



Transport Edinburgh

Edinburgh Trams

Lothian Buses

Tram Project Board

Report on Period 6

Papers for meeting 23th September 2009

09:30am – 1:00pm 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

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Agenda Tram Project Board

Brunel Suite – Citypoint, 2nd Floor

23th September 2009 – 09.30am to 1.00pm following the tie Board meeting

Attendees:

David Mackay (Chair)

Bill Campbell

Steven Bell

Cllr Ian Perry

Brian Cox

Cllr Phil Wheeler

Richard Jeffrey

Stewart McGarrity

Cllr Allan Jackson

Neil Scales

Alan Coyle

Dave Anderson

Graeme Bissett

Alastair Richards

Alasdair Sim (Minutes)

Apologies: Marshall Poulton, Kenneth Hogg, Donald McGougan; Cllr Gordon Mackenzie, Andy Conway

- 1 Review of previous minutes and matters arising
- 2 5 Key Business Priorities
 - 2.1 Building the Tram
 - Project Director Progress Report Period 6
 - Change Requests & Risk Drawdown (paper in pack)
 - TRO update (paper in pack for noting)
 - 2.2 Preparing for Operations
 - 2.3 Building the Brand
 - 2.4 Building the Team
 - 2.5 Preparing for the Future
- 3 Governance
- 4 Date of next meeting – 21st October 2009
- 5 AOB

Edinburgh Tram Network Minutes

STRICTLY PRIVATE AND CONFIDENTIAL

Tram Project Board

26th August 2009 (09:30 to 12:45)

tie offices – Citypoint II, Brunel Suite

Members:			
David Mackay (Chair)	DJM	Donald McGougan	DMcG
Cllr Gordon Mackenzie	GM	Bill Campbell	WWC
Richard Jeffrey	RJ		
In Attendance:			
Steven Bell	SB	Andy Conway	AC
Stewart McGarrity	SMcG	Mandy Haeburn-Little	MHL
Brian Cox	BC	Cllr Allan Jackson	AJ
Graeme Bissett	GB	Cllr Phil Wheeler	PW
Neil Scales	NS	Alastair Richards	AR
Kenneth Hogg	KH	Bob Cummins (part time)	BC
Dave Anderson	DA	Alasdair Sim (minutes)	AS

Apologies: Cllr Ian Perry, Marshall Poulton

1.0	Introduction, Review of Previous Minutes and Matters Arising	
1.1	DJM welcomed the participants to the meeting and acknowledged the apologies.	
1.2	A point of clarification from the Minute of the 29/07/09 TPB (item 3.5): DMcG pointed out that under the 'One Family' approach, there should be opportunities to minimise the administrative overhead, rather than just recharge costs.	Noted
1.3	All other actions identified from the previous minutes have been completed or are to be covered in the presentations to this Board meeting.	
1.4	DA noted under item 3.3, that discussions are ongoing with St. Mary's Cathedral regarding the planning implications of the revised Picardy Place junction layout.	
1.5	<i>The minutes were approved as an accurate record.</i>	
2.0	5 Key Business Priorities	
2.1	RJ updated the Board on matters since the previous meeting, noting that a great deal of intensive work has been undertaken across the team during August not only on DRP preparation, but also on providing information to inform the 20 th August Council Meeting including cross-party briefings and dealing with media/press reporting. RJ expressed this thanks to the Councillors who steered the tram motion through the 20 th August Council Meeting unopposed. This sent out a strong message that the Council remain united and committed behind the process.	

	This view was echoed by DJM and DMcG.	
3.0	Building the Tram	
3.1	<p><u>HSQE</u> Bob Cummins (tie Head of HSQE) reported on progress during Period 5. Hazard log reporting prior to commencement of works remains below expectation and this has been raised with BSC, encouraging them to take up a greater level of ownership for the activities within their sub-contractor's worksites. DA asked if the fact that BSC has yet to conclude the process of tying up the sub-contractors into formal contracts could be a factor in this. SB noted that contractual relationships do exist under the Letters of Intent that have been signed – and that BSC have been reminded of their obligation to provide collateral warranties in regard to their sub-contractors. BAM Rail has already provided the required collateral warranty for the track works.</p>	
3.2	<p><u>Overview of Current Progress (INFRACO)</u> SB reported that progress remains slower than desirable for the Infraco works, largely due to ongoing contractual matters. Progress on active worksites was summarised as follows:</p> <ul style="list-style-type: none"> ▪ Princes Street – 61% of track & roadworks complete against a planned 69%. Overhead line wiring and tramstop fit-out will take place with minimum disruption to traffic towards the end of 2010/early 2011. Hand back of Princes Street still on target for end November 2009. ▪ Works at Gogar Depot commenced early August, and works on the depot building (steel erection etc) will be evident from mid September. ▪ Track installation on the Guided Busway will commence during September. ▪ Beams on the Gogarburn Bridge are being installed this week. ▪ Raynesway have started the Burnside Road relocation works at Edinburgh Airport. ▪ Works on Shandwick Place tramstop have not started due to ongoing discussions with BSC regarding treatment of on-street sections. BSC are currently resisting further supplementary agreements with tie pending resolution of the wider contractual matters. 	
3.3	<p><u>Overview of Current Progress (Utilities)</u> SB presented a summary of the increased scope over and above the tendered utilities quantities (46,575m & 295 chambers vs 27,188m & 190 chambers). Most of these scope increases can be attributed to a combination of inaccurate utilities records; unknown apparatus; congestion/obstacles and resulting re-design and alternative routing. Estimated net outturn costs would indicate considerable value for money benefits, recognising these would be tempered against programme impacts. KH noted that there are positives to be drawn from these comparisons, and asked how this information is to be framed in the media. MHL reported that consideration to this was underway. Other utilities matters discussed were:</p> <ul style="list-style-type: none"> ▪ Carillion are currently at 96% completion – although challenging areas remain to be completed at Haymarket and York Place/Broughton. The Carillion works are expected to be completed by the end of November 2009. 	

