COP213	Design changes for MUDFA	£3,527																																													
COP215a	Lochside Avenue Junction to adoptable standard	£40,071																																													
COP219a	Depot Floor Pit for turntable	£8,914																																													
		£1,191,219																																													
<p>4.0</p>	<p>Preparing for Operations</p>																																														
<p>4.1</p>	<p><u>TRAMCO & DPOFA</u></p> <p>AR reported that there are now 14 No. trams in production. In a recent visit to the CAF factory in Spain, the Independent Competent Person (ICP) has confirmed that Tram No.1 can proceed to the next stage of testing, and that will be the dynamic testing which will be undertaken at the Siemens Test Track in Wildenrath (from January to March 2010). He went on to discuss the types of testing to be undertaken, and it was noted that the opportunity exists for positive press coverage during this phase.</p> <p>A number of vehicle storage options were also discussed for the period leading up to the commissioning/energising of the Gogar Depot were also discussed. AR confirmed in response to a DA query, that the OCIP insurance arrangements cover off site vehicle storage arrangements.</p> <p>Other key issues discussed were:</p> <ul style="list-style-type: none"> ▪ The OJEU notice for the procurement of the ticket vending machines 																																														

Transport Edinburgh

Edinburgh Trams

Lothian Buses

FOISA exempt

Yes
 No

	<p>was issued on 16/12/09.</p> <ul style="list-style-type: none"> ▪ Coordinated approach to tram, tramstop and busstop branding and dressing is ongoing with CEC, TEL and other stakeholders; ▪ DPOFA assignment and TUPE arrangements ready subject to the 17/12/09 Council Meeting. 	
5.0	Building the Brand	
5.1	<p>MHL reported on press coverage during the period 18 November to 10 December and referred the Board to the Media Analysis Paper. It is notable that in the past 4 weeks, 82% of stories published in the media are either positive or balanced. Much of this being focussed on the opening of Princes Street. DA noted that City Centre retailers have reported a 28% uplift in business since Princes Street opened. MHL noted that it is important to build upon the positive mood with our stakeholders – Primark in particular have expressed strong support for the tram, and have indicated that in considering the decision to locate their Scottish flagship store on Princes Street; tram was a major driver in this. MHL then went on to present a series of slides to the Board covering, the opening of Princes Street in photographs; the draft People Who Built the Tram book; and the ongoing branding and livery options discussions. WWC confirmed that Lothian Buses are currently reviewing their existing livery options at present as part of this process.</p>	
6.0	Building The Team	
6.1	No updates were provided at this time.	
7.0	Governance	
8.1	<p>GB updated the Board noting that the legal documentation required to ratify the transfer of tie shares from CEC to TEL, and the transfer of Edinburgh Trams Ltd shares from Lothian Buses to TEL were due to be signed in the next couple of days, subject to Council Approval (17/12/09). The roadmap for Phase 2 of the governance arrangements has been agreed, and the detail of this has to be drafted. GB to circulate a paper on this matter early in the New Year. DJM noted that the next TPB (scheduled for 13 Jan 2010) will be followed by a TEL Board Meeting, and that a set of dates going forward will be agreed at that time.</p>	<p>GB Note</p>
8.0	AOB	
8.1	<p>AC asked if the current situation with BSC has imported further risks with regard to Gogar Station. The Board agreed that this is a risk to monitor, and that ultimately Transport Scotland would be the owner of this risk. DA reported that the West Edinburgh Traffic & Transportation Assessment (WETTA) is in progress and that an additional tramstop has been identified to support the potential Edinburgh International Gateway proposals. SB noted that the design of this tramstop has already been considered as part of a third party obligation agreed at the Parliamentary Phase. DMcG referred the Board to a paper prepared by CEC on the current status of the Council Contribution, noting that the implications of the economic slowdown has deferred some of the developer led contributions. CEC are considering options in this regard.</p>	
9.0	Date of Next Meeting	
9.1	DJM thanked the Board for their contributions during the year, and wished the	

Transport Edinburgh

Edinburgh Trams

Lothian Buses

FOISA exempt

Yes

No

	participants a safe and enjoyable Festive period, noting the challenges to be faced in the New Year.	
9.2	The meeting closed at 13:00 and the date of the next meeting will be Wednesday 13th January 2010 commencing at 09:30hrs .	

Prepared by Alasdair Sim on 17th December 2009

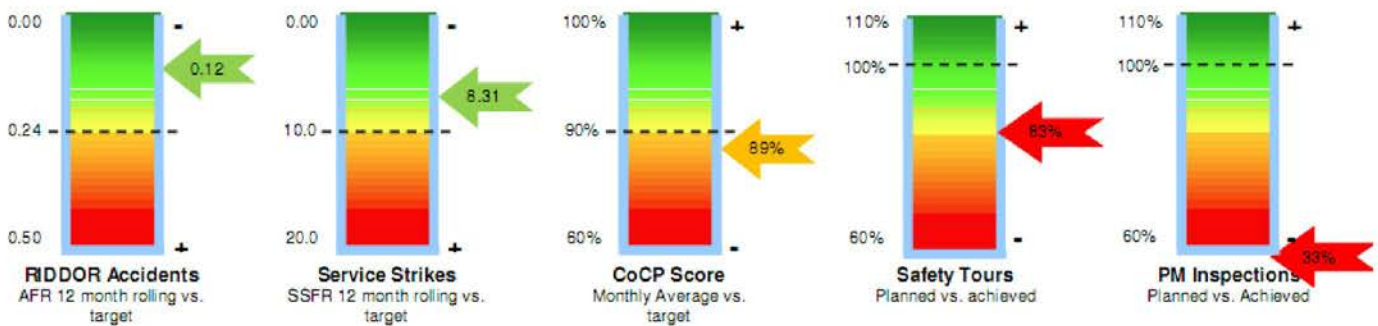
Building The Tram Project Director Report

Period 10 09/10

HSQE – Period 10

Accidents & Incidents

HS&E ACCIDENTS and INCIDENTS SUMMARY											
Total	Total Hours	>3 day	Major	Injury	NM/Unsafe Condition	Service Damage	ENV	RTA	MOP	AFR	SFR
Period	94,300	0	0	0	8	0	2	0	10	0.00	0.00
13 period rolling	1,732,653	1	1	30	259	144	14	10	58	0.12	8.31



During Period 10 there was a significant decrease in the amount of ongoing construction works was noted during period 10, this is attributed to the embargo and Christmas holiday period. There were no reportable accidents and no reported Service Strikes during Period 10. The shut down over the embargo and Christmas period has been successful with no incidents reported over the Christmas holiday period and no incidents recorded as a result of the severe weather.

The CoCP inspections, joint inspections and safety tours fell short of those planned in period 10. This will be addressed in period 11.

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
Section 2A Haymarket to Russell Rd	New Site Start Up	0.5	0.5	NA	1	NA	NA
Section 1A Tower Place Bridge	New Site Start Up	0.5	0.5	NA	1	NA	NA
Edinburgh Park Bridge	Construction of Ramps	0.5	0.5	1	1	1	NA
Edinburgh Park to Guided busway	General works	0.5	0.5	1	1	1	NA
PD	Total (y)	2	2	2	4	2	0
	Max Possible Total (y)	4	4	2	4	2	0
Total	Percentage P9	21%	73%	90%	53%	73%	50%
	Percentage P10	25%	69%	91%	63%	76%	50%

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

There has been a slight improvement in information provided by BSC for proving that the design has been subject to an Interdisciplinary review. However, more evidence in the form of minutes

Transport Edinburgh

Edinburgh Trams

Lothian Buses

FOISA exempt

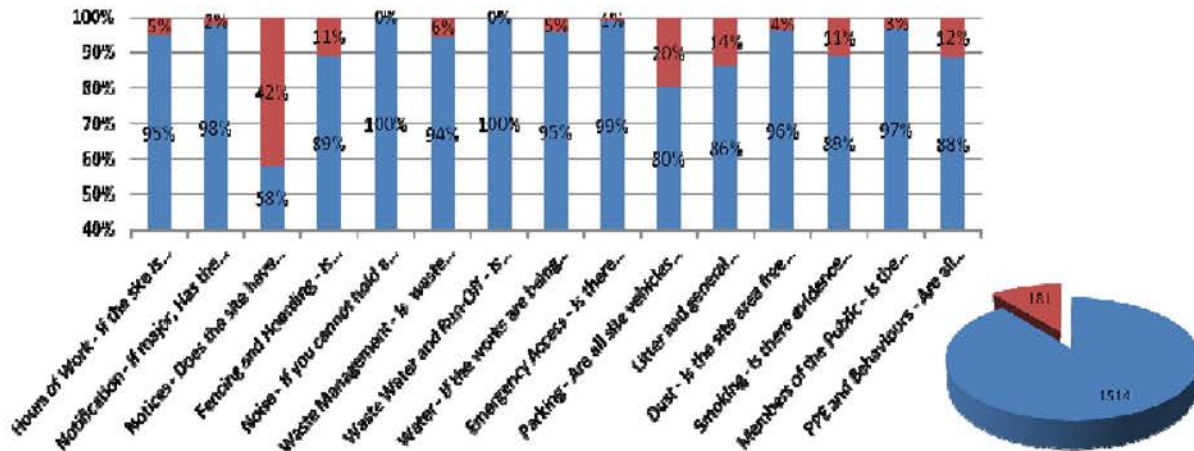
- Yes
- No

from Interdisciplinary workshops is required for sections of work before construction starts. A meeting is planned with BSC on 11th Jan to discuss and obtain further evidence.

There was a successful regulatory interface meeting with the Office of Rail Regulation. BSC presented to the ORR their philosophy behind the chosen rail profiles for the wheel rail interface at switches and crossings.

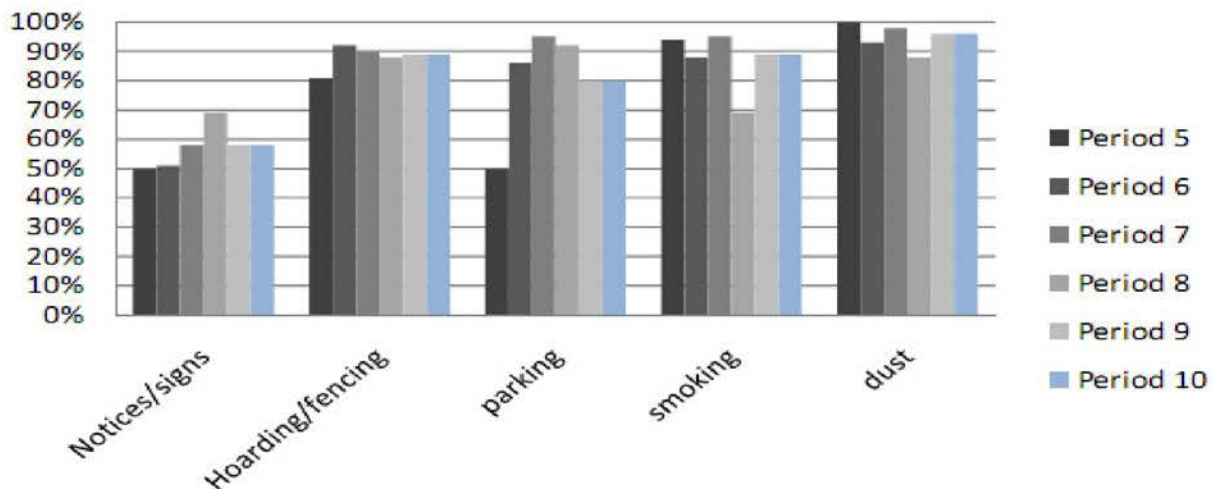
BSC have compiled a set of handover documents for the works completed at Princes Street thus far. These have been presented to tie and will be reviewed during period 11 for acceptance. **Code of Construction Practice Period 10**

APPENDIX B – INSPECTIONS



CoCP compliance continues to be monitored by tie, on the whole there has been little movement in the month, however there has been a decrease in compliance with Tram site identification and timescale signage. This is being addressed with the ordering of more signs and display of timescales.

COCP Trends



The COCP statistics are published on the tram website and continue to be monitored on a period by period basis. Action plans are also published to address areas of concern.

Progress

Progress in the Period for INFRACO works reflects a total cumulative completion of 13.1%, an increase of 0.3% against a plan of 0.8%.

The cost, programme and risk information in this Period 10 report continues to be based upon an unapproved forecast on the information reported in May 2009.

Dispute Resolution (Infraco)

At the end of Period 10, there are no matters under formal DRP at present. A decision on the Russell Road retaining walls issue was determined on 04/01/10. The next series of 5 DRP items are planned for release week commencing 11/01/10.

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.

tie is initiating a series of in depth audits on deign and programme to support further DRP and enable the updated contract strategy as ageeed by the TBP in December 2009.

Commercial Update (MUDFA)

Discussions have continued with Carillion in relation to the Changes, re-measurement and disruption claim as reported in Period 9. More. A strategy to conclude Carillion's works on the project has been implemented and Clancy Docwra taken over the sites to complete the remaining utilities diversion works.

Design

Design approvals status in Period 10 is summarised below (no update provided by SDS in period 10):

Phase 1a only	Number required		Number	
	v31	V51*	Submitted	Granted
Prior Approvals	49	56	52 (93%)	52 (93%)
Technical Approvals	71	86	84 (97%)	77 (89%)

***tie** have not yet received SDS v51 programme officially. It was submitted by BSC but immediately withdrawn.

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. The withdrawn V51 includes further design integration activities and redesign activities, the impact of these will be analysed on receipt of the official SDS programme.

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.

Utility works

There has been no progress on Utilities works during Period 10 as a result of the December Embargo and the handover process between Carillion and Clancy Docwra, as a result;

- Progress at the end of period 10 remains as 97% due to the suspension of works for the December embargo.

Transport Edinburgh

Edinburgh Trams

Lothian Buses

FOISA exempt

Yes

No

- Progress going forward will be concentrated around the Haymarket and the York Place to Picardy sections of the route from January 2010.
- Carillion works 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 4Jan10.
- Clancy Docwra have taken over the remaining utility work scope in the City Centre. This will be to complete the remaining works Post-Embargo – Haymarket, Shandwick Place, St Andrews Square, York Place, Leith Walk and Constitution St.
- Farrans started works on non Utilities in the Forth Ports area, and Clancy Docwra are undertaking diversion works at Lindsay road.
- MUD works at Airport are 98% complete, and the foul main tie-ins are proposed to commence Friday 15th January 2010 for three night shifts. Currently awaiting BAA approval of the method statement and programme.

Tram works (INFRACO)

Snagging works on Princes Street and George Street were carried out during Period 10 and will continue in Period 11.

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

Item	% Comp Rev 1
Haymarket viaduct	25.0%
Russell Road Retaining Wall (W4) (piling works)	7.2%
Carricknowe bridge (both North and South abutments)	36.5%
Edinburgh Park viaduct	82.5%
Depot building steelwork and cladding erection.	13.1%
Gogarburn bridge – bridge deck finishes and approach ramps	83.7%
Hilton Hotel Carpark	100.0%

- Works re-commenced at Haymarket viaduct with fencing and other enabling works in preparation for completion of bridge piers and superstructure
- Works within the City Centre due to recommence Jan-10 following the Embargo.
- Clancy Docwra has been awarded the contract to carry out the remaining utility works in the city centre starting in January10.
- Utility works continue at Lindsay road and Farrans have started work in the Forth port area
- Site clearance and earthworks for Trackworks between Haymarket and Roseburn commenced during Period 9, and trackworks are progressing at the Guided Busway with the outbound track nearing 60% installation.
- Works continues off street on a number of sites inc Edinburgh Park Bridge, Carrick Knowe Bridge, and the Depot.
- There have been no reportable accidents in the period so far
- The 13 period rolling service strike frequency has continued to fall and to date. BSC service strikes have risen this period with a significant near miss and service strike. This has been reviewed with BSC/tie. Any lessons learnt from events on Princes St. will be discussed and distributed to all relevant parties
- There has been a significant decrease in the number of MOP incidents this period
- Successful start up of contracts MUD on section 1a and Lindsay Road
- tie carried out an audit on BSC steel erection with a follow visit to Solway Steel
- Discussions taking place regarding BSC subcontract records of construction materials and the requirements for storage and retrieval.
- CoCP relaxation process has been refined and agreed with CEC. Training session with all tie PMs took place early December
- Quality concerns with the piles installed on the Guided Bus Way and tie has requested reasons for failures remedial proposals and copies of NCR's from BSC.

Successes in Period 10 are:

- Graham's have mobilised at Haymarket Viaduct with minor progress being made on Pier foundations.
- Works progressing well with 1500m of rail and sleepers installed on the outer loop on the Guided Busway with 1300 lm welded and 500 lm installed to final line and level with 150lm concreted.
- A8 Underpass; guide walls for piling completed with preparation work on programme for mobilisation of rig on 4th January 2010.
- Depot structure progressing well. Roof cladding and gutter drainage completed in period. Good progress being made on attenuation tanks with works ahead of programme.

Areas of concern for programme in Period 10 are (and continue to be):

- Late issue of IFC design against the V31 programme
- Agreement of a revised contract or construction programme, although diminishing now that agreement in place to rebuild programme by end of January 2010
- Infraco Consortium Integrated Design visibility and impact on programme, through introduction of additional IFC requirements.
- Redesign requirements for both temporary and permanent works redesign and associated design programme
- Late delivery of Utilities On-street programme (Leith walk, York Place, St Andrew Square and Haymarket)
- The impact of resolution of BDDI-IFC commercial issues and their impact on the construction programme
- Slow mobilisation
- Slow provision of estimates and finalisation of the agreement of change - Base Date Design Information (BDDI) to IFC is delaying the commencement of works at various locations including at Tower Place Bridge, Russell Road bridge, Murrayfield pitches Retaining Wall and Baird Drive Retaining Wall.
- Work on hold at Gogarburn Bridge due to issue regarding OLE pole position at the East abutment.

Cost

We continue in this report to reflect an outturn estimate of £533.3m, including £6.2m for the cancellation of 1b. However, given the commercial uncertainties with the 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 review of costs was undertaken with Transport Scotland on 10/12/09, and updated milestones and forecasts were presented.

Key cost related items to note in Period 10 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 P10 forecast outturn figure for 2009/10 is £114.5m – unchanged from P9.
- 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.
- The negative figure forecast for P11-13 in the table below relates to the net cost to utilities (cost-betterment), with betterment being greater than cost in the last quarter.