	<ul style="list-style-type: none"> ▪ Farrans are undertaking the utilities diversion works to programme at the airport, and are expected to finish in October 2009. ▪ Tenders for the Section 1a utilities works are under review and a recommendation to award will be made mid September. <p>A discussion took place around the implications of awarding this tender in the context of the Phase 1a construction works. It was agreed that the decision to progress the award of tender will be ratified at the next Tram Project Board Meeting.</p>			
3.4	<p><u>Relationship with BSC</u></p> <p>RJ reported that a number of formal and informal discussions had taken place with BSC collectively and individually, particularly in view of recent media reporting. These discussions were generally positive. BSC have expressed their disappointment that the DRP process has been initiated, and have demonstrated a mixed behaviour at audits, exhibited by a lack of substantiation or lack of information readily availability. DJM emphasised that it was very important to maintain pressure on early receipt of audit information.</p>	RJ/SB		
3.5	<p><u>Change Requests and Risk Drawdown</u></p> <p>SB submitted a risk drawdown request for a combined sum of £7.5m, comprising:</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 70%;"> <ul style="list-style-type: none"> ▪ COP107 Edinburgh Park Cycleway design @ £52K ▪ COP110 Depot Steelwork & Foundations @ £318K ▪ COP111 Stray Current Monitoring @ £89K ▪ COP113 SGN Diversion at A8 Underpass @ £302K ▪ COP114 Utilities Risk Drawdown @ £6.76m ▪ COP115 Design Changes for MUDFA @ £44K ▪ Stage 1 Design Changes (10 No.) @ £294K </td> <td style="width: 30%; text-align: center; vertical-align: top;"> <p>Approved</p> <p>Approved</p> <p>Approved</p> <p>Approved</p> <p>Approved</p> <p>Approved</p> <p>Approved</p> </td> </tr> </table> <p>SB confirmed that the combined drawdown was allocated within the available funding envelope of £545m. A separate paper discussing COP114 Utilities Risk Drawdown was presented to the Board for consideration.</p> <p><i>The Board approved the Change Request and Risk Drawdown for Period 5.</i></p>	<ul style="list-style-type: none"> ▪ COP107 Edinburgh Park Cycleway design @ £52K ▪ COP110 Depot Steelwork & Foundations @ £318K ▪ COP111 Stray Current Monitoring @ £89K ▪ COP113 SGN Diversion at A8 Underpass @ £302K ▪ COP114 Utilities Risk Drawdown @ £6.76m ▪ COP115 Design Changes for MUDFA @ £44K ▪ Stage 1 Design Changes (10 No.) @ £294K 	<p>Approved</p> <p>Approved</p> <p>Approved</p> <p>Approved</p> <p>Approved</p> <p>Approved</p> <p>Approved</p>	
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3.6	<p><u>Paper on Traffic Regulation Orders Strategy</u></p> <p>AS confirmed that tie and CEC Transport had discussed the proposed TRO strategy as agreed at the last TPB meeting, and outlined the pertinent points, particularly around the Statutory Consultation for TRO1 and the proposal to upload the TRO drawings, strategy and programme on the tram website in parallel with the Statutory Consultation process as public information. AC/AS with support from Duncan Fraser undertook to provide GMcK with a full briefing on the TRO Strategy as required.</p> <p>Key programme dates are:</p> <ul style="list-style-type: none"> ▪ Statutory Consultation TRO 1 (5 Consultees) – October 2009 ▪ Public Deposit (TRO1) – February 2010 ▪ Report to Council (TRO1) – July 2010 <p><i>The TRO Strategy Paper was noted by the Board.</i></p>	AC/AS		
3.7	<u>Paper on Remit of Finance, Legal & Commercial Sub-Committee</u>			

	<i>The paper was approved by the Board without comment.</i>	
3.8	<p><u>Formal Contractual Position with BSC</u> SB provided an overview of the proposed approach to DRP. This to be undertaken in 5 tranches:</p> <ul style="list-style-type: none"> ▪ Tranche 1 <ul style="list-style-type: none"> ○ EOT1 – DRP launched 11 Aug 09 ○ Hilton Car Park – DRP launched 11 Aug 09 ▪ Tranche 2 <ul style="list-style-type: none"> ○ BDDI Gogarburn Bridge – DRP launched 24 Aug 09 ○ BDDI Carrick Knowe Bridge – DRP launched 25 Aug 09 ▪ Tranche 3 <ul style="list-style-type: none"> ○ BDDI Russell Road Bridge – audit notified to BSC 26 Aug 09 and under internal challenge review ○ BDDI Earthworks Section 7 – audit notified to BSC 26 Aug 09 and under internal challenge review ○ Value Engineering ▪ Tranche 4 to be notified, but encompasses <ul style="list-style-type: none"> ○ EOT 2 ○ SDS ▪ Tranche 5 <ul style="list-style-type: none"> ○ Edinburgh Park valuation – agreed without the need for DRP (settlement @ £50K vs claim of £405K) <p>RJ reiterated that a robust and rigorous challenge exercise is in progress on all DRP matters and that the outputs of this are reported in full to the FLC Sub Committee (as a Steering Group) prior to activation by the CEO under delegated authority. RJ stressed that tie has in no way underestimated the challenges ahead and that it is accepted that a 100% success in each matter considered is highly unlikely. RJ and SB explained the contractual mechanisms available within the contract to maintain contractor progress whilst in DRP.</p>	
3.9	<p><u>Costs & Funding</u> SMcG presented the Period 5 cost overview to the Board, and reported a possible underspend in the region of £30m based upon forecast for the 2009/10 financial year (of £153.3m). This is largely attributed to contractor progress and the ongoing dispute. DMcG asked about the £3.2m payment to BSC resulting from the postponement of Phase 1b. RJ reported that this invoice had been paid following advice on the contractual position from DLA Piper. This paper to be forwarded to DMcG.</p>	RJ
4.0	Preparing for Operations	
4.1	<p><u>TRAMCO & DPOFA</u> Pertinent points arising from the AR report to the Board were:</p> <ul style="list-style-type: none"> ▪ 125,000 visitors have now been to the mock-up, feedback is still positive and the intention is that the mock-up will be moved to the West End, then onto The Gyle and the Airport by the end of the year. ▪ 9 trams are in various stages of construction and the first tram is ready to start Factory Acceptance Testing. ▪ The TEL Business Plan has been circulated but remains a commercially 	

	<p>sensitive document.</p> <p>In line with the previous Board recommendation, Transdev have been approached with regard to the in-sourcing of the operations role, and have reacted with understanding in the circumstances. DJM reinforced the point that it is essential that the position is handled properly in the public domain, and that the decision to proceed in this direction is in no way attributable to Transdev's performance but rather as a result of the wider governance direction.</p>	
4.2	<p><u>Service Integration Plan</u></p> <p>WWC briefed the Board on the Bus/Tram Service Integration Plan that is included within the TEL Business Plan. He explained that this integration plan was originally developed in 2006 and was included in the transport modelling and patronage forecasting that was documented in the Final Business Case. The plan has been updated slightly to reflect the current Lothian Bus network, and remains flexible for future updating. The plan was summarised as follows:</p> <ul style="list-style-type: none"> ▪ Services No.10 & 12 will be truncated at St Andrew Square. ▪ Services No. 22 & 25 will be truncated at Leith Street. ▪ A high quality tram bus interchange at Foot of the Walk will provide E/W integration with Services 21, 34 and 35 re-routed with two new Services (40 & 40A) introduced. ▪ A 10 minute frequency service (No. 16) will provide the core bus service on Leith Walk to provide accessibility benefits. ▪ In West Edinburgh, the Service No. 22 will operate at a reduced frequency along the Stenhouse corridor (to be determined), and the Airlink Service will operate at a reduced frequency of up to 50%. <p>DJM requested that the Service Integration Plan slides be forwarded to the Board members and that WWC be available to brief Cllr Ian Perry at the earliest opportunity.</p>	WWC
5.0	Building the Brand	
5.1	<p>MHL presented a Media Analysis to the Board, this analysis indicating the volume of press/media attention that the tram project generated (on average) 6 articles/reports per day during Period 5. The tie and CEC media teams have been constantly proactive and a number of positive stories have emerged during the period. MHL reported that a regular email on progress is being sent to the major retailers/stakeholders across the City – this is available to Board members on request.</p> <p>DA noted that the Festival has been a major success this year, and that the One Family Team has contributed greatly toward this and has helped to restore credibility within the City.</p> <p>Communications issues that have emerged (or continue to generate concern) during the Period are:</p> <ul style="list-style-type: none"> ▪ Code of Construction Practice breaches ▪ Leith Walk remains a sensitive area ▪ Business losses/compensation ▪ The Festival Fireworks ▪ Hogmanny 2009 ▪ Buses back on Princes Street – November or in January? <p>On the return of buses to Princes Street, DA reported that it would be his</p>	

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Yes

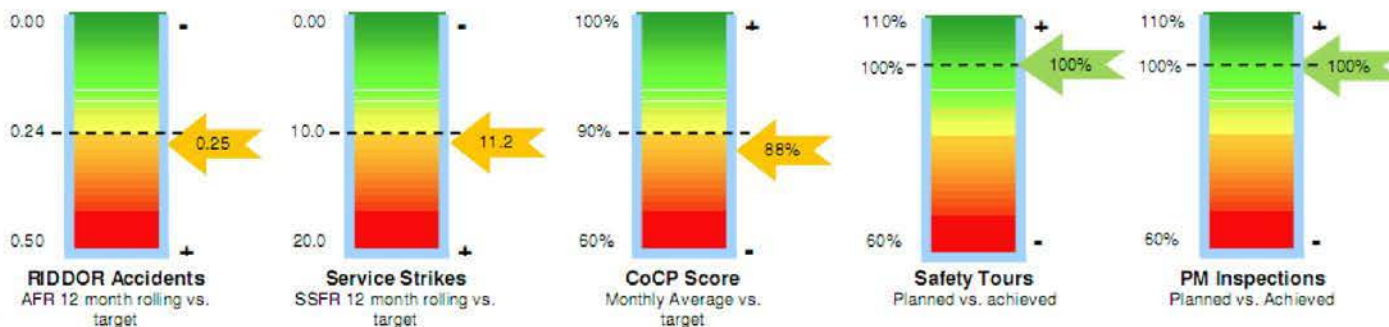
No

	<p>preference to leave the buses off Princes Street until January 2010 and create the opportunity to maximise the available public realm space to encourage visitors to the City Centre in the run up to Christmas. This is to be discussed at TOG (7th September). DJM acknowledged that it is a CEC matter, but asked that Lothian Buses be involved in the discussions prior to a decision being made.</p>	DA
6.0	Building The Team	
6.1	<p>RJ briefly updated the Board on progress to implement the Organisational Effectiveness Model across tie, and the development of objectives/responsibilities for the Executive Team. A revised bonus structure will be considered by the remuneration committee during September, and a leadership development strategy is under review.</p> <p>RJ reported that with regret, he has accepted the resignation of Gordon Rae, who has decided to pursue a more formalised HR Director Role than tie is currently able to offer.</p> <p>DJM noted that bonus payments to the tune of circa £12K (in total) will be paid out to several members of staff in September.</p>	
7.0	Preparing for the Future	
7.1	Nothing to report at this time.	
8.0	Governance	
8.1	<p>GB updated the Board on the previously agreed governance structure with TEL operating as the parent organisation with tie and Lothian Buses operating as subsidiary companies. It was agreed in February 2009 that steps would be taken to establishing this structure in two phases, the first being the arrangements in regard to tie. This has yet to be formalised, with the various documents required to achieve this under consideration by CEC Legal Services (Operating Agreement and a Memorandum of Understanding). DA to press for a swift resolution to conclude the drafting internally within CEC.</p> <p>The composition of the tie/TEL Boards to be agreed and ratified, and the appointment of non-executive Directors to be confirmed. It was noted that the contracts of the current non-exec members of the tie Board are due to expire at the end of September 2009.</p> <p>Various supporting document with regard to tax, legal status and H&S Management to be updated to advise the process. GB to action.</p> <p>GMcK to liaise with DA in regard to the recommendation to be put before the Council on 18 September 2009.</p> <p>It was confirmed that the points raised by KH delivered to BC in note form were addressed during the governance discussions.</p>	DA GB GMcK/ DA
9.0	AOB	
9.1	A site tour has been arranged for interested Board members at the conclusion of the meeting.	
9.2	DJM thanked the Board for their participation and input, and the meeting closed at 12:45.	
10.0	Date of Next Meeting	
10.1	The date of the next meeting will be Wednesday 23rd September 2009 commencing at 09:30hrs . It was noted that GMcK and KH tendered their apologies in advance.	

Prepared by Alasdair Sim on 31th August 2009.

Building The Tram Project Directors Report

Period 6 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	124,881	0	0	1	15	9	0	0	1	0.00	7.21
13 period rolling	1,592,205	1	3	30	225	178	3	16	58	0.25	11.18

- There have been no reportable accidents during Period 6. The 13 period AFR is 0.25 compared to the target, 0.24 accidents per 100,000hrs worked.
- There has been a decrease in the overall service strike frequency for the project, however, a number of water services have been struck by BSC. A new 'record of service damage' form is being used to help identify areas of causation.
- Director's Safety tours and Project Manager inspections have achieved 100% of those planned, however, a concerted effort is still having to be made to carry out joint inspections with the contractor.
- Further CoCP inspection have been carried out by tie, details of which are contained in Appendix B. Joint tie / BSC inspections have identified the main issues on BSC sites as – Provision of PPE, Housekeeping and Planning and Management. These issues have been addressed directly on site and are being monitored.
- Period 6 "Deliver a Safe Tram" inspection metrics were carried out on 4 activities across the project, 2 at Princes Street, 1 at the guided bus-way and 1 at the Depot.

Progress

Transport Scotland and City of Edinburgh Council have been briefed on the use of the formal Dispute Resolution Process contained within the Infraco contract and this was reported to the full council Meeting on 20th August. Strong and full Council support was given to the strategy being adopted by tie.

During the period the number of items in formal dispute with BSC has risen to 6. The table below shows the stage of the process each of these disputes is in and indicates, where known, which have been referred to mediation and which to adjudication. This decision is made following the Chief Executive's meeting part of the internal DRP process. tie has implemented a robust "Challenge" process to ensure that before any issue is referred to DRP that it has been externally and thoroughly tested prior to referral.

DRP No	Subject	DRP process commenced	PD Meeting	Position Papers	CEO Meeting	Referral	Decision
3	Hilton Car Park	√	√	√	√	14/09	11/10
4	EOT1	√	√	√	√	Mediation 22/23 Oct	Mediation 22/23 Oct
5a	Gogarburn	√	√	√	21/09	30/09*	27/10*
5b	Carrick Knowe	√	√	√	21/09	30/09*	27/10*
5c(B)	Russell Road	√	√	15/09	2/10	11/10*	7/11*
A	MUDFA Rev 8	√	√	15/09	2/10	11/10*	7/11*

Commenced by tie
Commenced by BSC

*Dates are based on proceeding directly to Adjudication.

Significantly, during the period, as certain items have entered the DRP process, this has allowed **tie** to use a facility within the contract to instruct works in DRP to progress (this is a Clause 80.15 instruction). Instructions to this effect have been issued for 2 of the structures in DRP and work has subsequently started at Carrick Knowe Bridge as a result of this.

The lack of a commercially agreed programme and the decision to apply formal contractual measures to resolve outstanding issues with the BSC consortium presents further risks in relation to the attribution of additional costs and delay to completion of the project. **tie** Ltd has taken extensive legal and technical advice, including Counsel's opinion, and is confident of its position on the key matters in dispute. However, given the nature of the process and the complexity of certain issues, it is unreasonable to expect that all adjudication outcomes will be awarded in the favour of **tie** Ltd and it will also be open to the BSC consortium to use the contract to formally pursue their objectives.