Actual YTD P10 & forecast P11-P13 FY09/10

£m	YTD P10	Forecast P11-P13,09/10	Total FY09/10
Infrastructure and vehicles	62.8	20.4	83.2
Utilities diversions	9.7	-1.2	8.5
Design	1.8	0.8	2.6
Land and compensation	0.8	0.8	1.5
Resources and insurance	12.6	3.9	16.5
Base costs	87.7	24.6	112.4
Risk allowance	0.0	2.1	2.1
Total Phase 1a	87.7	26.8	114.5

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

- ETP COWD to Period 10 is £87.7m (Period 9 £77.2m) against budget £108.9m. The key drivers for the -£21.1m 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 four risk reviews held in the period. One item was closed on the Infraco concerns register. There were three draw downs on the risk allowance approved in the period totaling £289,022. These are detailed later in this report. This leaves a risk and contingency balance of £2,125,608 (based upon the approved Project Risk Allowance at Financial Close).

The Project Risk Allowance at financial close was £30,336,196. Drawdowns to the end of Period 10 09/10 now total £22,805,552. Remaining risk balance based on the approved QRA is £2,125,608.

Communications & Customer Service

The media activity has been quiet with a small number of enquiries during this reporting period. These have focussed mainly 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 on the whole balanced and factual in relation to these areas with some less favourable coverage from readers' letters/comments although these have been minimal.

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 has been undertaken 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.

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.

Transport Edinburgh

Edinburgh Trams

Lothian Buses

FOISA exempt

Yes

No

Worksites were removed across the route as part of the combined city centre Christmas embargo and goodwill gesture on behalf of Edinburgh Trams. The 4th January saw work sites reinstated and new sections of work gearing up to start throughout January. In order to communicate the upcoming works approximately 5675 letters were distributed during December to residents and businesses across five major areas of work. These areas include Newhaven and Ocean Drive, Carrick Knowe, York Place, Broughton Street and the Haymarket area.

Period 10's total correspondence has dropped significantly in light of week 4 logging no contacts as it coincided with the Christmas and New Year holidays. The total therefore came to 199 contacts a difference of 165 from Period 9's total of 364 contacts. Weekly totals were generally low with a steady decrease in correspondence each week in the run up to Christmas.

Period 10 2009/10 – Papers for Consideration

Paper to: TPB**Meeting date: 13th January 2010****Subject: Project Change Control Update – Period 10, 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 9, £28.1m had been drawn down from the original risk allowance of £30.3 at Financial Close. In Period 10, an additional £104,000 was drawn down.

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

Description	Base cost	Risk	Total
Position at Financial Close (PCB)	481,680,811	30,336,196	512,017,007
Changes to end Period 9	28,106,566	-28,106,566	0
Position at end Period 9	509,787,377	2,229,630	512,017,007
Period 10 Changes	104,022	-104,022	0
Position at end Period 10 (CAB)	509,891,399	2,125,608	512,017,007

Changes Approved in Period 10Edinburgh Park Private Utilities (COP188 : £161,022)

This change is the cost of the diversion of private and new utilities within Edinburgh Park to facilitate the tram works. There was no budget provision allowed within the Mudfa contract. The initial quote from BSC was circa £247,000 and this lower figure was achieved by tendering the works and subsequently awarding the work to Clancy Docwra.

Land Renunciation (COP226 : £100,000)

This change is to fund the acquisition of land within the Chancelot Mill site operated by ADM Milling Ltd. This land is outside the Limits of Deviation as defined within the Tram Line One Act (2006), and is required to secure a significant value engineering opportunity. In renouncing this land from the lease with ADM Milling, Forth Ports require to be compensated for the loss in rental revenue for the remainder of the lease period. City of Edinburgh Council and Forth Ports have agreed figure of up to £100K to secure title of this land from Forth Ports.

Edinburgh Park Bridge Approach Ramps, re-charge duplicate change form (COP225 - £185,000)

This change was to rectify a previously duplicated change order, and is a credit item for the drawdown in the Period.

SDS relocation to Edinburgh Park (COP227 : £28,000)

This change was to fund the incurred IT procurement costs following the SDS staff relocation from City Point to Edinburgh Park.

Decision(s) / support required

The TPB is requested to:

1. Note the Project Change Control status at Period 10

Proposed

Name: Mark Hamill

Date: 13 January 2010

Title: Risk & Insurance Manager

Recommended

Name: Steven Bell

Date: 13 January 2010

Title: Tram Project Director

Approved

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

10/11 Period 10 - Primary Risk Register

Risk Description

ARM Risk ID	Cause	Event	Effect	Risk Owner	Significance	Black Flag	Treatment Strategy	Previous Status	Current Status	Due Date	Action Owner
343	General delay to programme with various causes e.g. failure to obtain approvals on time, 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) Liason between tie/BSC programme managers Programme Management Panel process Weekly tie/BSC commercial meetings	Complete On Programme	Complete On Programme	30-Oct-09 30-Dec-11	S Bell T Hickman
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) Intensive Mediation Marathon 29/6/09 to 6/7/09 to try and resolve issues. 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) 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. Resolution Strategy approved - 1st DRP to go, 10th August, audit requests to BSC for information going w/c 3.8.09	Complete On Programme On Programme Complete Complete Complete	Complete On Programme On Programme Complete Complete Complete	30-Jun-09 30-Jun-09 14-Aug-09 31-Jan-10 10-Aug-09	T Glazebrook S Bell S Bell F McFadden M Paterson T Glazebrook S Bell S Bell

10/11 Period 10 - 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
1091		Excavation of soft, unsuitable material below Earthworks outline	Additional cost	F McFadden	High - 25.00		Donaldsons to carry out surveys Extent of soft ground being investigated. External specialist advice deployed.	Complete	Complete	30-Jul-09	C Neil
1101	Unreasonable behaviour of BSC commercial management	Unrealistic estimates being submitted for potential changes	Programme delay while disputes regarding estimates are resolved	F McFadden	High - 25.00		Additional resource from TNT Agreed with BSC for independent evaluation to get benchmark 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.	Complete	Complete	30-Jul-09	M Paterson
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 Suite of options from surveys to be reviewed and agreement reached	Complete	Complete	30-Jun-09	C Neil
144	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 infra. impact upon risk balance.	D Sharp	High - 23.00		Evaluation of prior approval programme Fortnightly Meetings of Approvals Task Force Hold fortnightly Roads Design Group Informal consultation prior to statutory consultation Integrate CEC into tie organisation/accommodation (office move)	Complete	Complete	31-Oct-08	D Sharp
								Complete	Complete	31-Mar-10	D Sharp
								Complete	Complete	31-Dec-07	T Glazebrook
								Complete	Complete	31-Mar-09	T Glazebrook
								Complete	Complete	4-Jun-07	T Glazebrook

10/11 Period 10 - 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
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 - 23.00		Additional EMC modelling to give better info to NR CEC Planning - mock application by SDS Draft depot and station change proposals to NR Fortnightly meetings of Approvals Task Force Identify fallback options Monitoring and tracking through the 3rd party rep Monitoring of BBS - 12 week look ahead Obtain critical consents prior to financial close	Complete	Complete	31-Dec-07	C Kerr
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).	Amendments to design scope from current baseline and functional specification. 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 - 23.00		Close working relationship with CEC and stakeholders Weekly critical issues meeting	On Programme	On Programme	31-Jan-11	D Sharp

10/11 Period 10 - Primary Risk Register

Risk Description

ARM Risk ID	Cause	Event	Effect	Risk Owner	Significance	Black Flag	Treatment Strategy	Previous Status	Current Status	Due Date	Action Owner
928	Major single safety/ incident (including a dangerous occurrence) during construction	Safety/ incident during construction	Delay (potentially critical) due to HSE investigation and rework. PR risk to tie and stakeholders.	F McFadden	High - 23.00		All Site Staff to get CSCS or equivalent Develop and Implement incident Management Processes HSE Audits, site inspections and Management Safety Tours to be carried out Safety induction to be carried out for all site staff	On Programme	On Programme	30-Jan-11	C
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	C Neil	High - 20.00		Site Supervisors to be appointed by tie The tie "Safety" bus is being used to deliver safety talks & culture surveys to the contractors workforce. GPR surveys in areas where there are likely to be services Infraco trial holes where applicable. MUDFA trial holes to verify GPR surveys Obstructions and voids survey, establish ownership reduced delay on discovery.	Complete	Complete	28-Feb-07	S Clark
								Complete	Complete	1-Apr-07	T Glazebrook
								On Programme	On Programme	31-Jan-10	P Dobbins
								Complete	Complete	30-Jul-09	A Hill
								On Programme	On Programme	31-May-10	C Neil

10/11 Period 10 - 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
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 TRO 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 TRO strategy approved by board, discussion to be held with CEC head of transport to reduce risk of legal challenge. TRO Strategy to CEC Transport, Infrastructure and Environment Committee on 22 Sept 09 Use of TTROs to undertake construction of permanent works in advance of permanent TROs being approved.	Complete	Complete	30-Sep-09	S Clark
								Complete	Complete	31-Oct-09	S Clark
								Complete	Complete	22-Sep-09	D Fraser
								On Programme	On Programme	30-Jan-11	A Sim

10/11 Period 10 - Primary Risk Register

Risk Description

ARM Risk ID	Cause	Event	Effect	Risk Owner	Significance	Black Flag	Treatment Strategy	Previous Status	Current Status	Due Date	Action Owner
343	General delay to programme with various causes e.g. failure to obtain approvals on time, 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) Liasion between tie/BSC programme managers Programme Management Panel process Weekly tie/BSC commercial meetings	Complete On Programme	Complete On Programme	30-Oct-09 30-Dec-11	S Bell T Hickman
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) Intensive Mediation Marathon 29/6/09 to 6/7/09 to try and resolve issues. 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	Complete Complete	30-Jun-09 30-Jun-09 14-Aug-09	T Glazebrook S Bell 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	On Programme	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

10/11 Period 10 - 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
1091		Excavation of soft, unsuitable material below Earthworks outline	Additional cost	F McFadden	High - 25.00		Donaldsons to carry out surveys Extent of soft ground being investigated. External specialist advice deployed.	Complete	Complete	30-Jul-09	C Neil
1101	Unreasonable behaviour of BSC commercial management	Unrealistic estimates being submitted for potential changes	Programme delay while disputes regarding estimates are resolved	F McFadden	High - 25.00		Additional resource from TNT Agreed with BSC for independent evaluation to get benchmark 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.	Complete	Complete	30-Jul-09	M Paterson
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 Suite of options from surveys to be reviewed and agreement reached	Complete	Complete	30-Jun-09	C Neil
144	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 infra. impact upon risk balance.	D Sharp	High - 23.00		Evaluation of prior approval programme Fortnightly Meetings of Approvals Task Force Hold fortnightly Roads Design Group Informal consultation prior to statutory consultation Integrate CEC into tie organisation/accommodation (office move)	Complete	Complete	31-Oct-08	D Sharp
								On Programme	On Programme	1-Apr-10	M Paterson
								Complete	Complete	31-Mar-10	D Sharp
								Complete	Complete	31-Dec-07	T Glazebrook
								Complete	Complete	31-Mar-09	T Glazebrook
								Complete	Complete	4-Jun-07	T Glazebrook

10/11 Period 10 - 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
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 - 23.00		Additional EMC modelling to give better info to NR CEC Planning - mock application by SDS Draft depot and station change proposals to NR Fortnightly meetings of Approvals Task Force Identify fallback options Monitoring and tracking through the 3rd party rep Monitoring of BBS - 12 week look ahead Obtain critical consents prior to financial close	Complete	Complete	31-Dec-07	C Kerr
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).	Amendments to design scope from current baseline and functional specification. 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 - 23.00		Close working relationship with CEC and stakeholders Weekly critical issues meeting	On Programme	On Programme	31-Jan-11	D Sharp
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	14-Jul-11	R Bell
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Mar-10	D Sharp
								Complete	Complete	31-Aug-07	T Glazebrook
								Complete	Complete	30-Jun-09	D Sharp

10/11 Period 10 - Primary Risk Register

Risk Description

ARM Risk ID	Cause	Event	Effect	Risk Owner	Significance	Black Flag	Treatment Strategy	Previous Status	Current Status	Due Date	Action Owner
928	Major single safety/ incident (including a dangerous occurrence) during construction	Safety/ incident during construction	Delay (potentially critical) due to HSE investigation and rework. PR risk to tie and stakeholders.	F McFadden	High - 23.00		All Site Staff to get CSCS or equivalent Develop and Implement incident Management Processes HSE Audits, site inspections and Management Safety Tours to be carried out Safety induction to be carried out for all site staff	On Programme	On Programme	30-Jan-11	C
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	C Neil	High - 20.00		Site Supervisors to be appointed by tie The tie "Safety" bus is being used to deliver safety talks & culture surveys to the contractors workforce. GPR surveys in areas where there are likely to be services Infraco trial holes where applicable. MUDFA trial holes to verify GPR surveys Obstructions and voids survey, establish ownership reduced delay on discovery.	Complete	Complete	28-Feb-07	S Clark
								On Programme	Complete	31-Dec-10	B Cummins
								On Programme	Complete	31-Dec-10	B Cummins
								Complete	Complete	1-Apr-07	T Glazebrook
								On Programme	On Programme	31-Jan-10	P Dobbin
								Complete	Complete	30-Jul-09	A Hill
								On Programme	On Programme	31-May-10	C Neil

10/11 Period 10 - 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
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 TRO 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 TRO strategy approved by board, discussion to be held with CEC head of transport to reduce risk of legal challenge. TRO Strategy to CEC Transport, Infrastructure and Environment Committee on 22 Sept 09 Use of TTROs to undertake construction of permanent works in advance of permanent TROs being approved.	Complete	Complete	30-Sep-09	S Clark
								Complete	Complete	31-Oct-09	S Clark
								Complete	Complete	22-Sep-09	D Fraser
								On Programme	On Programme	30-Jan-11	A Sim

10/11 Period 10 - Primary Risk Register

Risk Description

ARM Risk ID	Cause	Event	Effect	Risk Owner	Significance	Black Flag	Treatment Strategy	Previous Status	Current Status	Due Date	Action Owner
343	General delay to programme with various causes e.g. failure to obtain approvals on time, 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) Liasion between tie/BSC programme managers Programme Management Panel process Weekly tie/BSC commercial meetings	Complete On Programme	Complete On Programme	30-Oct-09 30-Dec-11	S Bell T Hickman
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) Intensive Mediation Marathon 29/6/09 to 6/7/09 to try and resolve issues. 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) 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. Resolution Strategy approved - 1st DRP to go 10th August, audit requests to BSC for information going w/c 3.8.09	Complete On Programme	Complete On Programme	30-Jun-09 30-Jun-09 14-Aug-09 31-Jan-10	T Glazebrook S Bell S Bell S Bell

10/11 Period 10 - 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
1091		Excavation of soft, unsuitable material below Earthworks outline	Additional cost	F McFadden	High - 25.00		Donaldsons to carry out surveys Extent of soft ground being investigated. External specialist advice deployed.	Complete	Complete	30-Jul-09	C Neil
1101	Unreasonable behaviour of BSC commercial management	Unrealistic estimates being submitted for potential changes	Programme delay while disputes regarding estimates are resolved	F McFadden	High - 25.00		Additional resource from TNT Agreed with BSC for independent evaluation to get benchmark 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.	Complete	Complete	30-Jul-09	M Paterson
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 Suite of options from surveys to be reviewed and agreement reached	Complete	Complete	30-Jun-09	C Neil
144	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 infra. impact upon risk balance.	D Sharp	High - 23.00		Evaluation of prior approval programme Fortnightly Meetings of Approvals Task Force Hold fortnightly Roads Design Group Informal consultation prior to statutory consultation Integrate CEC into tie organisation/accommodation (office move)	Complete	Complete	31-Oct-08	D Sharp
								Complete	Complete	31-Mar-10	D Sharp
								Complete	Complete	31-Dec-07	T Glazebrook
								Complete	Complete	31-Mar-09	T Glazebrook
								Complete	Complete	4-Jun-07	T Glazebrook

10/11 Period 10 - 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
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 - 23.00		Additional EMC modelling to give better info to NR CEC Planning - mock application by SDS Draft depot and station change proposals to NR Fortnightly meetings of Approvals Task Force Identify fallback options Monitoring and tracking through the 3rd party rep Monitoring of BBS - 12 week look ahead Obtain critical consents prior to financial close	Complete	Complete	31-Dec-07	C Kerr
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).	Amendments to design scope from current baseline and functional specification. 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 - 23.00		Close working relationship with CEC and stakeholders Weekly critical issues meeting	On Programme	On Programme	31-Jan-11	D Sharp
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook

10/11 Period 10 - Primary Risk Register

Risk Description

ARM Risk ID	Cause	Event	Effect	Risk Owner	Significance	Black Flag	Treatment Strategy	Previous Status	Current Status	Due Date	Action Owner
928	Major single safety/ incident (including a dangerous occurrence) during construction	Safety/ incident during	Delay (potentially critical) due to HSE investigation and rework. PR risk to tie and stakeholders.	F McFadden	High - 23.00		All Site Staff to get CSCS or equivalent Develop and Implement incident Management Processes HSE Audits, site inspections and Management Safety Tours to be carried out Safety induction to be carried out for all site staff	On Programme	On Programme	30-Jan-11	C
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	C Neil	High - 20.00		Site Supervisors to be appointed by tie The tie "Safety" bus is being used to deliver safety talks & culture surveys to the contractors workforce. GPR surveys in areas where there are likely to be services Infraco trial holes where applicable. MUDFA trial holes to verify GPR surveys Obstructions and voids survey, establish ownership reduced delay on discovery.	Complete	Complete	28-Feb-07	S Clark
								Complete	Complete	1-Apr-07	T Glazebrook
								On Programme	On Programme	31-Jan-10	P Dobbin
								Complete	Complete	30-Jul-09	A Hill
								On Programme	On Programme	31-May-10	C Neil

10/11 Period 10 - 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
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 TRO 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 TRO strategy approved by board, discussion to be held with CEC head of transport to reduce risk of legal challenge. TRO Strategy to CEC Transport, Infrastructure and Environment Committee on 22 Sept 09 Use of TTROs to undertake construction of permanent works in advance of permanent TROs being approved.	Complete	Complete	30-Sep-09	S Clark
								Complete	Complete	31-Oct-09	S Clark
								Complete	Complete	22-Sep-09	D Fraser
								On Programme	On Programme	30-Jan-11	A Sim

10/11 Period 10 - Primary Risk Register

Risk Description

ARM Risk ID	Cause	Event	Effect	Risk Owner	Significance	Black Flag	Treatment Strategy	Previous Status	Current Status	Due Date	Action Owner
343	General delay to programme with various causes e.g. failure to obtain approvals on time, 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) Liasion between tie/BSC programme managers Programme Management Panel process Weekly tie/BSC commercial meetings	Complete On Programme	Complete On Programme	30-Oct-09 30-Dec-11	S Bell T Hickman
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) Intensive Mediation Marathon 29/6/09 to 6/7/09 to try and resolve issues. 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	Complete Complete	30-Jun-09 30-Jun-09 14-Aug-09	T Glazebrook S Bell 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	On Programme	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

10/11 Period 10 - 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
1091		Excavation of soft, unsuitable material below Earthworks outline	Additional cost	F McFadden	High - 25.00		Donaldsons to carry out surveys Extent of soft ground being investigated. External specialist advice deployed.	Complete	Complete	30-Jul-09	C Neil
1101	Unreasonable behaviour of BSC commercial management	Unrealistic estimates being submitted for potential changes	Programme delay while disputes regarding estimates are resolved	F McFadden	High - 25.00		Additional resource from TNT Agreed with BSC for independent evaluation to get benchmark 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.	Complete	Complete	30-Jul-09	M Paterson
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 Suite of options from surveys to be reviewed and agreement reached	Complete	Complete	30-Jun-09	C Neil
144	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 infra. impact upon risk balance.	D Sharp	High - 23.00		Evaluation of prior approval programme Fortnightly Meetings of Approvals Task Force Hold fortnightly Roads Design Group Informal consultation prior to statutory consultation Integrate CEC into tie organisation/accommodation (office move)	Complete	Complete	31-Oct-08	D Sharp
								On Programme	On Programme	1-Apr-10	M Paterson
								Complete	Complete	31-Mar-10	D Sharp
								Complete	Complete	31-Dec-07	T Glazebrook
								Complete	Complete	31-Mar-09	T Glazebrook
								Complete	Complete	4-Jun-07	T Glazebrook

10/11 Period 10 - 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
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 - 23.00		Additional EMC modelling to give better info to NR CEC Planning - mock application by SDS Draft depot and station change proposals to NR Fortnightly meetings of Approvals Task Force Identify fallback options Monitoring and tracking through the 3rd party rep Monitoring of BBS - 12 week look ahead Obtain critical consents prior to financial close	Complete	Complete	31-Dec-07	C Kerr
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).	Amendments to design scope from current baseline and functional specification. 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 - 23.00		Close working relationship with CEC and stakeholders Weekly critical issues meeting	On Programme	On Programme	31-Jan-11	D Sharp
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook
								Complete	Complete	31-Jul-08	T Glazebrook
								On Programme	On Programme	31-Jul-08	T Glazebrook

10/11 Period 10 - Primary Risk Register

Risk Description

ARM Risk ID	Cause	Event	Effect	Risk Owner	Significance	Black Flag	Treatment Strategy	Previous Status	Current Status	Due Date	Action Owner
928	Major single safety/ incident (including a dangerous occurrence) during construction	Safety/ incident during	Delay (potentially critical) due to HSE investigation and rework. PR risk to tie and stakeholders.	F McFadden	High - 23.00		All Site Staff to get CSCS or equivalent Develop and Implement incident Management Processes HSE Audits, site inspections and Management Safety Tours to be carried out Safety induction to be carried out for all site staff	On Programme	On Programme	30-Jan-11	C
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	C Neil	High - 20.00		Site Supervisors to be appointed by tie The tie "Safety" bus is being used to deliver safety talks & culture surveys to the contractors workforce. GPR surveys in areas where there are likely to be services Infraco trial holes where applicable. MUDFA trial holes to verify GPR surveys Obstructions and voids survey, establish ownership reduced delay on discovery.	Complete	Complete	28-Feb-07	S Clark
								On Programme	On Programme	31-Dec-10	B Cummins
								On Programme	On Programme	31-Dec-10	B Cummins
								Complete	Complete	31-Dec-09	B Cummins
								Complete	Complete	1-Apr-07	T Glazebrook
								On Programme	On Programme	31-Jan-10	P Dobbins
								Complete	Complete	30-Jul-09	A Hill
								On Programme	On Programme	31-May-10	C Neil

10/11 Period 10 - 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
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 TRO 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 TRO strategy approved by board, discussion to be held with CEC head of transport to reduce risk of legal challenge. TRO Strategy to CEC Transport, Infrastructure and Environment Committee on 22 Sept 09 Use of TTROs to undertake construction of permanent works in advance of permanent TROs being approved.	Complete	Complete	30-Sep-09	S Clark
								Complete	Complete	31-Oct-09	S Clark
								Complete	Complete	22-Sep-09	D Fraser
								On Programme	On Programme	30-Jan-11	A Sim

10/11 Period 10 - Primary Risk Register

Risk Description

ARM Risk ID	Cause	Event	Effect	Risk Owner	Significance	Black Flag	Treatment Strategy	Previous Status	Current Status	Due Date	Action Owner
343	General delay to programme with various causes e.g. failure to obtain approvals on time, 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) Liasion between tie/BSC programme managers Programme Management Panel process Weekly tie/BSC commercial meetings	Complete On Programme	Complete On Programme	30-Oct-09 30-Dec-11	S Bell T Hickman
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) Intensive Mediation Marathon 29/6/09 to 6/7/09 to try and resolve issues. 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) 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. Resolution Strategy approved - 1st DRP to go 10th August, audit requests to BSC for information going w/c 3.8.09	Complete On Programme	Complete On Programme	30-Jun-09 30-Jun-09 14-Aug-09 31-Jan-10	S Bell T Glazebrook S Bell S Bell

10/11 Period 10 - 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
1091		Excavation of soft, unsuitable material below Earthworks outline	Additional cost	F McFadden	High - 25.00		Donaldsons to carry out surveys Extent of soft ground being investigated. External specialist advice deployed.	Complete	Complete	30-Jul-09	C Neil
1101	Unreasonable behaviour of BSC commercial management	Unrealistic estimates being submitted for potential changes	Programme delay while disputes regarding estimates are resolved	F McFadden	High - 25.00		Additional resource from TNT Agreed with BSC for independent evaluation to get benchmark 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.	Complete	Complete	30-Jul-09	M Paterson
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 Suite of options from surveys to be reviewed and agreement reached	Complete	Complete	30-Jun-09	C Neil
144	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 infra. impact upon risk balance.	D Sharp	High - 23.00		Evaluation of prior approval programme Fortnightly Meetings of Approvals Task Force Hold fortnightly Roads Design Group Informal consultation prior to statutory consultation Integrate CEC into tie organisation/accommodation (office move)	Complete	Complete	31-Oct-08	D Sharp
								Complete	Complete	31-Mar-10	D Sharp
								Complete	Complete	31-Dec-07	T Glazebrook
								Complete	Complete	31-Mar-09	T Glazebrook
								Complete	Complete	4-Jun-07	T Glazebrook

10/11 Period 10 - 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
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 - 23.00		Additional EMC modelling to give better info to NR CEC Planning - mock application by SDS Draft depot and station change proposals to NR Fortnightly meetings of Approvals Task Force Identify fallback options Monitoring and tracking through the 3rd party rep Monitoring of BBS - 12 week look ahead Obtain critical consents prior to financial close	Complete	Complete	31-Dec-07	C Kerr
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).	Amendments to design scope from current baseline and functional specification. 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 - 23.00		Close working relationship with CEC and stakeholders Weekly critical issues meeting	On Programme	On Programme	31-Jan-11	D Sharp

10/11 Period 10 - Primary Risk Register

Risk Description

ARM Risk ID	Cause	Event	Effect	Risk Owner	Significance	Black Flag	Treatment Strategy	Previous Status	Current Status	Due Date	Action Owner
928	Major single safety/ incident (including a dangerous occurrence) during construction	Safety/ incident during	Delay (potentially critical) due to HSE investigation and rework. PR risk to tie and stakeholders.	F McFadden	High - 23.00		All Site Staff to get CSCS or equivalent Develop and Implement incident Management Processes HSE Audits, site inspections and Management Safety Tours to be carried out Safety induction to be carried out for all site staff	On Programme	On Programme	30-Jan-11	C
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	C Neil	High - 20.00		Site Supervisors to be appointed by tie The tie "Safety" bus is being used to deliver safety talks & culture surveys to the contractors workforce. GPR surveys in areas where there are likely to be services Infraco trial holes where applicable. MUDFA trial holes to verify GPR surveys Obstructions and voids survey, establish ownership reduced delay on discovery.	Complete	Complete	28-Feb-07	S Clark
								On Programme	Complete	31-Dec-09	B Cummins
								On Programme	Complete	31-Dec-10	B Cummins
								On Programme	Complete	1-Apr-07	T Glazebrook
								On Programme	On Programme	31-Jan-10	P Dobbins
								Complete	Complete	30-Jul-09	A Hill
								On Programme	On Programme	31-May-10	C Neil

10/11 Period 10 - 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
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 TRO 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 TRO strategy approved by board, discussion to be held with CEC head of transport to reduce risk of legal challenge. TRO Strategy to CEC Transport, Infrastructure and Environment Committee on 22 Sept 09 Use of TTROs to undertake construction of permanent works in advance of permanent TROs being approved.	Complete	Complete	30-Sep-09	S Clark
								Complete	Complete	31-Oct-09	S Clark
								Complete	Complete	22-Sep-09	D Fraser
								On Programme	On Programme	30-Jan-11	A Sim

Period 10 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 10 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 this will be achieved at the early February 2010.

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 v51 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 to put the DRP process on the MUDFA Rev 8 dispute on hold 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 the end of January 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 late Dec 2012. This has slipped only 3 days since the last period due in part to the requirement for BSC to issue their progress report 2 weeks early because of Christmas. Despite the Christmas break, BSC achieved a site set up at Haymarket viaduct and site clearance between Haymarket & Roseburn during the period. However, there was a lack of progress on-street due to the City Centre Christmas Embargo, which further compounded the delays due to the remaining Utility Diversions 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 (P09)	BSC Movement in Period (Cal Days)	tie Live Forecast (P10) Rev.01**
Section A	Depot completion	01-Jun-10	20-Jun-11	0	29-Apr-11
Section B*	Test Track Available	01-Jul-10	07-Nov-11	0	28-Dec-11
Section C	All Phase 1a Construction complete	10-Mar-11	26-Jun-12	0	21-Jun-12
Section D	Open for Revenue Service	06-Sep-11	23-Dec-12	0	19-Dec-12

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

** V51 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)

To date 5nr disputes have been referred to DRP by **tie** (Hilton Car Park, EOT 1, Carricknowe Bridge, Gogarburn Bridge and Haymarket Viaduct), Agreement has been reached on Hilton (Adjudicator awarded in tie's favour) and commercial settlement has been reached on Haymarket (BDDI - IFC) and EOT 1. In the period we received, the Adjudicator's response for the DRP's raised by tie against Gogarburn and Carricknowe Bridge, the Adjudicator found largely in favour of the position taken by BSC. tie's response to the Adjudicator's decision remains under review

BSC have so far referred 2nr disputes to DRP (Russell Road Retaining Wall and delays associated with the MUDFA Rev 8 programme). Agreement has been reached with respect to delays associated with the MUDFA Rev 8 programme. The Adjudicator's decision against Russell Road was received on 4/01/10 and will be reported in in Period 11. A significant saving resulted (>£400K) on the estimate presented by BSC and the adjudicator agreed with **tie** on many of the principles in dispute.

A summary on the DRP process 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	√	√	√	√	√	04/01/10
A	MUDFA Rev 8	Programme	√	√	√	√	On hold	
5e	Tower Bridge	BDDI to IFC	P10					
5h	Bankhead Drive	BDDI to IFC	P10					
5m	A8	BDDI to IFC	P10					

	Underpass						
5l	Section 7 Drainage	BDDI to IFC	P10				
5k	A8 Underpass Piles	Ground Conditions	P10				
5i	Baird Drive	BDDI to IFC	P10				

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 2 of the structures identified in the DRP and work subsequently started at Carrick Knowe Bridge and Russell Road during Period 09. As a result of Senior intervention discussions with Bilfinger Berger Principals in relation to agreement on EOT1 and programme, work also re-commenced or continued at the following locations in Period 10:

- Haymarket Viaduct – Excavation work started on 30/11/2009
- Haymarket Yards to Russell Road – removal of Vegetation to re-commence 5/1/10
- Edinburgh Park Bridge Ramps – works started 23/11/2009
- Edinburgh Park Bridge to Guided Busway – due to re-commence 6/1/10
- A8 Underpass - BT works finished. Piling platform works to follow on with a view to piling rig commencing work 5/1/10
- Depot Drainage - works continue, Estimate to be discussed after re-submission incorporating latest issued drawing

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)

An Exit Agreement is now in place with Carillion in respect of work under the MUDFA agreement. Outstanding diversions are now being carried out by Clancy Dowcra. Agreement of the final account with Carillion is progressing and a summary of the items being address is below. However it should be noted that in the most recent period Carillion have hardened their position with regard to monetary entitlement for disruption. It is likely that they will refer any outstanding issues to dispute resolution early in 2010.

Changes - A number of the 9 of the larger items of change discussed last period have been agreed. The remaining changes are being reviewed and CUS require to provide substantiation of the amounts claimed. It is anticipated that discussions regarding these changes will be concluded by the end of January '10.

There are a substantial number of lesser value changes and these are now being assessed and values verified. The aim is to complete this review by the end of January 2010. It is hoped

that significant progress will be made in the period however it is still contingent on information being forthcoming from Carillion.

Remeasurement of Works – Remeasurement of Work Sections is progressing with 19 No sections available. The value of the work has been agreed with Carillion for 8 No sections with a further 7 No sections remeasured and the value of the work under discussion. 4 No Sections remain to be checked and remeasured and this will be completed once as-built drawings become available. These are now overdue and expected within the next few days. Meetings have taken place to agree the value of remeasured work but some entitlement issues remain outstanding.

Disruption Claim – Carillion have formalised their disruption claim and have submitted further back up in the period. Tie have now received information for all sections of work. tie have commissioned Acutus to assess entitlement for St Andrews Square Section of the works with a view to using this as the basis for negotiation with Carillion to reach a settlement or Referral to Third Party for resolution.

2.3. Design

IFC Design

The submitted SDS Design programme at v51 was subsequently withdrawn by BSC with no reasons given. At the time of writing BSC have been unable to provide reasons for the programme withdrawal or provide robust dates for a re-submittal – No further update provided to tie in Period 10.

Approvals and Consents are measured at V51 and are progressing as follows:

- IFCs – Phase 1a: 89 issued out of 126 (figures in this report reflect the dates and progress shown in the unofficial version of v51 but do not include the 91 new IFCs included in v51. These will be reviewed once the official version of v51 is submitted.);
- Murrayfield Accommodation Works - granted in Period 10 raising the number of Prior Approvals granted to 93%. 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;
- There has been an increase to the number of Technical Approvals granted (from an increased no. of TAA's), two remaining to be submitted 9 left to be granted;
- Structures approvals are progressing well – 5 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 10 is summarised below (no update provided by SDS in period 10):

Phase 1a only	Number required		Number	
	v31	V51*	Submitted	Granted
Prior Approvals	49	56	52 (93%)	52 (93%)
Technical Approvals	71	86	84 (97%)	77 (89%)

*We have not yet received SDS v51 programme officially. It was submitted by BSC but immediately withdrawn.

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. The withdrawn V51 includes further design integration activities and redesign activities, the impact of these will be analysed on receipt of the official SDS programme.

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 were suspended during Period 10 for the December embargo, (this excludes the remaining utility works being undertaken between Constitution Street and Newhaven).

Progress remains as reported at the end of Period 09.

Rev.08 Figures - Period 9 2009-10	Period		Delta	Cumulative		Delta
	Plan	Actual		Plan	Actual	
MUDFA PERIOD 09 PROGRESS	Plan	Actual		Plan	Actual	
Section 1a Newhaven to Foot of the Walk	0.0%	0.0%	0.0%	100.0%	100.0%	0.0%
Section 1b Foot of the Walk to McDonald Road	0.0%	0.0%	0.0%	100.0%	100.0%	0.0%
Section 1c McDonald Road to Princes Street West	0.0%	1.9%	-1.9%	100.0%	91.2%	-8.8%
Section 1d Princes Street West to Haymarket	0.0%	2.4%	-2.4%	100.0%	96.4%	-3.6%
Combined Sections 1A-1B-1C-1D (On-Street) Newhaven Road to Haymarket	0.0%	1.2%	-1.2%	100.0%	96.3%	-3.7%
Section 2 Haymarket to Roseburn Junction	0.0%	0.0%	0.0%	100.0%	100.0%	0.0%
Section 5a Roseburn Junction to Balgreen Road	0.0%	0.0%	0.0%	100.0%	100.0%	0.0%
Section 5b Balgreen Road to Edinburgh Park Central	0.0%	0.0%	0.0%	100.0%	100.0%	0.0%
Section 5c Edinburgh Park Central to Gogarburn	0.0%	0.0%	0.0%	100.0%	100.0%	0.0%
Section 6 Gogar Depot	0.0%	0.0%	0.0%	100.0%	100.0%	0.0%
Section 7a Gogarburn to Edinburgh Airport	0.0%	0.0%	0.0%	100.0%	100.0%	0.0%
Combined Sections 2A-5A-5B-5C-6A-7A (Off-Street) Haymarket to Edinburgh Airport	0.0%	0.0%	0.0%	100.0%	100.0%	0.0%
FULL ROUTE PHASE 1A NEWHAVEN ROAD TO EDINBURGH AIRPORT	0.0%	0.9%	-0.9%	100.0%	97.0%	-3.0%

There has been no progress on MUDFA works during Period 10 as a result of the December Embargo and the handover process between Carillion and Clancy Docwra, as a result;

- Progress at the end of period 10 remains as 97% due to the suspension of works for the December embargo.
- Progress going forward will be concentrated around the Haymarket and the York Place to Picardy sections of the route from January 2010.
- 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 4Jan10.
- Clancy Docwra have taken over the remaining utility work scope in the City Centre. This will be to complete the remaining works Post-Embargo – Haymarket, Shandwick Place, St Andrews Square, York Place, Leith Walk and Constitution St.
- Farrans started works on non MUDFA Utilities in the Forth Ports area, and Clancy Docwra are undertaking diversion works at Lindsay road.
- MUD works at Airport are 98% complete, and due to a BAA requirement to complete jointing works a return visit will be required January/February 2010.

2.5. Tramworks (INFRACO)

Progress On-street saw the successful conclusion of works and the handback of Princes Street during period 09. Snagging works were carried out during Period 10 and will continue in Period 11.

Progress Off-street has continued or commenced in the following locations (%'s are for full structure). All of the active work sites were reported as suspended for the Xmas break from 18 Dec09.