We continue in this report to reflect an outturn estimate of £527.1m. 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.

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 the remainder of 2009.

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, and tie met with TS most recently on 9th September 2009.

The cost, programme and risk information in this Period 6 report continues to be based upon an unapproved forecast on the information reported in May 2009. This will be updated once the above actions are progressed.

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 ;

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FOISA exempt

Yes
 No

- Slow mobilisation of INFRACO, including lack of formal sub-contracts being in place;
- Failure of INFRACO to submit preparatory paperwork in a timely manner 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 v49 of the design programme);
- Design changes as a result of the Prior and Technical Approvals process; and
- Consortium integrated design programme and validation

Agreement of a revised programme is one of the key priorities for the PMP and this was one of the key discussion topics at mediation. Discussions on programme revision and potential extension of time awards to BSC are continuing and remain one of the most significant differences between the parties. During Period 06 **tie** has formally rejected the BSC proposed Rev 2.0 programme. This is likely to be a future DRP topic.

The **tie** live programme currently predicts an Open for Revenue Service date in late **October 2012**. This has slipped slightly since last period and is mainly due to the lack of progress being achieved by INFRACO across the route compounded by delays caused by Utility Diversions at Haymarket, Leith Walk and Newhaven.

As per the previous period reporting **tie** retain an unapproved recalibrated baseline programme which reflects an Open for Revenue Service date of 23 Feb 2012. This remains a **tie** only view as to date a recalibrated programme although now submitted by INFRACO has not been agreed with BSC.

Progress – Design

Progress reported in period 6 for design is as follows:

Phase 1a only	Number required		Number	
	v31	V49	Submitted	Granted
Prior Approvals	49	55	51 (93%)	50 (91%)
Technical Approvals	71	87	77 (86%)	70 (80%)

Reasons for design slippage are being reviewed and recorded each week at the design taskforce meeting which is focused on resolving outstanding design issues. This slippage has been addressed as part of the re-calibration of the programme. **tie** is identifying and implementing opportunities to mitigate the impacts of this slippage.

Progress – MUDFA

Progress on MUDFA works during Period 6 is presented below (this excludes the remaining utility works being undertaken outwith the MUDFA contract on sections 1A & 7B):

Rev.08 Figures - Period 06 2009-10	Period		Delta	Cumulative		Delta
MUDFA PERIOD 06 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%	99.9%	-0.1%
Section 1c McDonald Road to Princes Street West	5.5%	2.2%	-3.3%	100.0%	91.3%	-8.7%
Section 1d Princes Street West to Haymarket	6.1%	1.4%	-4.6%	100.0%	98.0%	-2.0%
Combined Sections 1A-1B-1C-1D (On-Street) Newhaven Road to Haymarket	3.0%	1.0%	-2.0%	100.0%	96.8%	-3.2%
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%

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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	2.4%	0.8%	-1.6%	100.0%	97.4%	-2.6%

Key points to note are:

- Progress at the end of period 6 is 97.4% complete for all MUDFA works. 38,462 linear m of diversions have been completed, with 311 linear m achieved in the period against a planned 944 linear m;
- The majority of the works are now concentrated around the Haymarket and York Place to Picardy sections of the route. The reduced output is again representative of some of the congestion issues with existing utilities;
- Carillion works within Section 1A are complete, and tender award for the remainder of the Section 1A utilities diversions is expected during Period 7;
- SGN service connections on Leith Walk were completed on 11/09/09, and connection works are ongoing at Shandwick Place;
- BT cabling works continue progressing well at three locations;
- No significant safety incidents occurred during the period, and as-built progress has been positive and in maintaining alignment with agreed programme dates.

Progress – INFRACO

The project continues to experience problems with slow progress for INFRACO works and, in particular, the appointment of direct BSC resource and the final appointment of the main package contractors. The BSC sub-contractors continue to operate with Limited Letters of Intent whilst awaiting conclusion of the full sub-contracts. 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 Haymarket viaduct, Russell road bridge, Murrayfield pitches Retaining Wall, Baird Drive Retaining Wall, Carricknowe bridge, Depot building and Tower Place bridge, although in the period tie has issued instructions in relation to 2 structures in the DRP process to get work started. These are Carrick Knowe where BSC have not mobilised and Russell Road Retaining Wall 4.

The work has continued on a number of worksites including:

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

- In both the east and west sections of the site work has continued with track formation preparation, track slab construction, track laying and slab construction; central reserve works; carriageway formation preparation, sub-base and base course works and kerbing and footpath works. Work has now also commenced at both Lothian Road junction and at the foot of the Mound;
- A programme is being developed to ensure that both bus shelters and trackers can be installed and operational before the end of November;
- Princes Street is 64 % complete and due for handback to CEC by 28th November.

Section 5B Balgreen Road to Edinburgh Park Central:

- At the guided bus way section piling works started and 1/3rd of section now available to start Track works. Track works to commence early Period 7;
- Edinburgh Park Station Bridge: BSC continued to work on diaphragm construction, deck slab and cope – 74% complete.

Section 5C Edinburgh Park Central to Gogarburn:

- A8 underpass combined phase 1 & 2 is on hold. Further work required to quantify scope of work required by Scottish Power to confirm status of existing cables. Construction

methodology has been agreed with Telecoms companies for a re-commencement in period 07.

Section 6 Gogar Depot

- Depot Access Road and Depot Building Foundations started on 31st August 2009 ; 76 out of 263 pours completed;
- Depot Building Steelwork due to start late September 2009.

Section 7 Gogarburn to Edinburgh Airport

- Gogarburn Bridge replacement piers and capping beam have been constructed. Bridge Decking works started. 64% complete;
- Gogar Culvert No.1 recommenced during Period 06;
- Gogar Culvert No.3 recommenced during Period 06.

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.

Milestones	Period 06		Cumulative (Short-Term)		Contract Planned to P06
	Planned	Actual	Planned	Actual	
Prelims	2	2	53	53	53
Construction	5	4	46	45	621

Progress – TRAMCO

Good progress continues to be made with the progress of deliverables against the schedule. Fabrication has commenced on the body shell for the 10th tram. Internal fit out and wiring continues for Trams 2 & 3 and the first tram has started Factory Acceptance Tests. A contingency is being investigated for storage and testing should the first trams be complete before the depot is ready to receive them.

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. Closely related to this, **tie** has recently notified Transdev of its intent to exercise its option to conclude the existing contractual arrangements as allowed for in the DPOFA contract. Discussions about an ongoing relationship are underway.

Progress – Testing & Commissioning

The process for acceptance of the Edinburgh Tram is designed to ensure that it is delivered in an acceptably safe, compliant and efficient manner. This process is undertaken via the testing and commissioning regime to validate and verify the system against applicable standards. To this end, a number of processes are underway including:

- Design Assurance. This process being undertaken by BSC(SDS)/**tie**;
- Quality Checking: 11 of the 37 BSC inspections and test plans are in progress;
- Systems Safety: Safety verification plans are in place and this process of verification is underway with INFRACO, the ICP, TEL and Transdev all involved in the process.