Item	% Comp Rev 1
Haymarket viaduct	25.0%
Russell Road Retaining Wall (W4) (piling works)	7.2%
Carricknowe bridge (both North and South abutments)	36.5%
Edinburgh Park viaduct	82.5%
Depot building steelwork and cladding erection.	13.1%
Gogarburn bridge – bridge deck finishes and approach ramps	83.7%
Hilton Hotel Carpark	100.0%

- Works re-commenced at Haymarket viaduct with fencing and other enabling works in preparation for completion of bridge piers and superstructure
- Works within the City Centre due to recommence Jan-10 following the Embargo.
- Clancy Docwra has been awarded the contract to carry out the remaining utility works in the city centre starting in January10.
- Utility works continue at Lindsay road and Farrans have started work in the Forth port area
- Site clearance and earthworks for Trackworks between Haymarket and Roseburn commenced during Period 9, and trackworks are progressing at the Guided Busway with the outbound track nearing 60% installation.
- Works continues off street on a number of sites inc Edinburgh Park Bridge, Carrick Knowe Bridge, and the Depot.

Successes in Period 10 are:

- Utility works at both Section 1A and Lindsay Road progressing well, however resolution required for ADM and FP access.
- George Street additional works programme was completed by 22nd December 2009.
- Graham's have mobilised at Haymarket Viaduct with minor progress being made on Pier foundations.
- Murrayfield pitch relaying contract now at end of maintenance period (30th December 2009). All works completed with handover documentation to be completed January 2010.
- Replacement Piling Rig for R.R.R.W. being mobilised on 8th January 2010 to recommence piling operations to panels 10-18 of W4.
- Works progressing well with 1500m of rail and sleepers installed on the outer loop on the Guided Busway with 1300 lm welded and 500 lm installed to final line and level with 150lm concreted.
- A8 Underpass; guide walls for piling completed with preparation work on programme for mobilisation of rig on 4th January 2010.
- Depot structure progressing well. Roof cladding and gutter drainage completed in period. Good progress being made on attenuation tanks with works ahead of programme.
- Additional G.I. works completed 18th December 2009; this should allow SDS to confirm design for Surcharge Area.
- Burnside Road work handover postponed until January 2010 following concerns of BAA on commissioning prior to Christmas break. Works now will be completed mid January 2010.
- Preliminary designs provided by architect for the Constitution Street wall. Funding and Project Management arrangements are still to be agreed with CEC.

Areas of concern for programme in Period 10 are (continue to be):

- Late issue of IFC design against the V31 programme
- Agreement of a revised contract or construction programme, although diminishing now that agreement in place to rebuild programme by end of January 2010
- Infraco Consortium Integrated Design visibility and impact on programme, through introduction of additional IFC requirements.
- Redesign requirements for both temporary and permanent works redesign and associated design programme
- Late delivery of Utilities On-street programme (Leith walk, York Place, St Andrew Square and Haymarket)
- The impact of resolution of BDDI-IFC commercial issues and their impact on the construction programme
- Slow mobilisation
- Slow provision of estimates and finalisation of the agreement of change - Base Date Design Information (BDDI) to IFC is delaying the commencement of works at various locations including at Tower Place Bridge, Russell Road bridge, Murrayfield pitches Retaining Wall and Baird Drive Retaining Wall.
- Work on hold at Gogarburn Bridge due to issue regarding OLE pole position at the East abutment.

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 work on the viaduct. Work on the viaduct continued throughout the period.
- Site clearance commenced prior to track works

Section 5A Roseburn to Balgreen Road

- Cased piling rig due on site w/c 04/01/2010 to recommence piling to RW W4.
- Demolition of the JB McLean Lean-too completed during the period

Section 5B Balgreen Road to Edinburgh Park Central:

- Carricknowe Bridge North abutment wall poured 10/12/2009 and rail-side formwork stripped during nightshift possession 13/12/2009.
- Guided Busway –Track installation commenced 24/11/2009 and continued during the period.
- Bankhead Drive – No works by BSC during the period.
- Edinburgh Park Bridge- Concrete footings to the north approach ramp completed w/e 11/12/2009.

Section 5C Edinburgh Park Central to Gogarburn:

- A8 Underpass: Works to slew BT 6 way commenced 4th November 2009. BT works completed 4th December 2009.
- Pile guide walls completed 18th December 2009. Crossovers due to commence 4th January 2010.

Section 6 Gogar Depot

- Depot Steelwork installation completed 11/12/09. Roof Cladding 95% completed 22/12/09.

Section 7 Gogarburn to Edinburgh Airport

- Gogarburn Bridge: West Abutment ground beams completed 20/11/09. No works since 27/11/09 due to design issue with East Abutment ground beam.
- Culvert 3: Metalwork and snagging to complete.
- Hilton Hotel Car Park: Works completed 8th December 2009.

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 10		Cumulative (Short-Term)		Contract Planned to P10
	Planned	Actual	Planned	Actual	
Prelims	2	2	61	61	61
Construction	7	5	95	93	761

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 10 2009-10	Period		Delta	Cumulative		Delta
INFRACO PERIOD 10 PROGRESS (Contract Rev.01 Programme)	Plan	Actual		Plan	Actual	
Section 1a Newhaven to Foot of the Walk	1.8%	0.0%	-1.8%	41.4%	0.0%	0.0%
Section 1b Foot of the Walk to McDonald Road	1.3%	0.0%	-1.3%	51.4%	1.4%	-0.1%
Section 1c McDonald Road to Princes Street West	1.5%	0.0%	-1.5%	33.3%	0.0%	-10.8%
Section 1d Princes Street West to Haymarket	0.0%	0.0%	0.0%	85.3%	39.2%	-3.5%
Combined Sections 1A-1B-1C-1D (On-Street) Newhaven Road to Haymarket	1.3%	0.0%	-1.3%	49.0%	7.4%	-4.2%
Section 2 Haymarket to Roseburn Junction	2.9%	1.0%	-1.9%	97.9%	14.1%	0.0%
Section 5a Roseburn Junction to Balgreen Road	1.4%	1.0%	-0.4%	68.9%	4.3%	0.0%
Section 5b Balgreen Road to Edinburgh Park Central	1.8%	0.4%	-1.4%	77.8%	33.4%	0.0%
Section 5c Edinburgh Park Central to Gogarburn	2.6%	0.0%	-2.6%	77.2%	3.8%	0.0%
Section 6 Gogar Depot	2.3%	0.6%	-1.7%	94.2%	13.2%	0.0%
Section 7a Gogarburn to Edinburgh Airport	2.9%	0.1%	-2.8%	67.2%	32.8%	0.0%
Combined Sections 2A-5A-5B-5C-6A-7A (Off-Street) Haymarket to Edinburgh Airport	2.1%	0.6%	-1.6%	79.0%	17.2%	0.0%
FULL ROUTE PHASE 1A NEWHAVEN ROAD TO EDINBURGH AIRPORT	1.8%	0.3%	-1.5%	66.5%	13.1%	-3.4%

Section	Commentary
Section 1a Newhaven to Foot of the Walk	<p>Section 1A4 Lindsay/Newhaven Road under review with both design and construction methodology challenges. Ch 0-200 & Newhaven TS programmed to commence Jan-10. Draft OSSA programme under review.</p> <p>Clancy Docwra working on Utility diversions for W1 Lindsay Rd RW which releases Infraco works in this section. Temp. Utility diversions at bridges complete. Infraco works to start on Tower Bridge Jan-10. BDDI – IFC still to be agreed.</p> <p>Utility Diversions Transferred in Section 1A1</p> <p>Plates 1-10 Novated from Utilities.</p> <p>Plates 15, 16, 17 & 18 (Baltic St Junction) Novated from Utilities. Design outstanding (IFA's Due MID Jan 2010)</p> <p>Works to Church Wall on Constitution work required – due to</p>

Section	Commentary
	commence Jan-10 – confirmation on who is to carryout work is required.
Section 1b Foot of the Walk to McDonald Road	Roadworks programmed to commence Jan 10 in ch 080-350. Cabling work Leith Walk due for completion May 10. Draft OSSA programme under review, meeting arranged wk 1 period 11between tie/BSC to discuss.
Section 1c McDonald Road to Princes Street West	Roadworks McDonald Rd and Picardy Place - Cabling work Leith Walk due for completion May 10. Section between Picardy Place and St Andrew Square still subject to programme challenge, Utility and Telecom work due for completion in Q3. Section of east side of St Andrew Square dependent on successful solution to telecoms diversions. Draft OSSA programme under review, showing start in Q4. West register st – Waveley Bridge – Utilities complete in area, Infraco free to commence works
Section 1d Princes Street West to Haymarket	Princes Street snagging works progressing. Road/ Trackworks – Haymaket – the Crescents – Intergrated TM plan agreed to allow BSC to start work in phases between The Crescents and Haymarket. The Crescents – Shandwick place (ch850-440)– Utility works complete – Infraco to commence works end-Jan 2010.
Section 2 Haymarket to Roseburn Junction	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.
Section 5a Roseburn Junction to Balgreen Road	Temporary & permanent works re-design along with commercial resolution delaying various structures. All required consents in place for track installation. W4-Piling stopped on 05/11/09 as 2no. drill bits on 04/05 Nov 09. BSC decided on 05/11/2009 to demobilise the piling rig and equipment as the CFA piling was not working. Additional SI commenced 09/11/2009 and was completed w/e 20/11/2009. Now it's likely to restart on Jan10 due to the non availability of Rig.
Section 5b Balgreen Road to Edinburgh Park Central	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. Carricknowe Bridge progressing during Period 10 with concrete pour at the both abutments. Guided Busway section: Majority of civil works completed. Failed 9 OLE piles being rectified. Track laying works started during period 9 and continued during P10. Edinburg park Bridge- both approach ramp works started period-9. Concrete footings to the north approach ramp completed during P10.
Section 5c Edinburgh Park Central to Gogarburn	A8 Underpass recommenced during P13 2008-09 but has since been on hold due to discovery of obstructions & refusal of piles. Design solution to combine Phases 1 & 2 now in place. Traffic diversion completed. Works to slew BT 6 way commenced 4 th November 2009. BT works completed 4 th December 2009. Pile guide walls completed 18 th December 2009. Crossovers due to commence 4 th January 2010
Section 6 Gogar Depot	Depot works recommenced 17 th August 2009. Depot Steelwork installation completed 11/12/09. Roof Cladding 95% completed 22/12/09.
Section 7a Gogarburn to Edinburgh Airport	Gogarburn Bridge: Bridge deck and embankment works completed. No works since 27/11/09 due to design issue with East Abutment

Section	Commentary
	ground beam. Culverts 1,2and 3 have been completed. Hilton Hotel Car Park: Works completed

Tram construction (Tramco)

Good progress continues to be made with the progress of deliverables against the schedule. Fabrication has commenced on the body shell for the 13th tram. Internal fit out and wiring continues for Trams 2 & 3 and the first tram is nearing completion of the Factory Acceptance Testing process, which has included it's first run under traction power. Dynamic testing will begin in earnest in the New Year. A contingency is being investigated for storage and testing should the first trams be complete before the depot is ready to receive them.

Tram inspector arrangements are in the process of being formalised with BSC.

The CAF contract programme is incorporated in the Master Tram Project Programme and the current position indicates the following confirmed milestone dates:

- 1st Tram delivery – 09-Apr-10
- 5th Tram delivery – 10-May-10
- 27th Tram delivery – 17-Jan-11

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 intergrated 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		Comments
				Start	Finish	Start	Finish	
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>Fallogo 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 Salamander 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	

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 refurbishment. 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
Waverley Steps	Transport Scotland	Refurbishment of existing Waverley Steps with inclusion of new escalators and elevators	PRINCES STREET 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	ST. ANDREW STREET 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	
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.

Edinburgh Tram Project

Delivery Organisation Period Progress Report

Document Type: Progress Report
 Issue: Issue 1
 Progress Meeting Date: Period 10
 Page: 37

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 review of the TS projects was carried out mid November with a wash-up session for 2009 arranged for early January with TS.

2.8. Other

Gogar Surface Station

Key issues/Decisions Required

1. Network Rail change to procurement strategy has reduced pressure on **tie** to agree specific access dates for Network Rail contractor. However, issue has not yet been resolved and Transport Scotland's continuing involvement is needed to conclude the construction staging.
2. Decision in principle reached on Scottish Water sewer diversion route. This needs to be confirmed by Scottish Water and Network Rail as viable and impact on construction staging considered .
3. Transport Scotland has confirmed willingness in principle to fund BSC involvement in construction staging works. BSC is still not willing to take part in construction staging on grounds of giving priority to construction of core Edinburgh Tram Network.
4. Decisions required on long-lead items and abortive works. **tie** to provide further information in Period 11 to facilitate this.

Design progress

At the end of Period 10 **tie** assesses the design phase as 59% complete compared with 77% planned. The cost of work done is £515k compared with £680k planned. The forecast outturn remains unaffected.

tie is pressing BSC to produce an integrated design programme that reflects the actual start date and completes by the end of the 2009-10 financial year.

Period 10 progress and actions to recover slippage

Progress in period for BSC and SDS was as originally planned and there was no further slippage in the design.

tie has identified some actions in relation to approvals that can help to recover earlier design slippage. The first of these (bringing forward submission of the Prior Approval to December 2009) was not realised as the Prior Approval drawings needed to be changed to accommodate the revised proposal for diverting the sewer.

Experience with design on the Edinburgh Tram project indicates that the only significant opportunities for improving programme lie with the approvals process.

These have started to be implemented but the potential recovery has not yet been realised. The table below outlines measures being taken, their potential effect and progress to date.

Activity	Potential impact	Progress to date	Dependencies
Encourage CEC to approve Prior Approval application in under 8 weeks	Prior approval granted up to 21 days earlier	Initial discussion with CEC planning held. Further discussions needed to confirm this as part of Approvals Task Force.	Depends on public response to consultation on Prior Approval application. Cannot be achieved if there are material objections.
Encourage CEC to approve Technical Approval application for retaining wall in under 8 weeks	Technical approval granted up to 14 days earlier	No discussions yet held with CEC. Further design information needed from SDS so discussions can take place.	Depends on Technical Approval not being delayed to re-align retaining wall to accommodate sewer diversion

tie has re-programmed the Joint Revenue Committee tram revenue modelling work for Periods 12 and 13 following receipt of the further information requested from BSC and Transport Scotland forecast for Period 11.

Programme milestones

Activity	Planned	Period 6 forecast	P10 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	8/1/10
Submit Prior Approval application	26/11/09	15/1/10	15/1/10
Receive Prior Approval	5/2/10	12/3/10	12/3/10
Receive Structures Technical Approval	5/2/10	8/3/10	8/3/10
IFC	26/2/10	22/3/10	22/3/10

SDS unofficial programme v51 is forecasting 39 calendar days slippage to the IFC drawings for the tram elements of the Gogar Interchange compared to the baseline programme (IFC 6/4/2010). v51 shows 15 calendar days slippage compared to v50.

This does not match up with SDS reporting of progress at joint tie/BSC/SDS progress meetings where SDS is reporting that they are on track for IFC issue before end March 2010.

Integrated Programme Development

tie has continued to meet TS and NR to allow TS to develop the integrated programme and the Network Rail change in procurement strategy provides a new opportunity to resolve programme issues. However, the Network Rail deadline of September 2011 continues to put pressure on the integrated programme that is difficult to resolve without impact on the core Edinburgh Tram Network.

tie provided an assessment of mitigation measures that could be instructed by Transport Scotland that would increase the likelihood of meeting access dates sought by Network Rail. Transport Scotland has confirmed it does not wish to proceed with any of these measures at present.

Further meetings have been taking place on the diversion of the 1500mm combined sewer by Network Rail. **tie** has assisted Network Rail by attending meetings on this issue and has amended the design of the Retaining Wall to accommodate a better option for diverting the sewer that reduces conflict with the tram track form.

The location of the radio mast has been agreed between Network Rail and **tie** subject to final technical survey by BSC. Some design issues remain to be agreed on appearance of the mast and its garrison housing.

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 conflict between 1500 mm sewer diversion and tram trackform.

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 for Period 10 so that BSC can present a proposal to the ICP with the support of **tie**.

Land

Network Rail has provided draft temporary and permanent land acquisition plans to **tie**. We are reviewing these to establish the extent to which they are compatible with the tram scheme and provided feedback to Network Rail to inform outline agreements on land transfer and access for maintenance.

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 and is due to issue an initial scoping document for agreements.

Cost reporting

Cost of work done to date is £515k versus the £680k originally forecast.

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.

We have also reached the point where further construction staging meetings need to involve BSC for **tie** and Network Rail to make meaningful progress. Transport Scotland has confirmed in principle that TS will underwrite BSC costs for attending those meetings if necessary. However, BSC is still not willing to take part in construction staging on grounds of giving priority to construction of core Edinburgh Tram Network.

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 on before the end of the financial year in relation to agreements with Network Rail. **tie** expects that the extent of this will become clearer during Period 11 as Network Rail tables some draft agreements for review.

Long-lead items / abortive works

tie has raised the general issue with Transport Scotland of long-lead items that would need to be ordered and works associated with the current tram scheme that would be abortive if Gogar Interchange is constructed.

Two examples are:

- (1) the switches & crossings for the east entry to the Depot have been ordered by BSC for the original ETN layout but not yet manufactured – **tie** could instruct BSC to change that order to include the new S&C or to ensure that this particular item of S&C is the last one to be manufactured giving further time for a decision to be reached.
- (2) drainage is due to be installed early in 2010 at the Gogar Interchange site for the existing ETN scheme. The installation of that drainage could be postponed to avoid abortive work but there would be programme impacts if Gogar Interchange subsequently does not go ahead.

tie will continue with the implementation of the existing ETN scheme unless otherwise instructed by Transport Scotland. **tie** will provide further information in Period 11 to allow TS to assess the implications of instructions on abortive/long-lead items.

Other Reporting Streams Progress

The following sections describe progress on other areas of the project during period 10.

Temporary traffic regulation orders (TTROs)

- No major traffic switches were implemented in the period due to the December Embargo.
- Traffic management planning is ongoing for Princes St Phase 3, Haymarket Integrated Utilities and Tram works and for Picardy Place.

Traffic regulation orders (TROs)

- The Statutory Consultation process for TRO1 was completed in Period 9, this process being limited to 7 Statutory Consultees only at this stage. The comments and queries raised by L&B Police and Lothian Buses will require to be addressed in TRO2.
- It is envisaged that the Public Deposit of TRO1 will take place in Q1 2010, and envisages the order being made in July 2010. A report to this effect is being presented to Council on 8 February 2010.
- 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

- INFRACO has now delivered its EMC Management Plan and EMC Strategy for NR infrastructure assets and established the scope for the immunisation works. A programme for these works is being developed with INFRACO for the Immunisation solution part. They should include the programme of those works for the immunisation solution for NR infrastructure. The NR Immunisation development nears completion. Volker Rail preparing design for the works.
- INFRACO will be developing the full assurance case for NR acceptance. Preliminary assurance case to enable traction power testing and commissioning has been completed. Further assurance will be provided up to, and including, bringing into service;
- The contractor has submitted for ROTR possessions according to the look-ahead programme.
- NR – the Bridge and Operating Agreements are not yet concluded. There is an outstanding issue on indemnities to close out, and this is being elevated by CEC on the advice of TS, to the ORR. TS have provided helpful advice on this matter.

Third party interfaces

- Forth Ports – CEC and Forth Ports entered into Licence agreements to facilitate the remaining utilities and BSC works separately. Works will commence in the Leith Docks area in early January 2010.
- 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;
- Building fixings – CEC has reached agreement with the parties objecting to the building fixings process without the need to resort to court action. It is expected that BSC will begin the process to notify owners for commencement of preparatory works.
- 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.

MUD Works at Edinburgh Airport

- HV cable at Conflict 1 installed 16th December 09 and the area reinstated by 18th December 09.
- The Asset Integration/As-built documentation has been issued to BAA on 8th December 09. This will be updated with the HV and the foul main on completion.

Burnside Road Realignment

- The new road and barrier system, and the associated works, are substantially complete.
- BAA confirmed on 15th December 09 that it was not willing to accept Handover of the new assets due to a number of concerns that cause a risk to the airport which are enhanced by the Christmas

holidays. This will require an additional visit by the barrier Contractor for the relocation of the existing card reader and the final commissioning of the new system. Training for BAA staff has been arranged to accommodate shift patterns and the revised Handover.

- Planned Completion Date was 12th January 10. This will be reviewed on receipt of revised commissioning dates from the barrier Contractor.

Hilton Car Park

- INFRACO – Works were completed by W/E 11 December 09.

Section 1 Utilities

- Farrans continuing with works, however Christmas break minimised progress this period.
- 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 not agreed, although the intent to carry out a land acquisition may negate this element, principle of land agreement is in place, finalisation required with Forth Ports and AD.
- The licence with ADM is in place and works commenced as of 30th 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)

- . Close out report to be compiled following Lessons learned session in January 2010.

Cemetery Wall on Constitution Street

- Preliminary designs for Cemetery Wall removal and rebuild have been produced by Heath architects and further discussions are ongoing between CEC and HS.

3 Headline cost report

2.9. Current financial year

	FY 09/10			FY 09/10			FY 09/10			COWD To Date Actual	Costs To Go Forecast	Total AFC Forecast
	COWD Period			COWD Year To Date			COWD Full Year Forecast					
	Actual	Budget	Variance	Actual	Budget	Variance	Forecast	Budget	Variance			
Total Project COWD	10.581	11.068	-0.487	87.732	108.875	-21.143	114.503	150.072	-35.569	321.761	211.548	533.309
Other Funding	0.874	0.914	-0.040	7.244	8.990	-1.746	9.454	12.391	-2.937	26.567	17.467	44.034
Demand on TS	9.707	10.154	-0.447	80.488	99.885	-19.397	105.049	137.680	-32.632	295.194	194.080	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 briefing 10th December 2009).**
- 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 P10 forecast outturn figure for 2009/10 is £114.5m – unchanged from P9.
- 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.
- The negative figure forecast for P11-13 in the table below relates to the net cost to utilities (cost-betterment), with betterment being greater than cost in the last quarter.

Actual YTD P10 & forecast P11-P13 FY09/10

£m	YTD P10	Forecast P11-P13,09/10	Total FY09/10
Infrastructure and vehicles	62.8	20.4	83.2
Utilities diversions	9.7	-1.2	8.5
Design	1.8	0.8	2.6
Land and compensation	0.8	0.8	1.5
Resources and insurance	12.6	3.9	16.5
Base costs	87.7	24.6	112.4
Risk allowance	0.0	2.1	2.1
Total Phase 1a	87.7	26.8	114.5

Key sensitivities to the latest milestone forecast to P10-P13 09/10 are:

- On-street works - Risks: Haymarket to Roseburn Junction Trackwork (£-637k); Leith Walk Roadworks (£-122k); Depot structure milestones in P13 (-£741k)
- Structures - Opportunities: Tower Place Bridge (+£348k), Depot blockwork & Ducts (+£742k)
- Other key non-Infraco risks to the current forecast include (-£704k) Network Rail/ TS agreement.

ETP COWD in FY09/10 to Period 10 is £87.7m (Period 9 £77.2m) against budget £108.9m. The key drivers for the -£21.1m 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	-1.2	8.5
Design	0.7	0.4	0.6	0.8	2.6
Land and compensation	0.6	0.1	0.1	0.8	1.5
Resources and insurance	2.9	3.5	6.1	3.9	16.5
Base costs	23.2	26.9	37.6	24.6	112.4
Risk allowance	0.0	0.0	0.0	2.1	2.1
Total Tram	23.2	26.9	37.6	26.8	114.5

- 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; and
- Note: Utilities diversions -£1.2m forecast in Q4 relates to the nett (utilities costs -betterment credit) final betterment elements forecast against utilities providers.

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	133.4	10.2	302.9
Utilities diversions	18.4	33.4	8.5	-1.9	0.0	58.4
Design	24.4	4.7	2.6	1.8	0.6	34.1
Land and compensation	16.8	1.7	1.5	0.0	0.8	20.9
Resources and insurance	42.8	15.8	16.5	12.7	12.1	99.8
Base costs (inc 1b)	133.1	101.0	112.4	145.9	23.8	516.1
Risk Allowance	0.0	0.0	2.1	15.1	0.0	17.2
Total	133.1	101.0	114.5	161.0	23.8	533.3

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 is due to be presented to Transport Scotland mid-January** 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	14Dec07A		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	25-Jan-10
Edinburgh Park viaduct complete	24-May-09	14-Oct-09	19-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)	May-10
Haymarket viaduct complete	08-Dec-08	07-Jan-10	Jun-10
All consents and approvals granted	18-May-09		May10
Design assurance complete	20-Jan-09		Jun-10
1 st Tram delivered	09-Apr-10	09-Apr-10	09-Apr-10
Carrick Knowe bridge complete	11-May-09	24-Dec-10	Oct-10
A8 underpass complete	14-Jul-09	30-Sep-10	Dec-10
Roseburn viaduct commences	20-Jan-09	20-Oct-09	May-10
TRO process complete	01-Dec-09		Jun-10
Driver recruitment commences	July 2010		Oct-10
1 st OHL installed (Commence Section 6)	11-Dec-09	Dec-10	Sep-10
1 st section (other than depot) complete ready for energisation (2)	25-June-10	May-11	Oct-10
Commission Section 2 (Haymarket to Roseburn junction)	11-Jan-10	Dec-11	Jun-11

Milestones	Baseline programme date	BSC Rev 2 programme – unapproved *	Actual / current forecast date tie live prgm
Final tram delivered	17-Jan-11	May-12	17-Jan-11
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	Apr-11
Test track complete	23-Apr-10	16-Aug-11	Dec-11
Commission Section 7 (Gogar to Edinburgh Airport)	25-June-10	Oct-11	Dec-11
Commission Section 1 (Newhaven to Haymarket)	11-Mar-11	May-12	Jun-12
Commission Section 5 (Roseburn junction to Gogar)	09-Nov-10	Feb-12	Jun-12
Driver training commences (excludes depot)	Nov 2010	Aug-11	Jul-12
System testing complete off street	09-Dec-10	Mar-12	Jul-12
Construction Line 1a complete	17-Jan-11	05-Apr-12	Jun-12
System testing complete on street	16-Feb-11	May-12	Jul-12
Letter of "no objection" from Independent Competent Person to commence tram running	17-Apr-11	May-12	Sep-12
Shadow running starts	18-Apr-11	Jul-12	Sep-12
Shadow running complete	July 2011	Oct-12	Dec-12
Letter of "no objection" from Independent Competent Person to commence revenue service	July 2011	Oct-12	Dec12
Open for revenue service	July 2011	October 2012	Dec-12

*BSC Rev 2 programme is not an agreed Contract programme

Guidance for Completion:

Legend for colouring of Actual / forecast date text

Green: Actual / forecast date is ahead or in line with baseline
Yellow: Slight slippage – readily recoverable with action.
Pink: Significant slippage but expect recovery can be achieved
Red: 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, with a first draft expected by the end of January 2010. This process is underway with weekly reviews of data

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
1A Commence remaining non-MUDFA utility Diversions	09-Nov-09A
7 Complete Utility diversions Ingliston Park and Ride to Airport	13-Nov-09A
2A S19 Haymarket viaduct re-commences	23-Nov-09A
1C Complete Road & track installation on Princes Street	29-Nov-09A
1D Complete Road and Track works Lothian Rd junction	29-Nov-09A
7 Complete Hilton Hotel Carpark	11-Dec-09A
1C3 – Telecoms Works St Andrew Square to Princes Street West	04-Jan-10C

Milestones	Actual / current forecast date
2A -Trackworks Haymarket to Roseburn Junction -1135m	04-Jan-10S
2A – Haymarket viaduct	04-Jan-10C
5A Construct New Scotrail Carpark	04-Jan-10S
5A W4 Russell Road retaining wall piling - recommencing in Jan	04-Jan-10C
5B Re-commence Trackworks Bankhead to Edinburgh Park Stn	04-Jan-10S
5C - A8 Underpass –Combined phase 1/2 recommence	04-Jan-10S
7A Gogar Landfill	04-Jan-10S
1C Utility Diversions between Picardy Place and St Andrew Square	05-Jan-10S
5B Trackworks Balgreen Rd Saughton Road North	05-Jan10C
1A – Continue Utility Diversions Newhaven to Ocean Terminal	06-Jan-10S
5C W16 Commence Gyle Stop RW	11-Jan-10S
6 Depot Building Pits	11-Jan-10S
6 Depot Building Steelwork	15-Jan-10F
1A3 Commence Temporary Platforms and Demolition Tower Place bridge	18-Jan-10S
5C S32 Commence Depot Access bridge	18-Jan-10S
1A - Newhaven Rd to Ocean Terminal - ch 0000-0160 - Roadworks	18-Jan-10S
1A - Newhaven Rd to Ocean Terminal - ch 0000-0160 - Trackworks	18-Jan-10S
1A – Newhaven Road Tramstop	18-Jan-10S
1B - Leith Walk - ch 350-100 - Roadworks	18-Jan-10S
1D - Shandwick ch 850-440 - Roadworks Phase 1	19-Jan-10S
6 Depot Building Foundations	20-Jan-10F
1B – Telecoms Works Jane Street to McDonald road	20-Jan-10S
7 Burnside Road construction	20-Jan-10F
5A Demolition of Wanderers Clubhouse	25-Jan-10S
1D - Haymarket ch 1250-1125 - Roadworks Phase 1	25-Jan-10S
1B - Leith Walk - ch 600-850 - Roadworks	01-Feb-10S
5C – Commence W16 Gyle Centre TS RW	01-Feb-10S
1A – Commence Utility Diversions Bernard Street to Foot of the Walk	09-Feb-10S
1C1 – Telecoms Works McDonald Rd to Picardy Place	15-Feb-10C
1A – Commence Utility Diversions Port of Leith to Bernard Street	16-Feb-10S
7A S29 Gogar Underbridge	16-Feb-10F
6 Depot Earthworks	19-Feb-10F
6 Depot Sub-station	22-Feb-10S
1D Complete Utility diversions Haymarket to Shandwick Place	24-Feb-10F
7 W14/W15 Gogarburn RW	01-Mar-10S
1C2 – Telecoms Works Picardy Place to St Andrew Square	02-Mar-10C
1D – Telecoms Works Palmerston to Haymarket	05-Mar-10F
1B Complete Utility snagging between Foot of the Walk and Balfour Street	08-Mar-10F
5A S20 Russell Road bridge Piling	12-Mar-10S

Milestones	Actual / current forecast date
1B Complete Utility snagging between Balfour Street and McDonald Road	17-Mar-10F
5B Trackworks Saughton Rd to Bankhead (Guided Busway)	24-Mar-10F
1D – Telecoms Works Lothian Rd Junction	26-Mar-10F
5C Complete S27 Edinburgh Park Station bridge	06-Apr-10F

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 four risk reviews held in the period. One item was closed on the Infraco concerns register. There were three draw downs on the risk allowance approved in the period totaling £289,022. These are detailed later in this report. This leaves a risk and contingency balance of £2,125,608 (based upon the approved Project Risk Allowance at Financial Close).

Risk and Opportunity Reviews

The following reviews took place in the period:

Date	Format of review	Attendees	Comments
19/10/09	Change and Risk Review	Project Risk Manager Infraco QS Infraco Commercial Mgr	Review of current and proposed changes against risk allowance
30/11/09	Signalling, Communication and Control (SCC) Risk Review	Project Risk Manager SCC Project Risk Manager	Risks and Treatment Plans Reviewed
01/12/09	Structures Risk Review	Project Risk Manager Project Manager	Risks and Treatment Plans Reviewed
03/12/09	Roads and Drainage Risk Review	Project Risk Manager Project Manager	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 42 risks in the risk register. The top five project risks are listed on the following pages.

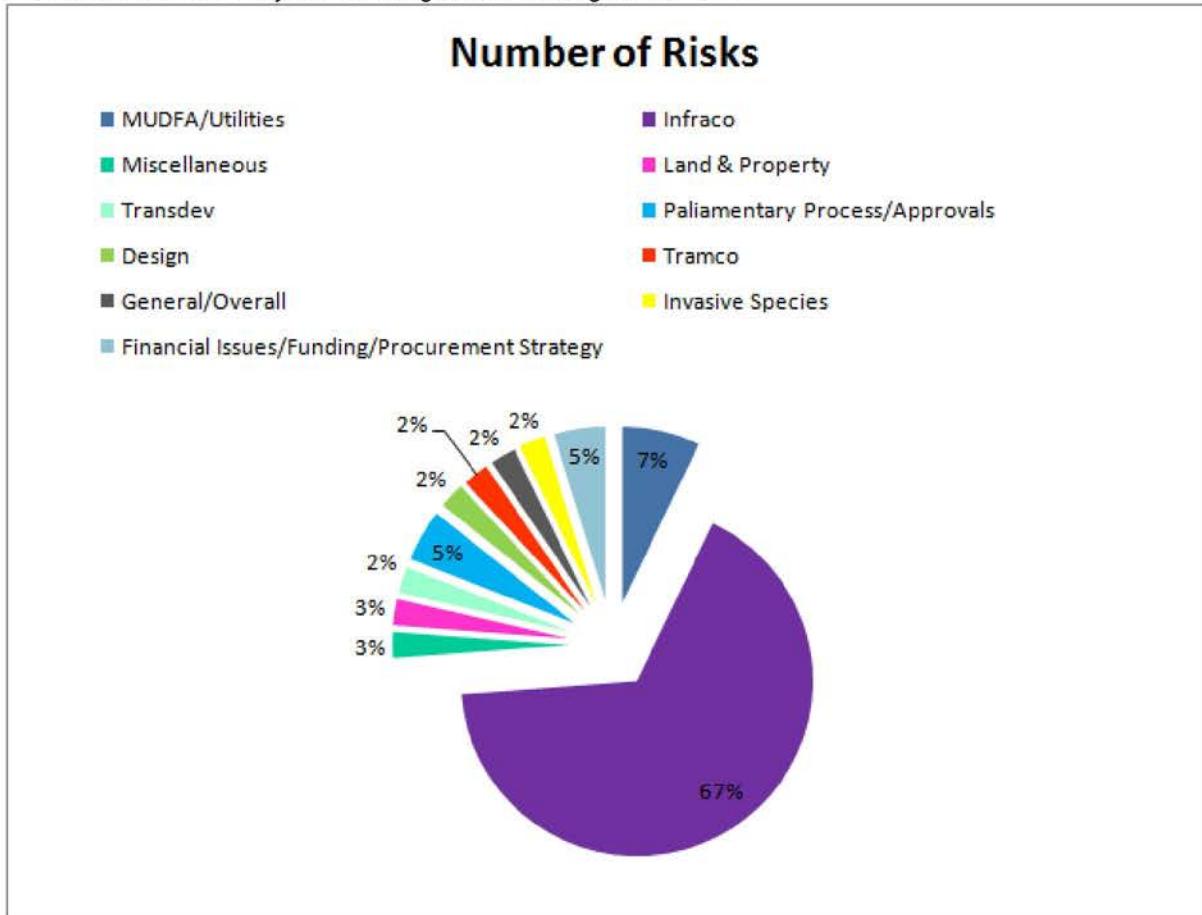
Top 5 Risks - Period 10 2010/2011

ARM Risk ID	Cause	Event	Effect	Risk Owner	Significance	Black Flag	Treatment Strategy	Previous Status	Current Status	Due Date	Action Owner
343	General delay to programme with various causes e.g. failure to obtain approvals on time; 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) Liason between tie/BSC programme managers Programme Management Panel process Weekly tie/BSC commercial meetings	Complete On Programme On Programme On Programme	Complete On Programme On Programme On Programme	30-Oct-09 30-Dec-11 30-Dec-11 30-Dec-11	S Bell T Hickman F McFadden M Paterson
1077	Base Date Design Information issued For Constructions (BDD-I-FC). 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) Intensive Mediation Marathon 29/6/09 to 6/7/09 to try and resolve issues. 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 Complete	Complete Complete Complete	30-Jun-09 30-Jun-09 14-Aug-09	S Bell S Bell 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	On Programme	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

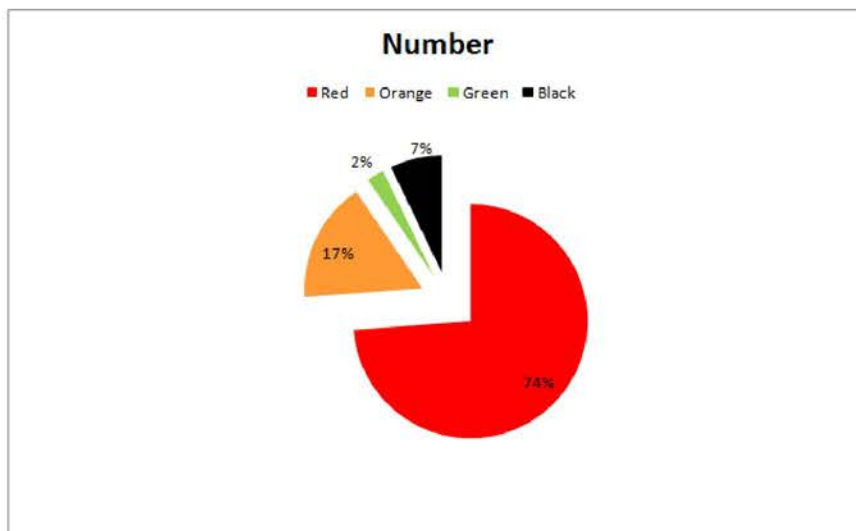
Top 5 Risks - Period 10 2010/2011

ARM Risk ID	Cause	Event	Risk Description	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 - 25.000		Donaldsons to carry out surveys Extent of soft ground being investigated. External specialist advice deployed.	Complete	Complete	30-Jul-09	C Neil
1101	Unreasonable behaviour of BSC commercial management	Unrealistic estimates being submitted for potential changes		Programme delay while disputes regarding estimates are resolved	F McFadden	High - 25.000		Additional resource from TNT Agreed with BSC for independent evaluation to get benchmark 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.	Complete	Complete	30-Jul-09	M Paterson
1094		Roads throughout works require full depth reconstruction		Programme impact plus additional costs. £1.5m cap applies to only 4 areas.	F McFadden	High - 24.000		Carry out surveys to confirm extent of roads requiring full depth reconstruction Suite of options from surveys to be reviewed and agreement reached	Complete	Complete	30-Jun-09	C Neil
									On Programme	On Programme	31-Mar-10	M Paterson
									Complete	Complete		
									On Programme	On Programme	30-Dec-10	M Paterson
									Complete	Complete		
									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

The following four items were closed in the period.