BSC have produced Inspection and Test Plans (ITP's) for the current set of construction works, however they have not yet produced a consolidated Test and Commissioning Plan. Constituent

elements are available from CAF, the tram manufacturer, the Operator and an overall framework from TEL exists to cover the activities.

It is intended over the next three periods to obtain collective engagement on testing and commissioning, and agreement to the formation of a project wide multi-disciplinary test coordination team as part of the "Preparing for Operations" key workstream.

Progress – Interface with 3rd Party Projects : Gogar Surface Station

At the end of Period 6 the baselined design phase was 15% complete compared with 19% planned. The cost of work done is £130k compared with £170k planned. The forecast outturn remains unaffected. This reflects the slower progress made by SDS as the optioneering exercise was being completed.

The impact of Gogar Interchange on **tie**'s Authorised Undertaker role for EARL needs to be regularised such that any potential conflict of interest is addressed. This is being pursued directly with Transport Scotland.

tie will update its programme for Gogar Interchange by 22/9 to incorporate the updated Infraco design programme. This programme will then be adjusted together with TS & NR to produce an agreed integrated programme for the Gogar Interchange.

Project management meetings have continued between **tie**, TS and NR and a further design workshop took place on 19 August. Network Rail is arranging a further workshop for Period 7 as well as regular contact between designers.

Mott MacDonald has provided revised plans and sections and **tie** will produce an update of the budget cost for discussion with Transport Scotland in Period 7 in line with provision of revised estimates by Network Rail.

Progress – Other

Temporary traffic regulation orders (TTROs)

- No major traffic switches implemented in the period;
- Traffic management planning ongoing for Princes St Phase 3, Haymarket and Picardy Place;
- It is looking increasingly likely that buses will be returning to Princes Street at the end of November – this will be confirmed by CEC on 29th September 2009. Traffic Management plans for this major traffic switch are currently under development.

Traffic regulation orders (TROs)

- A TRO programme is in place to ensure that the first order TRO 1, which will allow for operation of the tram system, envisages the order being made in July 2010;
- Following TPB and pending CEC approval on 22 September, it is expected that the statutory consultation process to commence in early October 2009.

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;
- 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.

Third party interfaces

- NR – the Bridge Agreements are not yet concluded. There is an outstanding issue on indemnities to close out. CEC are taking this matter up directly with TS. The Operating Agreement draft with NR is currently on hold pending resolution of the same indemnities issue that is concerning CEC with the Bridge Agreement. Both matters are with CEC for resolution.

Transport Edinburgh

Edinburgh Trams

Lothian Buses

FOISA exempt

Yes
 No

- Forth Ports – Forth Ports have introduced a new clause into the Agreement drafting which seeks to link payment for the Tram works with the Planning Approval for the Leith Harbour Development, this is unacceptable to CEC and the matter has been raised for resolution at a senior level.
- 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** plan to take the matter up directly with TS;
- Building fixings – the process of lodging court submissions has commenced with 9 applications lodged in the period. The building fixing programme will commence in Spring 2010;

BAA - Burnside Road (BAA) Raynesway Construction.

- Works commenced on 10th August 09 and are currently on programme;
- Generally planned Completion Date is maintained (January 2010).

Section 7B Utilities

- MUD works – The MUD contractor (Farrans) continues on site;
- The installation of the gas main is now 95% complete requiring tie-ins at both ends;
- The multi-utility trench is 75% installed and backfilled.

Hilton Car Park & Phase 1

- INFRACO – No works have commenced. Reviewable Tram Works Design (RTWD) Issued. BAA response received. Formal DRP started and expect work to commence on car park works on 28/09/09.

Section 1 Utilities

- Invitation to Tender documents (ITT) sent to 5 companies (Farrans, Morrisons, Raynesway, Clancy Docwra and UUPLC). Tenders returned on 11-Sept-09 and award expected 2/10/09.

Fast link modifications (Front Line)

- Works completed.
- BT manhole is to be built after the Scottish Power cable has been diverted.

Murrayfield Pitches (Souters)

- Final accounts now agreed. Subject to works being carried out during maintenance and establishment period.



Archaeological works at Constitution Street (Frontline):

- The archaeological works have now recovered in excess of 280 skeletons and this figure will rise beyond the 300 mark prior to the end of the works;
- Reinstatement of the next area approximately 20 metres long commenced;
- Because of the large number of skeletons found and potential post excavation works the budget for this work is under threat. This is being reviewed and will be reported in future reports once the scale of post excavation works including carbon dating, reporting and re-internment is scoped.

Cost**Current Financial Year**

The budget for Phase 1a in 2009/10 is £150.1m (forecast £119.7m), which was produced linking the **tie** re-baselined programme to Infraco construction milestones. **tie** have escalated four key issues to Dispute Resolution Procedure (DRP) and BSC have escalated two issues following the failure of mediation to bring both parties to an agreement. It is anticipated that a fully agreed programme will not be made available from the Infraco contractor until key DRP issues have been resolved.

The unresolved commercial issues introduced a high degree of uncertainty to the outturn costs for financial year 09/10 in relation to activities which the Infraco may not start until commercial differences are resolved and **tie** may not have sufficient contractual leverage to instruct commencement. The phase 1(a) outturn figure for 2009/10 of £119.7m (£150.1m period 5) has been fully re-assessed in period 6 in-line with **tie**'s latest internal view of programme, coupled with Project Managers informed view of Infraco deliverables in 2009/10. The reduction in forecast this month is in-line with the high-side sensitivity flagged in the period 5 TS report.

The ETP Phase 1(a) 2009/10 outturn (£119.7m) is particularly sensitive to Infraco milestone achievement. Our forecast is dependent upon work commencing on the key structural and on-street works flagged below, with the values forecast to be achieved this financial year shown in brackets.

It is assumed that structural work will recommence on the Haymarket Viaduct (£450k) by December and the A8 Underpass (£653k) is also assumed to have progressed to a stage where milestones are being achieved in January. Along the railway corridor works are due to begin at Carrick Knowe (£348k) in September; and Russell Road Retaining Wall (£349k), Baird Drive Retaining Wall (£185k) and Balgreen Road Bridge (£411k) will all start in January/February 2010.

In addition, for track, we anticipate that the Guided Busway (£1.3m) will be complete by the end of March. Haymarket Yards (£1.3m) and the area between Saughton and Edinburgh Park (£1.8m) are assumed to commence in December/January. We anticipate that the Depot milestones will be 75% (£6.5m) complete by March 2010.

In the On-street section, we anticipate Tower Bridge piling (£523k) starting in October, to be complete by end March 2010. Leith Walk Track and Highways (£1.5m) anticipate a January start. St. Andrews Square Track and Highways (£600k) forecast is also reliant upon a February start date. Princes St works (£2.3m) are ongoing and works at Shandwick Place (£800k) are anticipated to start September/October 2009.

Funding available from TS for the project in 2009/10 is £149m. The TS share of this year's updated forecast (£122.9m which includes a £3.9m fee payable to BSC for the postponement of Phase 1b) is £112.8m, giving available headroom of £36.2m.