Risk description				
Risk Number	Cause	Risk Event	Effect	
OLE	8 Rejection of building fixing agreements	OLE design in place at present is based on a certain amount of building fixings. Rejections of these building fixings will necessitate a design change.	Overhead poles, which are more expensive than building fixings, will need to be used instead. Redesign of area affected will be required	

The following three concerns were added in the period by the Infraco Director.

Risk description				
Risk Number	Cause	Risk Event	Effect	
General	116 Failure of BSC to comply with Employer's Requirements	Failure to supply system verification, integration and design assurance documentation.	ICP does not approve system for operation.	
General	117 Utility diversions carried out prior to final design of DKE. Lack of space when utility diversion were being carried out.	Conflicts with services within the DKE at Leith Walk.	Additional cost and delay	
General	118 Supplemental Agreements are used for remaining on-street works.	Contractor paid on demonstrable costs as per agreements.	Additional cost	

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 tie Tramworks and Utilities PMs. 4-weekly tie Tramworks/Utilities management meetings. Identification of programme clashes between Tramworks and Utilities works tracked.	31/03/2010	Yes	No	No	Period 13
D Burns	869	644	Length of Line 1a to be re-surveyed on regular basis	31/01/2010	Yes	No	No	Period 12
D Sharp	271	559	Assure the quality and timing of submissions	31/03/2010	Yes	No	No	Period 12
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	557	SDS to obtain consent for design in accordance with programme requirements - SGN and Scottish Power. Complete with the exception of section 1A1	31/01/2010	Yes	No	No	Period 12
F McFadden	914	573	SDS to obtain consent for design in accordance with programme requirements - Scottish Water and all Telecoms. Complete with the exception of section 1A1	31/01/2010	Yes	No	No	Period 12
G Barclay	1084	654	Assess TM implications to minimise enabling works and additional cost	31/01/2010	Yes	No	No	Period 12
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.	31/01/2010	Yes	No	No	Period 12
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.	31/01/2010	Yes	No	No	Period 12
M Paterson	1091	667	Extent of soft ground being investigated. External specialist advice deployed.	31/03/2010	Yes	No	No	Period 13
P Dobbin	931	660	Infraco trial holes where applicable.	31/01/2010	Yes	No	No	Period 12
S Bell	1077	691	Six issues going through DRP process. Anticipated conclusion mid-November 09.	31/01/2010	Yes	No	No	Period 12
W Biggins	911	628	Liase with Scottish Power to agree and approve method of crossing tunnel.	31/01/2010	Yes	No	No	Period 12

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.

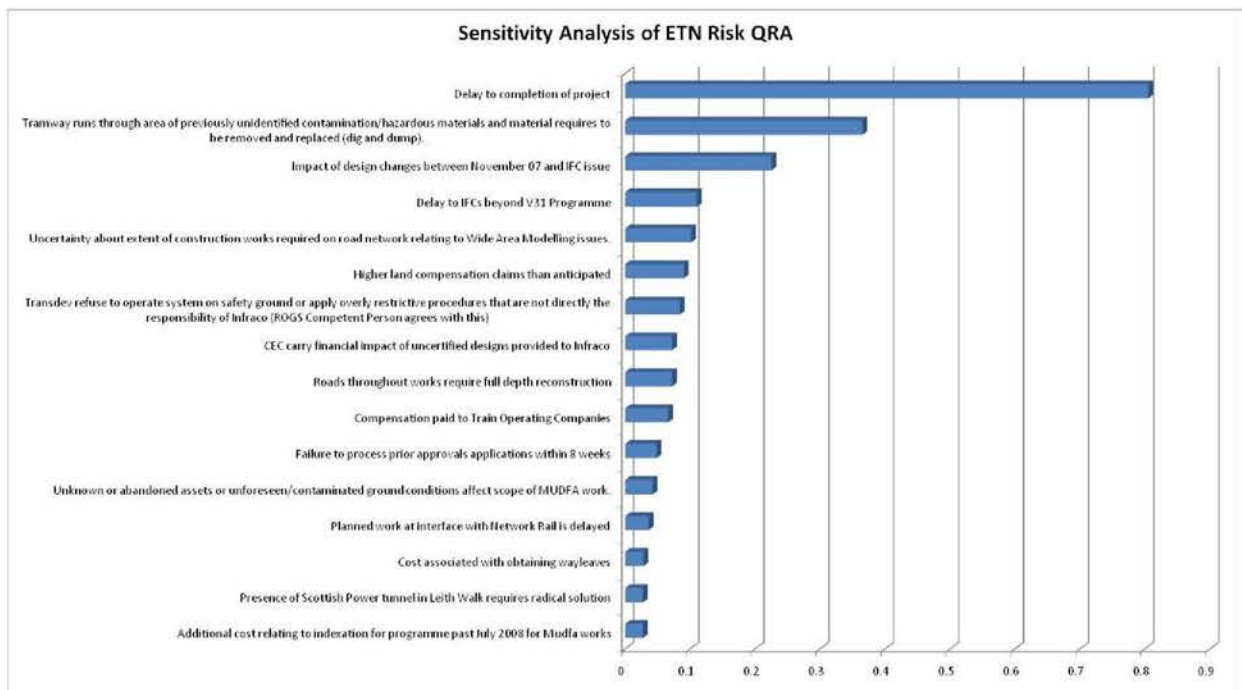
The Project Risk Allowance at financial close was £30,336,196. Drawdowns to the end of Period 10 09/10 now total £22,805,552. Remaining risk balance based on the approved QRA is £2,125,608.

Risk drawdown

The following table illustrates the drawdown applications on the project risk and contingency allocations in Period 10.

Description	Owner	Value (£)
Edinburgh Park Private Utilities	Mike Paterson	-161,022
Land Renunciation costs for ADM Milling	Alasdair Sim	-100,000
Edinburgh Park Bridge Approach Ramps, re-charge duplicate change form	Mike Paterson	185,000
SDS relocation to Edinburgh Park	Mike Paterson	-28,000
	Total	104,022

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.

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

Progress continues to be made on a number of opportunities and it is hoped a number of these will crystallise in the coming periods.

Opp number	Event	Opp rating	Open?	Treatment plan	Owner	Due date	Review Comments
46	Eliminate soil nailing in preference for 1.2 batter. This would provide a mitigated cost increase	1	Open	AR/SB/FMF have agreed to reduce clearances in the depot stabling area. BSC to confirm conditions can meet 1.2 slope.	AS		
47	Advance Siemens commencement by 6-9 months as contract programme showing completion prior to handover to Siemens	1	Open	Programme team to be made aware of opportunity and attempt to negotiate with BSC	AS		
48	Obtain agreement with CEC to adopt a different road construction methodology thereby saving time and money.	1	Open		CN		
49	Opportunity to amend to standard foundations in off-street section which would reduce cost.	1	Open		CN		
52	Selling of land which has been purchased but is no longer required	1	Open		A Sim		
53	Recovery of costs from Siemens for recovery of stray current monitoring costs	1	Open		CK/BB		
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)	1	Open	WB liaising with Siemens to agree proposals. Production saving to be made	WB		P9 - Approach to South Gyle Access Bridge (49m) - becoming Rheda City C from Direct Fix (Production saving) East side of Bankhead Stop (33m) - becoming Rheda City C (Production saving) Eastern ramp at Edinburgh Park Station Bridge (72m) - becoming Rheda City C (Production saving) East Side of Castle Gogar Access Rd (679m) - From A8 to Depot this can become ballasted throughout (200m to be Rheda City C and 479m to be ballasted) Potential cost/production savings Departure side of IPR stop (104m) - becoming Rheda City C (Production saving) Gyle Tramstop to south side of A8 (165m) - convert from greentrack to ballasted, agreed with CEC planner. Potential £350 per metresaving

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.

No.29 - BSC are redesigning with ballasted track. The saving will be in moving from slab to ballasted but maintenance cost will increase.

No.34 - Siemens are installing to their design which removes the need for 38 sets of breathers. Resubmitted design proposal with design calculations are being reviewed. Saving of approximately £12,000 x 38. This saving does not include any reduction in civils costs.

No.39 - CEC planners have confirmed that Haymarket to Russell Rd Bridge (477m) and Russell Rd to Murrayfield Hall (490m) can be changed to ballasted from direct fix. Saving needs to be calculated.

No.40 - S49 is now being installed through tram stops. This provides a production saving which needs to be agreed with BSC.

Transport Edinburgh

Edinburgh Trams

Lothian Buses

FOISA exempt

Yes

No

No.42 – this opportunity has been accepted by Siemens and is being carried out. This provides a production saving which needs to be agreed with BSC.

No.54 – Approach to South Gyle Access Bridge (49m) - becoming Rheda City C from Direct Fix. This provides a production saving which needs to be agreed with BSC.

East side of Bankhead Stop (33m) - becoming Rheda City C. This provides a production saving which needs to be agreed with BSC.

Eastern ramp at Edinburgh Park Station Bridge (72m) - becoming Rheda City C. This provides a production saving which needs to be agreed with BSC.

East Side of Castle Gogar Access Rd (679m) - From A8 to Depot this can become ballasted throughout (200m to be Rheda City C and 479m to be ballasted) This provides a cost and production saving which needs to be agreed with BSC.

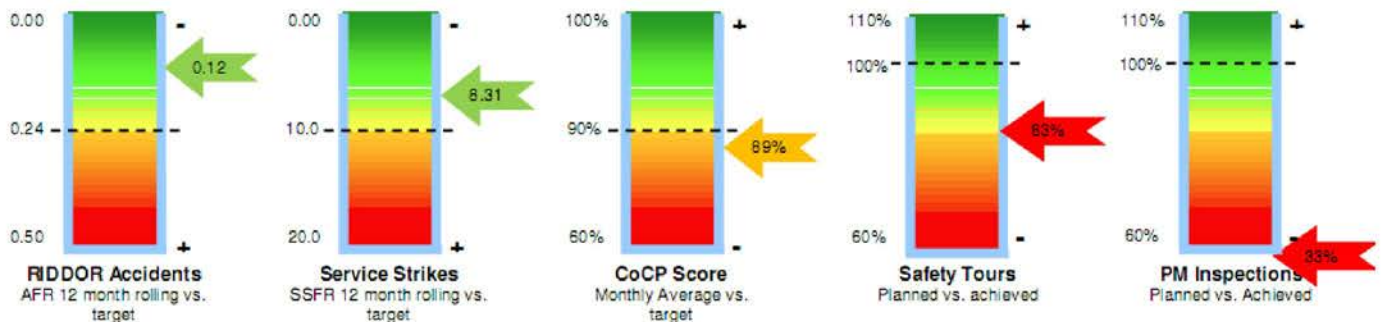
Departure side of IPR stop (104m) - becoming Rheda City C. This provides a production saving which needs to be agreed with BSC.

Gyle Tramstop to south side of A8 (165m) - convert from greentrack to ballasted, agreed with CEC planner. Potential for £350 per metre saving.

6 Health, safety, quality and environment

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	94,300	0	0	0	8	0	2	0	10	0.00	0.00
13 period rolling	1,732,653	1	1	30	259	144	14	10	58	0.12	8.31



During Period 10 there was a significant decrease in the amount of ongoing construction works was noted during period 10, this is attributed to the embargo and Christmas holiday period. There were no reportable accidents and no reported Service Strikes during Period 10. The shut down over the embargo and Christmas period has been successful with no incidents reported over the Christmas holiday period and no incidents recorded as a result of the severe weather.

Although there has not been any significant construction related health and safety events a number of incidents have been reported involving cyclists falling as a result of cycling on the Tram rail in Princes Street, one of which resulted in serious injury. A training session was organised with Spokes. The rails are installed as per specification and guidance. There was an increase in the number of MOP interactions mainly due to 7 incidents involving damaged car wheels/tyres in Russell Road as a result of BSC carrying out trial holes that were inadequately reinstated.

The CoCP inspections, joint inspections and safety tours fell short of those planned in period 10. This will be addressed in period 11.

Environment

Environmental Incident recorded at Gogar depot re uncontrolled release of contaminated water through the sewer into the Gogar Burn. Discussions currently ongoing with BSC and SEPA re the course of action to be taken.

Tie are still awaiting BSC Invasive Species Strategy – this is an Employers Requirement. A follow up letter to the original request will be sent to BSC during period 11. Live knotweed was rediscovered at the Viking Building (isolated area) - TCM have now fully removed this plant. Ongoing monitoring will take place.

Works ongoing regarding contaminated ground. Discussions with BSC and clarification requested from tie to BSC for details of contaminants.

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
Section 2A Haymarket to Russell Rd	New Site Start Up	0.5	0.5	NA	1	NA	NA
Section 1A Tower Place Bridge	New Site Start Up	0.5	0.5	NA	1	NA	NA
Edinburgh Park Bridge	Construction of Ramps	0.5	0.5	1	1	1	NA
Edinburgh Park to Guided busway	General works	0.5	0.5	1	1	1	NA
PD	<i>Total (y)</i>	2	2	2	4	2	0
	<i>Max Possible Total (y)</i>	4	4	2	4	2	0
Total	Percentage P9	21%	73%	90%	53%	73%	50%
	Percentage P10	25%	69%	91%	63%	76%	50%

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

There has been a slight improvement in information provided by BSC for proving that the design has been subject to an Interdisciplinary review. However, more evidence in the form of minutes from Interdisciplinary workshops is required for sections of work before construction starts. A meeting is planned with BSC on 11th Jan to discuss and obtain further evidence.

There was a successful regulatory interface meeting with the Office of Rail Regulation. BSC presented to the ORR their philosophy behind the chosen rail profiles for the wheel rail interface at switches and crossings.

BSC have compiled a set of handover documents for the works completed at Princes Street thus far. These have been presented to **tie** and will be reviewed during period 11 for acceptance. The completed work at Princes Street will be subjected to the **tie** SVS (Safety Verification System) system with a view to compiling evidence to prove the safe design and construction of the works complete so far. This will test the SVS and produce vital evidence required to enable commissioning, testing and operation.

Design Assurance Audit (Tram) carried out 18th November 2009 - A meeting was held on the 16th December 2009 to determine the findings from the audit. From the information provided by CAF; 1 observation will be raised against BSC to update their Design Management Plan and 1 finding will be raised against **tie** with regard to the record of review process. The formal report will be developed and issued prior to the Christmas vacation.

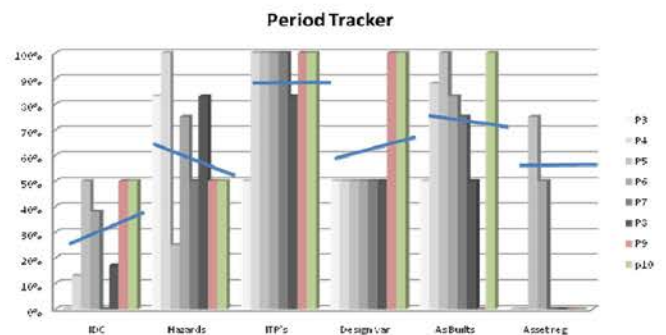
A discussion paper has been produced by **tie** detailing the next stage in the "Deliver a Safe Tram" strategy. The paper outlines the "Readiness for Operation Strategy" that will lead to Safety Assurance during testing, commissioning and operation. A briefing paper will be submitted to the Board in February. A number of productive discussions have taken place regarding the recording and management of assets for the Tram Infrastructure and the Tram. These have been carried out in conjunction with TEL and ETL and an acceptable strategy has been agreed.

Action to be taken

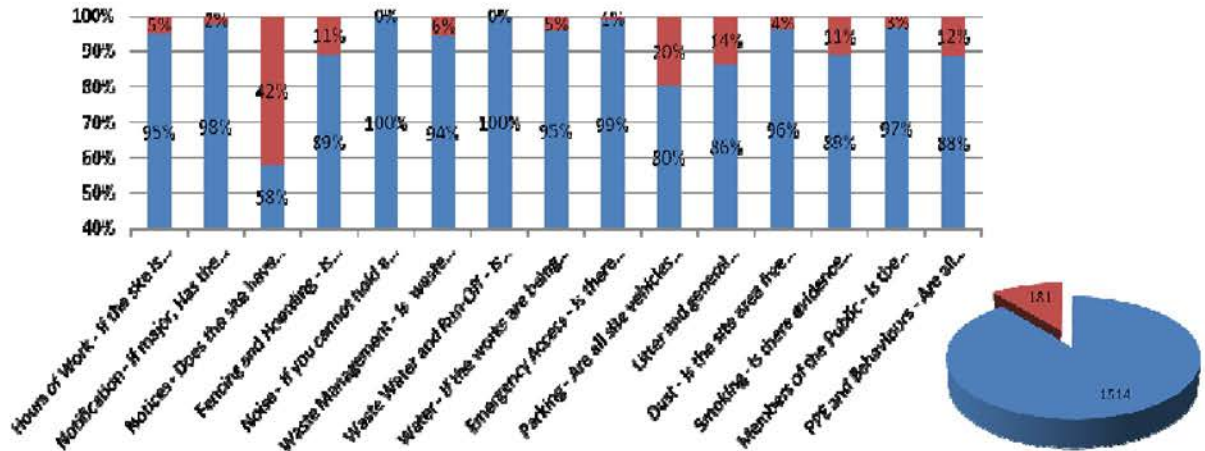
Weekly inspections will recommence 8th January 2010, subsequent to the Christmas vacation. Inspections will be carried out in Leith Walk, Shandwick Place, Gogar Depot and Russell Road Retaining Wall, during period 11.