Actual YTD P6 & forecast P7-P13 FY09/10

£m	YTD P6	Forecast P7 - P13,09/10	Total FY09/10
Infrastructure and vehicles	32.0	52.9	84.9
Utilities diversions	7.5	0.8	8.3
Design	1.2	1.3	2.5
Land and compensation	0.7	0.9	1.6
Resources and insurance	6.4	8.5	15.0
Base costs	47.8	64.4	112.2
Risk allowance	-0.0	7.5	7.5
Total Phase 1a	47.8	71.9	119.7

Transport Edinburgh

Edinburgh Trams

Lothian Buses

FOISA exempt

Yes

No

Phase 1a COWD to Period 6 is £47.8m (Period 5 is £40.3m) against budget £54.2m. The main drivers for the -£6.4m variance are: the timing of Infraco works costs forecast in 2009/10 offset by MUDFA costs incurred over the original plan.

Forecast payment of £3.2m was made to the Infraco Contractor in August relating to phase 1b costs.

Total Project Anticipated Forecast Cost

Re-baselined Phase 1a 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	84.9	102.6	34.3	297.8
Utilities diversions	18.4	33.4	8.3	0.0	0.0	60.1
Design	21.4	4.7	2.5	1.1	0.1	29.8
Land and compensation	16.8	1.7	1.6	0.1	0.8	21.0
Resources and insurance	42.7	15.8	15.0	10.6	9.8	93.8
Base costs	130.0	101.0	112.2	114.3	44.9	502.5
Risk Allowance	0.0	0.0	7.5	9.6	7.5	24.6
Total Phase 1a	130.0	101.0	119.7	123.9	52.5	527.1
Phase 1b postponement	3.0	0.0	3.2	0.0	0.0	6.2
Total Phase 1a and Phase 1b	133.1	101.0	122.9	123.9	52.5	533.3

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 Project Management assessment of deliverables. The AFC for Phase 1a above includes an unapproved increase of £15.1m to the project risk allowance. The approved cost estimate for delivery of Phase 1a of the project remains at £512m. The phasing of the £527.1m has been updated in period 6 by **tie**, and will be further updated when there is an updated agreed programme with the Infraco contractor.

The latest forecast view includes £3.2m of costs relating to Phase 1b which crystallised as contractually payable to BSC due to the postponement of Phase 1b (this will require to be covered by current funding). Coupled with the re-baselined forecast, there is £11.7m of funding headroom within the £545m total funding available.

Risk & Opportunity

There were twelve risk reviews held in the period. Two items were closed on the Infraco concerns register and 7 items added. There were sixteen risk draw downs approved in the period totaling £731,675. These are detailed later in this report. This leaves a risk and contingency balance of £8,780,397 (based upon the approved Project Risk Allowance at Financial Close).

The Project Risk Allowance at financial close was £30,336,196. The Project Risk Allocation has reduced by £731,675 in the period. Total drawdowns to the end of Period 6 09/10 now total £21,555,799. Remaining risk balance based on the approved QRA is £8,780,397.

All existing risks, as well as those recently added, are being reviewed to ensure the QRA output is as accurate as is reasonably possible. It is accepted that the additional risks and increase in QRA output are currently unapproved. These are within the unapproved range in costs provided to TS on 26th May. **tie** will continue to report on the risk allocation at Financial Close until a new budget (with an updated QRA) is approved.

Approved drawdown applications on the project risk allocation in Period 6, amount to £731,675.

Communications/Customer Service

Media / Press Activity

Transport Edinburgh

Edinburgh Trams

Lothian Buses

FOISA exempt

Yes

No

Media Coverage for Period 6 has been extensive as usual, with articles relating to the project appearing daily in various local newspapers and intermittently in national publications.

Positive news pieces included a story in The Herald with regard to a Carbon Emissions report by the Scottish Government. Coverage of the progress made on the Gogarburn bridge works and the Princes Street reinstatement also made for positive press for the project. A profile of our extensive archaeological works for the Edinburgh Trams website was conducted using Bit TV. John Lawson, Head of Archaeology CEC and two contractors, Headlands and GUARD, were interviewed as part of the profile.

Upcoming media stories for Period 7 include a profile on Women and Construction, a "Day in the Life of the Logistics team" piece along with a story highlighting the new Tramformer scheme for Primary Schools which promotes awareness of the project and safety around worksites. Another profile piece concerning Richard Jeffrey having reached 4 months on the project will be printed during the first week of Period 7.

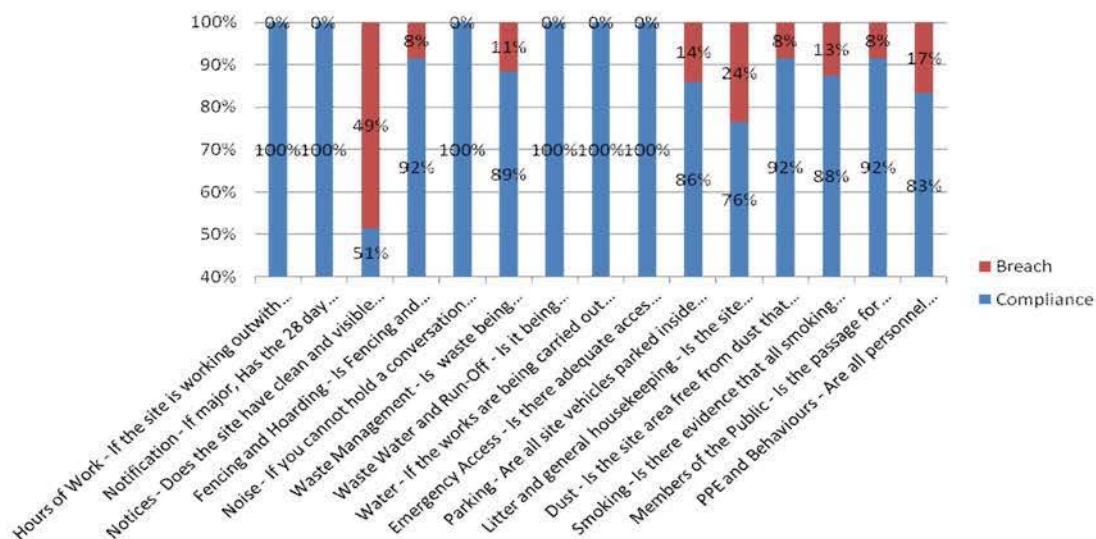
Customer Service Activity

Overall, correspondence from Period 6 has fallen by 99 contacts from Period 5. Each week logged under 100 contacts, with week 3 only recording 59 contacts.

Information requests constitute the majority of all correspondence for Period 6, with 219 out of the total 299 contacts made regarding information on the project and its various components. This trend has not differed from previous Periods, however the total requests for information dropped by 106 from Period 5. Typical enquires included information on Gas Abandonment works on Leith Walk, parking suspensions, Haymarket works and timescales for various works sites across the route.

Period 6 Complaints (43) and COCP Complaints (14) have increased since Period 5 by 14 and 4 contacts. Weeks 1 and 3 especially logged high numbers of complaints with 10 and 17 being recorded by the Customer Service team. With 17 complaints during week 3, issues concerning alleged inconsistent information on notifications and lack of completion dates on signage at work sites. COCP complaints were logged concerning similar issues of signage not being accurate.

Code of Construction Practice Compliance



Public Information Planning

Transport Edinburgh

Edinburgh Trams

Lothian Buses

FOISA exempt

Yes

No

Various pieces of signage have been produced for different areas and events. Open for Business signage was designed and produced for Frederick Street, Murrayfield and the Conan Doyle bar. Banners were also made for the Edinburgh Festival firework display.