Meeting to be arranged with BSC to discuss outstanding actions from previous period reports, where actions have not been addressed. **tie** will formally write to BSC requiring details of action to be carried out.

Code of Construction Practice Period 10

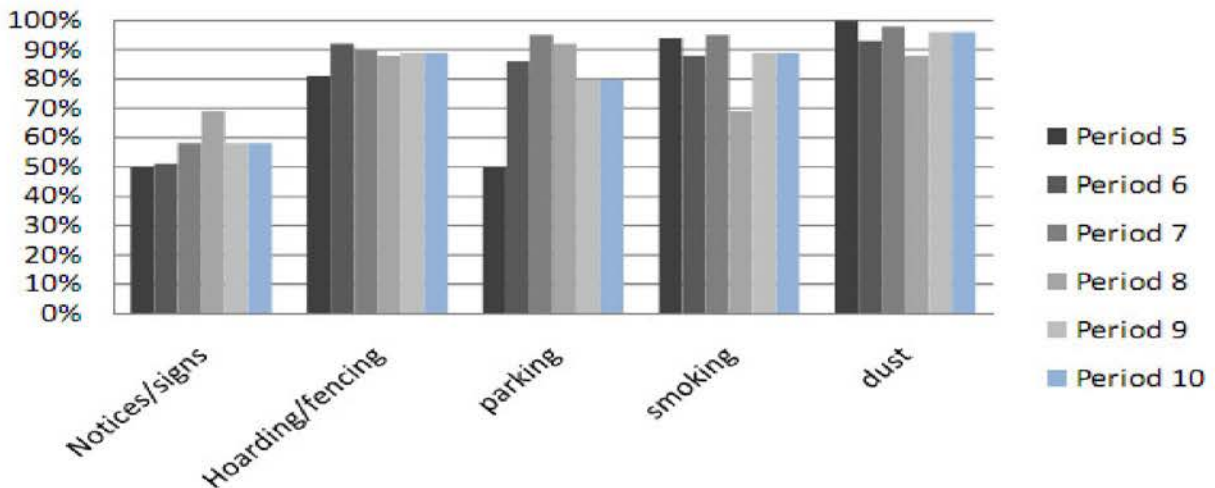


APPENDIX B – INSPECTIONS



CoCP compliance continues to be monitored by **tie**, on the whole there has been little movement in the month, however there has been a decrease in compliance with Tram site identification and timescale signage. This is being addressed with the ordering of more signs and display of timescales.

COCP Trends



The COCP statistics are published on the tram website and continue to be monitored on a period by period basis. Action plans are also published to address areas of concern.

7 Stakeholder and Communications

Media / Press Activity

The media activity has been quiet with a small number of enquiries during this reporting period. These have focussed mainly 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 on the whole balanced and factual in relation to these areas with some less favourable coverage from readers' letters/comments although these have been minimal.

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 has been undertaken 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.

Planned work within the City Centre at the east end of Princes Street (St Andrew's Square end) may also provoke some media coverage once the work commences.

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.

The Edinburgh Sparkles campaign which provided widespread publicity for the City in the lead-up to and during the Festive period has received significant positive feedback. A full media analysis exercise will be undertaken over the coming weeks.

Public Information Planning

The Closure of Broughton Street for MUDFA works beginning 16th January has produced a pressing need for signage relaying that Broughton Street is open for business and has full pedestrian access. Therefore two large mesh banners as well as several smaller Corex boards have been produced to communicate this message.

Banners for Leith Walk, illustrating a variety of messages such as 'I love Leith' and 'Welcome to Leith Walk' as well as specific area promotions, have been put in place and have drawn an enthusiastic and positive response. These banners have been produced with Burt Greener and funded by Edinburgh Trams, CEC Economic Development and Open for Business. 600 Leaflets informing and advising residents of properties affected by tram buildings and fixings were printed and sent out in mid-December. A sign informing the public about Murrayfield's future tramstop is in the final stages of artwork and will be printed for display during the next month.

Regarding branding, the sub-group of the branding group tasked with recommending options for tram livery is progressing with two livery options. Key decision-making meetings at the branding group level, prior to forwarding recommendations to politicians, are due to take place at the end of January. The same sub-group is also actively planning and considering ideas for the dressing of the tram route as part of the overall operational tram brand. Key considerations are Edinburgh's history, heritage and elegance, diverse range of festivals and events and specific aspects of each area along the route.

Partner and Stakeholder Communications

Worksites were removed across the route as part of the combined city centre Christmas embargo and goodwill gesture on behalf of Edinburgh Trams. The 4th January saw work sites reinstated and new sections of work gearing up to start throughout January. In order to communicate the upcoming works

Transport Edinburgh

Edinburgh Trams

Lothian Buses

FOISA exempt

Yes

No

approximately 5675 letters were distributed during December to residents and businesses across five major areas of work. These areas include Newhaven and Ocean Drive, Carrick Knowe, York Place, Broughton Street and the Haymarket area. Several letters have been delivered to residents on Ocean Drive and Tower Place regarding visual inspections of their properties ahead of work on Tower Bridge early in the New Year.

Training for cyclists was held on Sunday 13th December with the aim to raise awareness of the correct way in which to negotiate the new tram lines on Princes Street. The drop in sessions which were given by staff from the Bike Station was successful in attracting around 40 cyclists.

The new Tram Facts booklet which was produced last period has now been distributed to various outlets such as the Edinburgh City Council and the Tram Mock up, while also available on the Edinburgh Trams website. The facts cover a range of topics while also supplying general facts and figures relating to the length of the route, number of tram stops etc.

The following meetings were held with stakeholder groups during period 10 to discuss our upcoming works in 2010:

- Broughton Street Traders
- Dublin Street Residents Association
- West End Traders

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

Website / Internet Communications

There were 15303 visits to the www.edinburghtrams.com website, an expected drop from Period 9, attributable to the Christmas break and a reduction in the number of users who view our pages from work. Despite this drop in traffic to our main website, the number of followers on twitter has risen to 475 against last period's 452. Facebook interaction and membership has also risen to 482 members compared with last period's 468. Video podcast views remain high, although the lower traffic over the Christmas and New Year period has seen a drop to 2507 views.

RSS feeds, which actively push information to users were accessed 4,342 times this period - a very high number, particularly in consideration of the overall reduction in user traffic over the holidays. This indicates that people who have signed up to alerts still elect to read these and follow associated links. "Local Updates" resumed first place this period, with the route map and story so far sections rising in popularity to put podcasts into fourth place for the first time. Fewer videos were posted over the holiday period, partially accounting for this change. Facebook and Twitter video views remained consistently high with, video podcasts remaining our most popular online communications resource after the Facebook and Twitter feeds themselves.

Logistics

The logistic team has begun phasing in operations from 4th January with Haymarket continuing as it has been over the holiday period. Other areas such as Broughton St and Shandwick Place will occur later in the month. Site cleaning will be maintained until the contractors take over those areas which have only been coned off.

Winter Festivals

The Edinburgh Sparkles campaign which was launched on the 26th November continued throughout the first two weeks of Period 10 in the run up to Christmas. The Edinburgh Sparkles calendar of events was sponsored by Edinburgh Trams in partnership with the City of Edinburgh Council, Essential Edinburgh and Destination Edinburgh Marketing Alliance.

Transport Edinburgh

Edinburgh Trams

Lothian Buses

FOISA exempt

Yes

No

The collaboration of these groups alongside local retailers and stakeholders ensured the biggest Christmas promotional event to date aimed at attracting shoppers into the City for the festive period.

Feedback so far from traders in the City Centre has been very positive, with extensive media coverage being generated by the various events on offer throughout Edinburgh as well as Hogmanay Celebrations.

Freedom of Information Requests

During Period 10, 3 requests for information have been lodged, while information given to a previous request has been asked to be reviewed. Currently a one family FOISA strategy is being discussed with our partners in order to create a comprehensive system for dealing with requests from the public.

Customer Service Activity

Period 10's total correspondence has dropped significantly in light of week 4 logging no contacts as it coincided with the Christmas and New Year holidays. The total therefore came to 199 contacts a difference of 165 from Period 9's total of 364 contacts. Weekly totals were generally low with a steady decrease in correspondence each week in the run up to Christmas.

As a consequence of week 4's zero contacts, totals by Format and Subject have also been affected accordingly. Emails and Phone calls remain the main channels of enquiry for this period logging 80 and 86 contacts respectively. Face to Face correspondence has not featured as a channel for public enquiry once again this period only logging 8 information request. The reduction in our work sites across the city and therefore the need to liaise directly with businesses and residents through our Tram Construction Advisors will attribute to F2F contacts having dropped in recent weeks. The remaining contacts were received via Letters, of which there were 25.

Information Requests managed to accumulate 178 contacts for Period 10, leaving 21 contacts to be distributed across the remaining subjects of correspondence. Four Complaints were logged for Period 10, two of which concerned a cycling accident on Princes Street while there was also 4 enquiries made regarding Employment on with Edinburgh Trams. There were also contacts logged for Business Support, Land and Property and Building Fixings.

Customer Service Figures: Period 10

Transport Scotland - Monthly Customer Service Report 07/12/2009 - 01/01/2010

Item	Volume Month	Volume (Cumulative from 21/11/08)	Performance (Month)	Performance (Cumulative)	Target Performance
Telephone response	104	3480	98	97	90% in 30 seconds
Telephone Same day resolution	99	3352	96	96	Info only
Email acknowledgement	74	1879	100		100% acknowledged within 24 hours
Email response			100	99	90% resolution in 7 days
Email same day resolution	67	1703	91	91	Info only
Letter acknowledgement	19	153	100		100% acknowledgement within 24 hours
Letter response			100	95	100% resolution in 7 days
Total Enquiry Volumes	197	5512			
Website update	28	999	100	100	Weekly

Out of Standard/Work in Progress statement at month end 01 Jan. 2010

		Volume of WIP @ m/end	Oldest date	Oldest Issue	Handled By
M/e 01 Jan. 2010	Email	0	N/A	N/A	
	Letters	1	22 Dec 09	Are perts allowed on trams	Alastair Richards/Tom Wynn
	Calls	0	N/A	N/A	

Monthly Notifications Performance 07/12/09 to 01/01/2010 and Cumulative from 21 November 2008

4 Major notifications – all for utility and in standard
 2 Minor notification – all for utility and in standard
 0 Emergency notifications

Notification Type		Work Site	Utilities	Tram works	Total	% in Standard
Major works	Month	Notifications	4	0	4	
		In Standard	4	0	4	100
	Cumulative	Notifications	10	5	15	
		In Standard	4	2	6	67
Minor Works	Month	Notifications	2	0	2	
		In Standard	2	0	2	100
	Cumulative	Notifications	80	32	112	
		In Standard	68	24	92	82
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

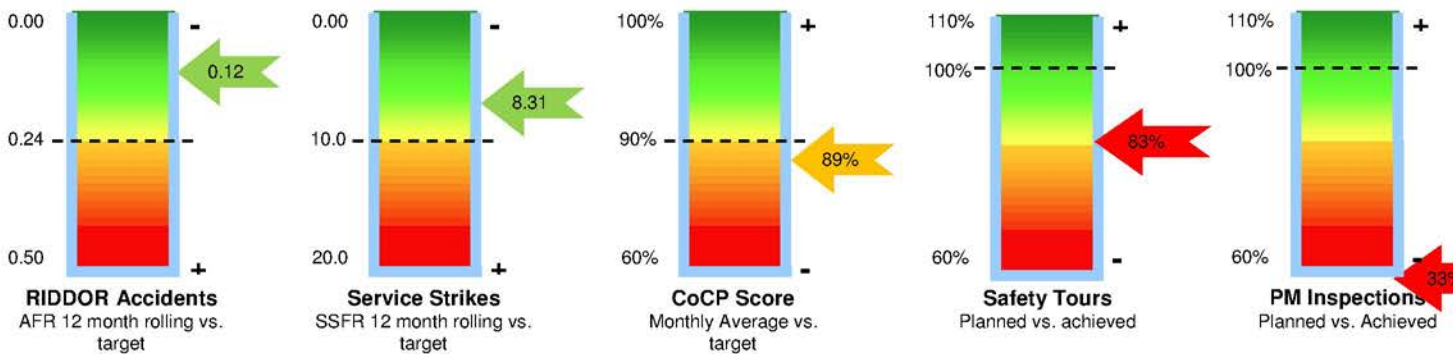


Deliver the Tram Safely

Company Report – Period 10_{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	94,300	0	0	0	8	0	2	0	10	0.00	0.00
13 period rolling	1,732,653	1	1	30	259	144	14	10	58	0.12	8.31
Carillion	Total Hours	>3 day	Major	Injury	NM/Unsafe Condition	Service Damage	ENV	RTA	MOP	AFR	SFR
Period	10,000	0	0	0	0	0	0	0	1	0.00	0.00
13 period rolling	571,018	1	1	13	162	103	2	9	29	0.35	18.04
BSC	Total Hours	>3 day	Major	Injury	NM/Unsafe Condition	Service Damage	ENV	RTA	MOP	AFR	SFR
Period	65,000	0	0	0	3	0	1	0	9	0.00	0.00
13 period rolling	861,150	0	0	16	68	33	8	1	27	0.00	3.83
Other Tram	Total Hours	>3 day	Major	Injury	NM/Unsafe Condition	Service Damage	ENV	RTA	MOP	AFR	SFR
Period	4,300	0	0	0	5	0	1	0	0	0.00	0.00
13 period rolling	58,485	0	0	1	25	8	4	0	1	0.00	13.68



EXECUTIVE SUMMARY

- A significant decrease in the amount of ongoing construction works was noted during period 10, this is attributed to the embargo and Christmas holiday period.
- There were no reportable accidents during period 10.
- There were no reported Service Strikes during Period 10.
- A significant number of incidents involving damaged car wheels/tyres in Russell Road as a result of BSC carrying out trial holes that were inadequately reinstated.
- No incidents reported over the Christmas holiday period.
- No incidents recorded as a result of the severe weather.
- A number of incidents have been reported involving cyclists falling after coming into contact with the rail in Princes Street, one of which resulted in serious injury. A training session was organised with Spokes.
- There has been a slight increase in environmental incidents reported during period 10 but no significant events were noted.
- CoCP inspections, joint inspections and safety tours fell short of those planned in period 10. This will be addressed in period 11.



Deliver the Tram Safely

Company Report – Period 10_{09/10}

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

Project Running Totals	HS&E Tours	HS&E PM Inspection
Number planned	6	15
Number achieved	5	5

HS&E KEY ACHIEVEMENTS

- BSC – completion of Princes Street approx 250,000 man hours without RIDDOR or significant incident.
- Successful start up of Lindsay Rd and Section 1a, Clancy and Farrans respectively.
- CUS successfully ceased works and reopened areas to the public.
- Successful shut down over the Christmas period with no reports of incidents.

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

- A significant near miss was noted regarding unsafe working at height during the placing of cabins for McKean's, involving a BSC subcontractor. *See Appendix A for further details.*
- A recent near miss involving excavation works close to a live gas main resulted in assurances having to be given to SGN that contractors employed by **tie** were competent to carry out works. Meetings have taken place with SGN, **tie** and Clancy Dowcra. **tie** have increased inspection and checks of the works being carried out by Clancy Dowcra.
- The HSE interviewed **tie** (Paul Colquhoun) for their in-house magazine and took numerous photographs – a good, positive article has been compiled by the HSE.
- CoCP relaxation process has been refined and agreed with CEC. Training session with all **tie** PMs took place early December, further training scheduled to take place 7th January 2010.
- CUS – successful cessation of works and close down of work areas - smooth transition took place with takeover by Clancy Dowcra of traffic management.
- Successful handover of Princes Street without any major incidents or any public incidents.
- Decommissioning of existing gas main in Constitution St resulted in the disconnection of gas supply to 32 properties. SGN authorised Carillion to abandon gas main. SGN records were not representative of the actual connections to the main. CUS executed their works in accordance with the Safe System and SGN requirements report still being finalised and checked by **tie**.
- Reconciliation and compilation of records for MUDFA Carillion works are continuing and processes for completing all relevant CDM and Statutory undertakers' handover/commissioning packs is ongoing.

SIGNIFICANT RISKS FOR THE NEXT PERIOD

RISK	ACTION
<ul style="list-style-type: none"> • Restart of Haymarket Viaduct – Grahams, contractor to BSC. • Continuation and start of Clancy Dowcra works at sections 1C & 1D. • New areas of work starting – BSC on-street works pending supplemental agreement, Haymarket/Shandwick place. • Back to work – 2010. • Other contracts – SRU, Gyle Utilities, Gogar Interchange etc. 	<ul style="list-style-type: none"> • WPP reviewed, prestart checklist in place. Working close to Network Rail land. • Prestart meeting to be held Construction Phase Plan to be reviewed by tie, start on site checklist to be completed • 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. • Meeting arranged for 07.01.10 with BSC to reinforce standards/outputs required on tram project • Health and Safety Pre-construction plans being developed, prestart meetings will be held as appropriate



Deliver the Tram Safely

Company Report – Period 10_{09/10}

ENVIRONMENTAL SUMMARY

List any significant environmental events, initiatives, breaches etc

- Environmental Incident recorded at Gogar depot re uncontrolled release of contaminated water through the sewer into the Gogar Burn. Discussions currently ongoing with BSC and SEPA re the course of action to be taken.
- Still awaiting BSC Invasive Species Strategy – this is an Employers Requirement. Another formal letter will be sent to BSC during period 11.
- Live knotweed present at Viking Building (isolated area) - TCM have now fully removed this plant. Ongoing monitoring will take place.
- Works ongoing regarding contaminated ground. Discussions with BSC and clarification requested from **tie** to BSC for details of contaminants.