A strategy planning meeting has taken place in preparation for works on York Place and London road, while consultations with Broughton Community Council are to take place regarding works in the area. Regular meetings are also held with Parliamentary MSPs regarding the project and its progress.

Website / Internet Communications

There were 13102 visits to the www.edinburghtrams.com website this period, with the number of followers on twitter rising to 222 against last period's 116. Facebook interaction and membership has also risen with 290 'fans' now following our facebook page as compared with last period's 183.

Video podcasts were introduced half-way through the period to www.edinburghtrams.com and the Apple iTunes store. While it is not possible to track how many people subscribe for these updates via iTunes, 773 people accessed the podcast feed on our servers, indicating that at least this many people viewed the podcast online or downloaded it.

Logistics

Period 6 Logistics figures again remain constant at roughly 340 inbound deliveries per week. Outbound deliveries however dropped significantly from the 70 recorded during Period 5. Between week 1 and week 2 during Period 6 Outbound deliveries dropped by 27, from 34 to 7 deliveries. Figures for boxes, cages and rails delivered as part of the inbound deliveries also dropped by around 400 each between week 1 and 2 also. Superdrug delivery point has been moved to Hanover Street due the street being cleared of difficulties.

Partner and Stakeholder Communications

In the last month, Tramformer presentations have been conducted at 17 primary schools in Edinburgh. Recruitment is now under way, and 2 pupils are being selected from each participating school. Visits to sites will take place next month.

We have also been involved in running workshops in conjunction with Scottish Businesses for Communities. The pilot programme ran at Craigroyston High School this month, 8 workshops were run to a total of 80 Primary 7 pupils.

Edinburgh Trams was also represented at the Scottish Transport Convention on the 15/09/09 with an information stand and employees on hand to discuss with attendees the progress of the project.

Freedom of Information Requests

For Period 6, a total of 8 Freedom of Information requests have been dealt with. Of the 8 requests, 5 were completed, 2 are waiting to be signed off for completion while one request is still in progress. One request has also gone to the Information Commissioner for consideration.

Winter Festival

A Marketing and PR working group has been set up comprising of professionals from City of Edinburgh Council, tie ltd, DEMA, Winter Festivals and retailers in the City Centre. The group is continuing to meet to discuss the proposals for this year's Winter Festival and to insure the success of the festive celebrations.

A report on the Princes Street Christmas proposals will be consider at the next Policy and Strategy Committee on 29 September. This will consider the main options for managing Princes Street over the Winter Festivals period in light of discussions undertaken with city centre retailers, and to determine when buses, taxis and cycles will be returned to Princes Street following the completion of the tram construction works. An update will be provided in the next report.

Period 6 2009/10 – Papers for Consideration

**Paper to: TPB
2009****Meeting date: 23 September****Subject: Project Change Control Update – Period 6, 2009/10****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 5, £20.8m had been drawn down from the original risk allowance of £30.3 at Financial Close. In Period 6, an additional £731,675 has been drawn down.

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

Description	Base cost	Risk	Total
Position at Financial Close (PCB)	481,680,811	30,336,196	512,017,007
Changes to end Period 5	20,824,124	-20,824,124	0
Position at end Period 5	502,504,935	9,512,072	512,017,007
Period 6 Changes	731,675	-731,675	0
Position at end Period 6 (CAB)	503,236,610	8,780,397	512,017,007

Changes Approved in Period 6Gogar Castle Tree Felling (COP125 - £1,162)

Removal of trees on Gogar Castle Road to accommodate Crash Gate 10 works.

Risk Drawdown - Contaminated Material at Haymarket (COP128 - £54,987)

An investigation of contaminated material at the Scotrail Depot at Haymarket Station was required. The investigation of contaminated material is excluded from the Infraco Contract.

Replace Mass Barrier at St Andrews Square (COP130 - £22,897)

It was agreed with stakeholders that Mass barrier on St. Andrew Square would be replaced with a combination of visirail and kerbed build outs.

Risk Drawdown - Gogarburn Culverts S30, S31 and S34 (COP132 - £13,368)

This resulted from a change in Base Date Design Information (BDDI) to Issued for Construction (IFC) drawings beyond development and completion of the design. Alterations to the track levels resulted in changes to the construction of Gogarburn Culverts S30, S31 and S34.

Risk Drawdown - Section 7 Additional West Embankment Starter Layer (COP133 - £36,616)

This change was required to enable the removal of soft ground between chainages 710 430 to 710 520. The change order was issued in order to progress works to the west abutment and bridge deck of Gogarburn Bridge.

Risk Drawdown - Section 6 Depot Secondary Steelwork (COP134 - £2,356)

This resulted from a BDDI to IFC change. The additional secondary steelwork is as a result of design development. The agreement to issue a Change Order for the secondary steelwork is part of a wider agreement on the depot building. **tie** has noted that the agreement to the additional secondary steelwork is without prejudice to our position on the normal development and completion of designs being included within the construction works price. The original estimate from BSC was for £73,000.

Increase in Gross Amount of Change Orders Issued (COP146 - £341,179)

It was agreed with BSC that all changes to BSC works (apart from design only) will be subject to an uplift of 17.5% to cover BSC prelims not included in the contract provision of 7.4%. This change updates all change orders issued to date.

Risk Drawdown - Haymarket Internal retaining wall (COP137 - £14,208)

This change is as a result of the requirement to redesign the retaining wall due to unforeseen ground conditions.

Stage 1 Design Changes (8 no. - £244,902)

These are agreed design changes where the construction impact is not yet known but the design element has been instructed via letter (stage 1). In most cases there will be a construction impact (stage 2) and when this is known, the formal change order will be issued.

Decision(s) / support required

The TPB is requested to:

1. Note the Project Change Control status at Period 6

Proposed Name: Mark Hamill Date: 23 September 2009
 Title: Risk & Insurance Manager

Recommended Name: Steven Bell Date: 23 September 2009
 Title: Tram Project Director

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

FOISA exempt

Yes
 No

Primary Risk Register - Period 6

ETN Primary Risk Register - Period 6 2009/10

ETN Primary Risk Register - Period 6 2009/10											
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)	Undefined	Undefined	30-Jul-09	S Bell
							Liason between tie/BSC programme managers	On Programme	On Programme	30-Dec-11	T Hickman
							Programme Management Panel process	On Programme	On Programme	30-Dec-11	F McFadden
							Weekly tie/BSC commercial meetings	On Programme	On Programme	30-Dec-11	M Paterson
1077	Base Date Design Information to Issued For Constructions (BDDI-IFC). Lack of visibility of design changes between November 2007 and May 2008	Tramworks price based on a design which may have been altered. Unclear who authorised design change.	Additional cost and programme delay	S Bell	High - 25.00		Establish a process which will act as a control mechanism for design changes. (If one exists already then ensure process is complied with)	Complete	Complete	30-Jun-09	T Glazebrook
							Intensive Mediation Marathon 29/6/09 to 6/7/09 to try and resolve issues.	Complete	Complete	30-Jun-09	S Bell
							Mediation resulted in no overall agreement on BDDI - IFC although it gave useful background information. Strategy paper to be presented to TPB on 29 July to seek approval for way forward including utilising necessary contract mechanisms (DRP, audit etc)	Complete	Complete	14-Aug-09	S Bell
							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
							Six issues going through DRP process. Anticipated conclusion mid-November 09	N/A	On Programme	13-Nov-09	S Bell