QUALITY SUMMARY

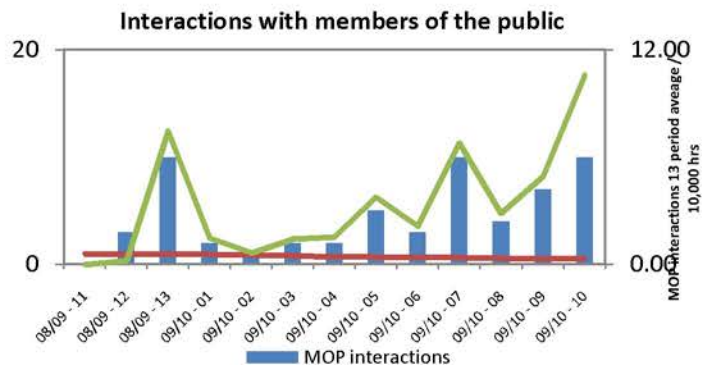
List any significant quality events, initiatives, breaches etc

- MUDFA handover – as built records are in the process of being completed and handed to **tie**. Ongoing assistance being provided by the HSQE team where required.
- Douglas Ross, BSC Consortium QA Manager has advised that he will leave the project 8th January 2010.
- Formal QA and environmental inspections carried out on Farrans and Clancy Dowcra. Programme of inspections to be developed and formally issued. Monitoring of results will take place to ensure that issues are highlighted.
- 3 meetings held with **tie**/BSC and BSC subcontractors to discuss lessons learned from Princes Street. A number of useful points were discussed in order that the processes can be improved for future handovers. A report will be developed and issued in due course.

MEMBER OF PUBLIC INTERACTION SUMMARY

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

- The number of Interactions with Members of the Public
- 7 claims from motorists damaging car tyres from hitting a pot hole left by BSC after trial hole works
- Review of tram lines/cyclists interface being undertaken by engineering team after some incidents being reported
- No reports of any incidents during the increase in interface with the public during the reopening of Princes St

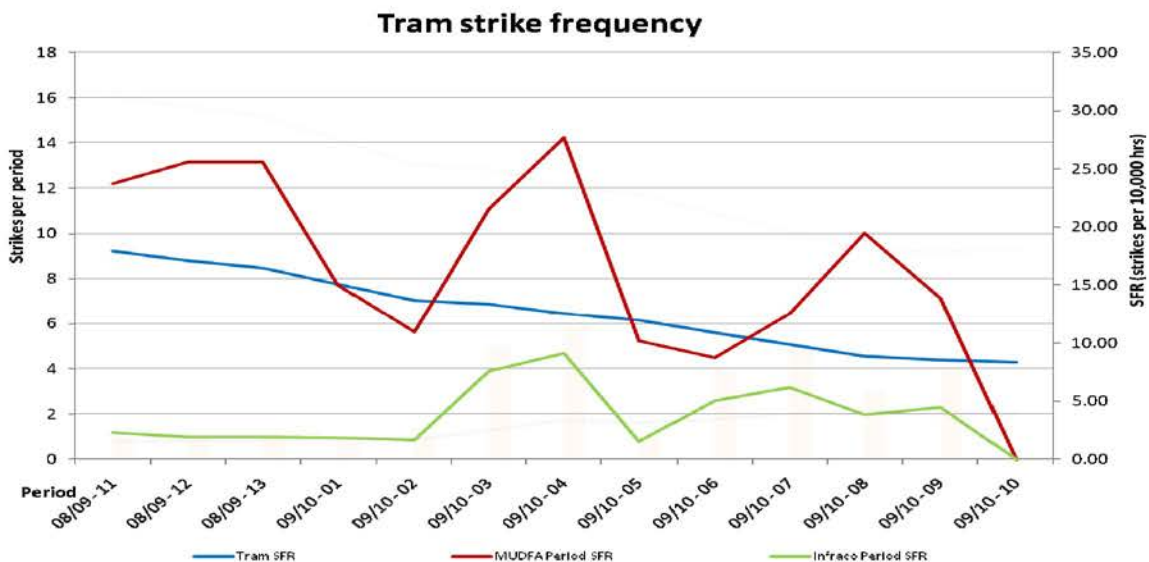
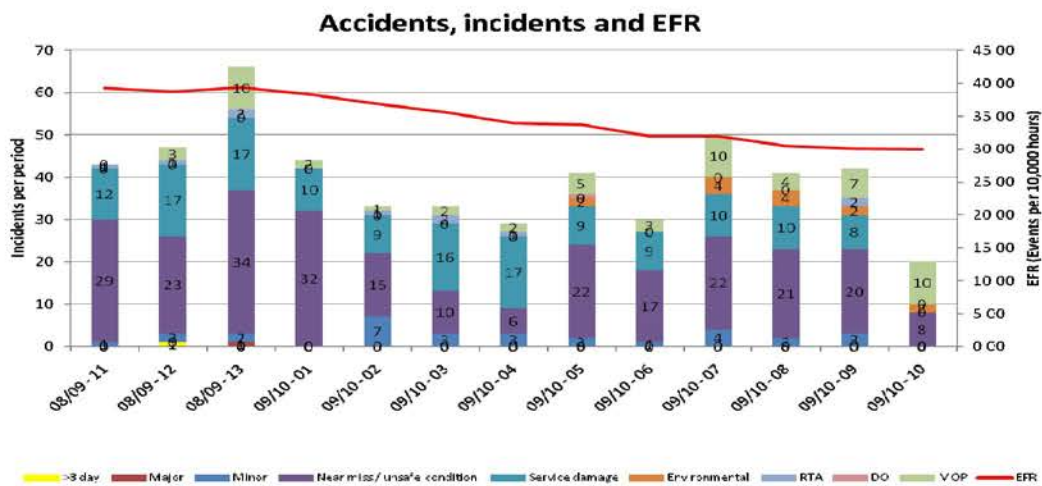
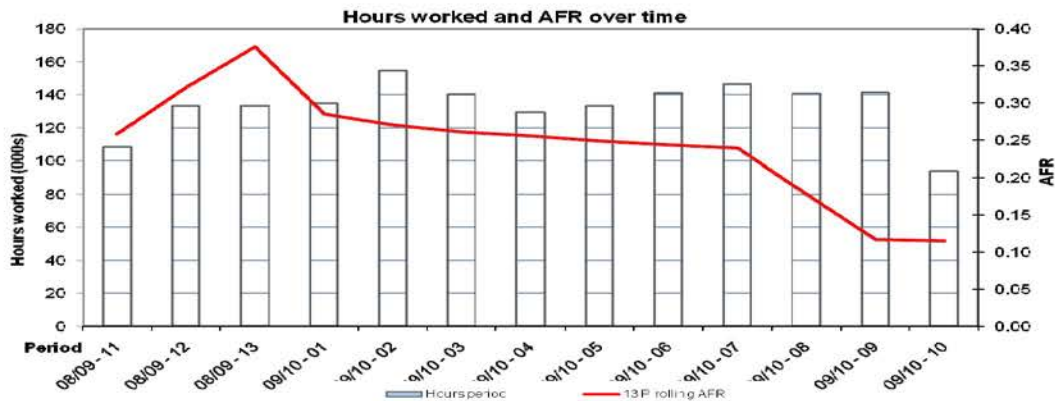




Deliver the Tram Safely

Company Report – Period 10_{09/10}

GRAPHS





Deliver the Tram Safely

Company Report – Period 10_{09/10}

APPENDIX A SIGNIFICANT ACCIDENT / INCIDENT

AIIR Ref:	AIIR01086	Serious/Significant	Yes	Action taken by tie (if required):
Contr Ref:		Description:		
Project	SECTION 1A Road Works	In the course of off- loading the cabins at the compound operatives were working at height with no harnesses or fall arrest system, as agreed in the method statement		tie have requested a report and will review the findings
Location:	Ocean Drive			
Date & Time	10 th December at 10.45am			
A/I type:	Near Miss/Unsafe Condition	Action taken by Contractor:		
tie PM:	Malcolm Butchert	Works stopped, whilst solution found. Operatives not to be allowed access to site again. Review of MS and RA prior to similar operations taking place again. Form F313 raised		
Contractor:	BSC			
Sub Contr:	McKeans			

AIIR Ref:	AIIR01088	Serious/Significant	No	Action taken by tie (if required):
Contr Ref:		Description:		
Project	Infraco	Scottish Water had noted that soiled water was being discharged into Gogar burn. Inspection held at 16.00 with Scottish Water, SEPA and BSC. Problem identified as being due to water discharge from the outfalls in the Gogar Depot		The situation will be monitored Successful
Location:	Tram Depot			
Date & Time	10 th December at 14.45am			
A/I type:	Environmental	Action taken by Contractor:		
tie PM:	Andy Scott	Pumped discharged stopped, new Method Statement prepared and tool box talk to be held. Further inspection to be arranged with SEPA to demonstrate effectiveness of new proposals		
Contractor:	BSC			
Sub Contr:	Barr			

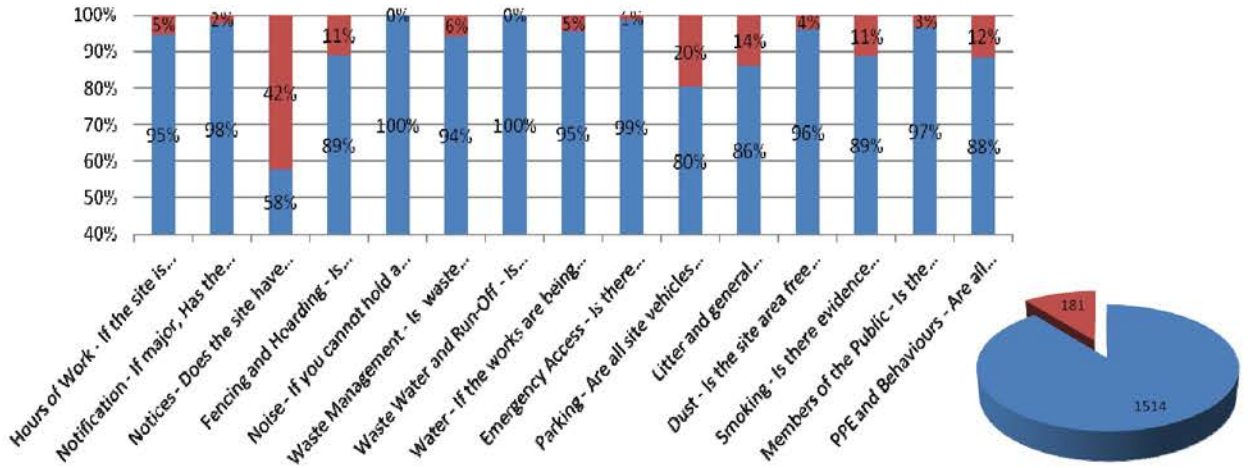
AIIR Ref:	AIIR – not reported	Serious/Significant	Yes	Action taken by tie (if required):
Contr Ref:		Description:		
Project	Other Tram	An excavator was observed excavating close to a live gas main. The bucket of the excavator was closer than the 500mmm specified in the MS and HSE guidance. The operatives were requested to stop by SGN but it is alleged that they continued to excavate		tie will review the report from the contractor. tie have increased the level of specific Gas works checks and inspections and have agreed with SGN to provide an independent assessment of the ongoing works
Location:	Section 1C			
Date & Time	15 th December			
A/I type:	Near Miss/ Unsafe Cond.	Action taken by Contractor:		
tie PM:	Malcolm Butchert	An investigation has taken place and a report is produced with corrective actions		
Contractor:	Clancy Dowcra			
Sub Contr:	N/A			



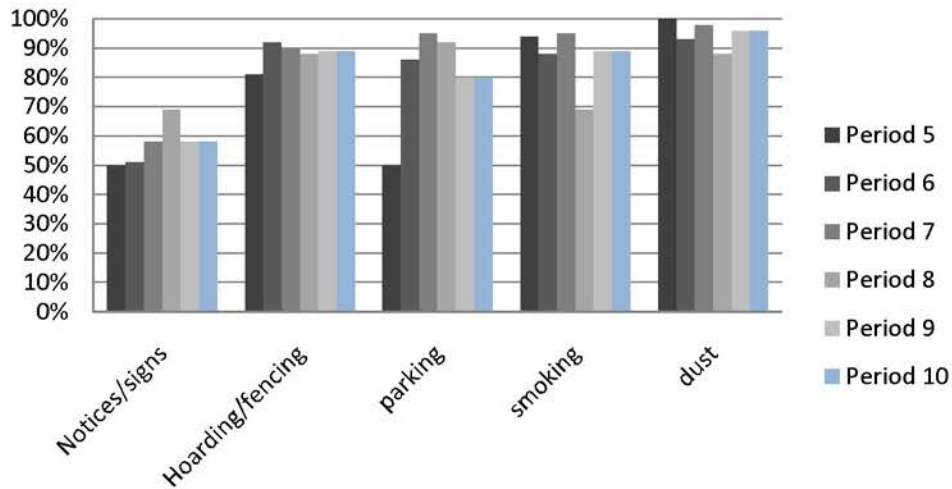
Deliver the Tram Safely

Company Report – Period 10_{09/10}

APPENDIX B – INSPECTIONS



COCP Trends





Deliver a Safe Tram

Company Report – Period 10

Section	Activity	Data Checked					
		Interdisciplinary Design Check	Hazards	Inspection and Test Plan System	Design Variation/Change	As Built	Asset Register
Section 2A Haymarket to Russell Rd	New Site Start Up	0.5	0.5	NA	1	NA	NA
Section 1A Tower Place Bridge	New Site Start Up	0.5	0.5	NA	1	NA	NA
Edinburgh Park Bridge	Construction of Ramps	0.5	0.5	1	1	1	NA
Edinburgh Park to Guided busway	General works	0.5	0.5	1	1	1	NA
PD	<i>Total (y)</i>	2	2	2	4	2	0
	<i>Max Possible Total (y)</i>	4	4	2	4	2	0
Total	Percentage P9	21%	73%	90%	53%	73%	50%
	Percentage P10	26%	69%	91%	63%	76%	50%

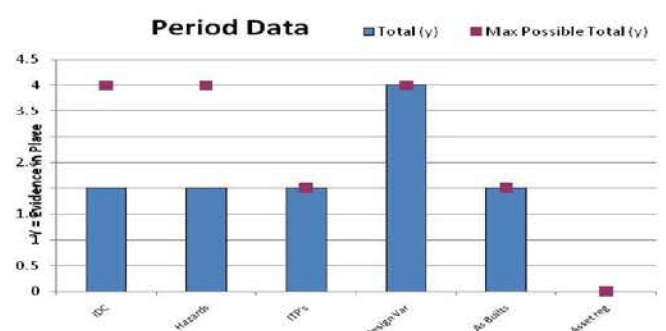
Key - Y = Evidence exists (1) N = No evidence exists (0) NA = Not applicable (-) P = Part evidence in place (0.5)

1.0 Deliver a Safe Tram Key Metrics

- There has been a slight improvement in information provided by BSC for proving that the design has been subject to an Interdisciplinary review. However, more evidence in the form of minutes from Interdisciplinary workshops is required for sections of work before construction starts. A meeting is planned with BSC on 11th Jan to discuss and obtain further evidence.
- There was a successful regulatory interface meeting with the Office of Rail Regulation. BSC presented to the ORR their philosophy behind the chosen rail profiles for the wheel rail interface at switches and crossings.
- BSC have compiled a set of handover documents for the works completed at Princes Street thus far. These have been presented to **tie** and will be reviewed during period 11 for acceptance.
- The completed work at Princes Street will be subjected to the **tie** SVS (Safety Verification System) system with a view to compiling evidence to prove the safe design and construction of the works complete so far. This will test the SVS and produce vital evidence required to enable commissioning, testing and operation.
- Design Assurance Audit (Tram) carried out 18th November 2009 - A meeting was held on the 16th December 2009 to determine the findings from the audit. From the information provided by CAF; 1 observation will be raised against BSC to update their Design Management Plan and 1 finding will be raised against **tie** with regard to the record of review process. The formal report will be developed and issued prior to the Christmas vacation.
- A discussion paper has been produced by **tie** detailing the next stage in the “Deliver a Safe Tram” strategy. The paper outlines the “Readiness for Operation Strategy” that will lead to Safety Assurance during testing, commissioning and operation. A briefing paper will be submitted to the Board in February.
- A number of productive discussions have taken place regarding the recording and management of assets for the Tram Infrastructure and the Tram. These have been carried out in conjunction with TEL and ETL and an acceptable strategy has been agreed.

1.1 Deliver a Safe Tram – Required Action

- Weekly inspections will recommence 8th January 2010, subsequent to the Christmas vacation. Inspections will be carried out in Leith Walk, Shandwick Place, Gogar Depot and Russell Road Retaining Wall, during period 11.
- Meeting to be arranged with BSC to discuss outstanding actions from previous period reports, where actions have not been addressed. **tie** will formally write to BSC requiring details of action to be carried out.

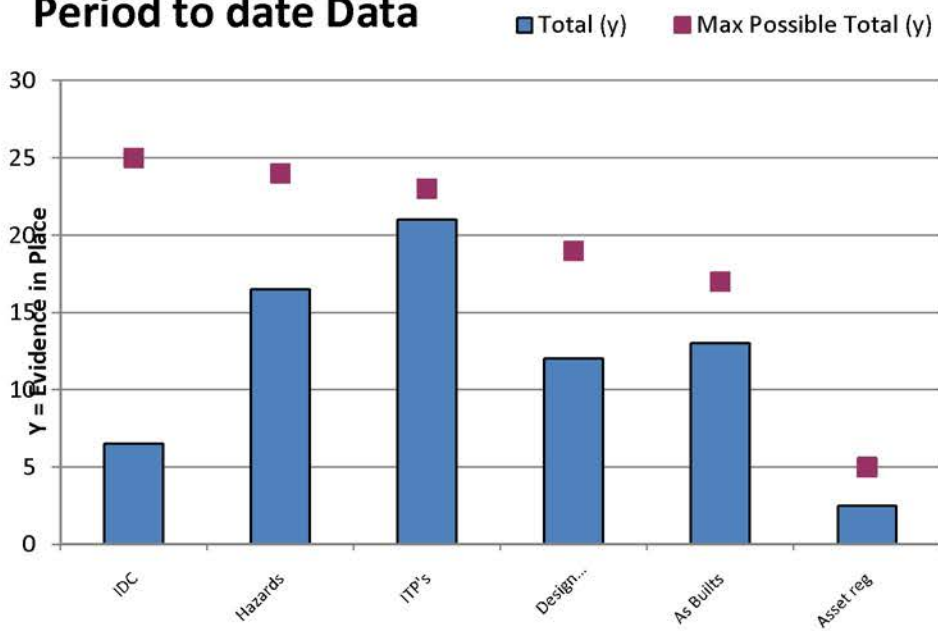




Deliver a Safe Tram

Company Report – Period 10

Period to date Data



Period Tracker