ETN Primary Risk Register - Period 6 2009/10											
ARM Risk ID	Cause	Event	Effect	Risk Owner	Significance	Black Flag	Treatment Strategy	Previous Status	Current Status	Due Date	Action Owner
1090	Initial costs for Burnside Road works higher than anticipated	Cost of works at Burnside Road exceed that allowed in project budget.	Additional Cost	F McFadden	High - 25.00		Costs being reviewed and tender documents sent out April 09.	Complete	Complete	30-Jun-09	F McFadden
							Tender docs issued based on scheme design information. Pre-tender estimate produced and final design ongoing. Delivery of tenders final outcome can be predicted.	Complete	Complete	30-Jul-09	F McFadden
1091		Excavation of soft, unsuitable material below Earthworks outline	Additional cost	F McFadden	High - 25.00		Donaldsons to carry out surveys	Complete	Complete	30-Jul-09	C Neil
							Extent of soft ground being investigated. External specialist advice deployed.	On Programme	On Programme	31-Dec-09	M Paterson
1101	Unreasonable behaviour of BSC commercial management	Unrealistic estimates being submitted for potential changes	Programme delay while disputes regarding estimates are resolved	F McFadden	High - 25.00		Additional resource from TNT	Complete	Complete	30-Jul-09	M Paterson
							Agreed with BSC for independant evaluation to get benchmark	Complete	Complete	30-Jul-09	M Paterson
							All estimates to be scrutinised by the commercial team and, where appropriate, challenge made to BSC. Additional resource (T&T) being used to check estimates to reduce delay.	On Programme	On Programme	30-Dec-10	M Paterson
1094	Roads throughout works require full depth reconstruction		Programme impact plus additional costs. £1.5m cap applies to only 4 areas.	F McFadden	High - 24.00		Carry out surveys to confirm extent of roads requiring full depth reconstruction	Complete	Complete	30-Jun-09	C Neil
							Suite of options from surveys to be reviewed and agreement reached	On Programme	On Programme	31-Oct-09	M Paterson

ETN Primary Risk Register - Period 6 2009/10											
ARM Risk ID	Cause	Event	Effect	Risk Owner	Significance	Black Flag	Treatment Strategy	Previous Status	Current Status	Due Date	Action Owner
44	SDS contractor does not deliver the required prior and technical approval consents in line with SDS V31	Delay to IFC drawings beyond V31 Programme	Delay to programme with additional resource costs and delay to infraco. Impact upon risk balance.	D Sharp	High - 23.00		Evaluation of prior approval programme	Complete	Complete	31-Oct-08	D Sharp
							Fortnightly Meetings of Approvals Task Force	On Programme	On Programme	30-Oct-09	D Sharp
							Hold fortnightly Roads Design Group	Complete	Complete	31-Dec-07	T Glazebrook
							Informal consultation prior to statutory consultation	Complete	Complete	31-Mar-09	T Glazebrook
279	Third party consents including Network Rail consent are denied or delayed	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		Integrate CEC into tie organisation/accommodation (office move)	Complete	Complete	4-Jun-07	T Glazebrook
							Additional EMC modelling to give better info to NR	Complete	Complete	31-Dec-07	C Kerr
							CEC Planning - mock application by SDS	Complete	Complete	31-Dec-07	T Glazebrook
							Draft depot and station change proposals to NR	Complete	Complete	31-Jan-08	A Sim
							Fortnightly meetings of Approvals Task Force	On Programme	On Programme	30-Oct-09	D Sharp
							Identify fallback options	Complete	Complete	31-Aug-07	T Glazebrook
							Monitoring and tracking through the 3rd party rep	Complete	Complete	30-Jun-09	D Sharp
							Monitoring of BBS - 12 week look ahead	On Programme	On Programme	14-Jul-11	R Bell
Obtain critical consents prior to financial close	Complete	Complete	31-Jul-08	T Glazebrook							

ETN Primary Risk Register - Period 6 2009/10											
ARM Risk ID	Risk Description			Risk Owner	Significance	Black Flag	Treatment Strategy	Previous Status	Current Status	Due Date	Action Owner
	Cause	Event	Effect								
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.	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 - 22.00		Close working relationship with CEC and stakeholders	On Programme	On Programme	31-Jan-11	L Murphy
							Weekly critical issues meeting	Complete	Complete	31-Jul-08	T Glazebrook
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 - 21.00		All Site Staff to get CSCS or equivalent	On Programme	On Programme	30-Jan-11	C McLauchlan
							Develop and Implement Incident Management Processes	Complete	Complete	27-Apr-07	T Condie
							HSQE Audits, site inspections and Management Safety Tours to be carried out	On Programme	On Programme	31-Dec-10	B Cummins
							Safety Induction to be carried out for all site staff	On Programme	On Programme	31-Dec-10	B Cummins
							Site Supervisors to be appointed by tie	Complete	Complete	28-Feb-07	S Clark
The tie "Safety" bus is being used to deliver safety talks & culture surveys to the contractors workforce.	On Programme	On Programme	31-Dec-09	B Cummins							

ETN Primary Risk Register - Period 6 2009/10											
ARM Risk ID	Cause	Event	Effect	Risk Owner	Significance	Black Flag	Treatment Strategy	Previous Status	Current Status	Due Date	Action Owner
931	Utilities assets uncovered during construction that were not previously accounted for; unidentified abandoned utilities assets; known redundant utilities; unknown live utilities; unknown redundant utilities.	Unknown or abandoned assets impacts scope of Infraco work	Re-design and delay as investigation takes place and solution implemented; Increase in Capex cost as a result of additional works.	C Neil	High - 20.00		GPR surveys in areas where there are likely to be services	Complete	Complete	1-Apr-07	T Glazebrook
							Infraco trial holes where applicable.	On Programme	On Programme	31-Jan-10	P Dobbin
							MUDFA trial holes to verify GPR surveys	Complete	Complete	30-Jul-09	A Hill
							Obstructions and voids survey, establish ownership reduced delay on discovery.	On Programme	On Programme	31-Dec-09	C Neil
977	Legal challenge. Extension of statutory consultation process. Large number of objections. TRO process is subject to a public hearing process.	Delay in achievement of TRO(s) due to a large number of public objections and/or a legal challenge to using a TTRO to construct Infraco.	Requirement to start construction using TTROs	D Fraser	High - 20.00		Comms strategy to include provision of process and drawings on website for public viewing	N/A	On Programme	30-Sep-09	S Clark
							TRO strategy approved by board, discussion to be held with CEC head of transport to reduce risk of legal challenge.	On Programme	Complete	31-Oct-09	S Clark
							TRO Strategy to CEC Transport, Infrastructure and Environment Committee on 22 Sept 09	N/A	On Programme	22-Sep-09	D Fraser
							Use of TTROs to undertake construction of permanent works in advance of permanent TROs being approved.	On Programme	On Programme	30-Jan-11	A Sim
1084	Coconstraints applied to work areas post-contract to satisfy stakeholders	Additional Traffic Management and enabling works are required to meet stakeholder constraints applied post-contract	Additional cost and potential delay to programme	G Barclay	High - 20.00		Assess TM implications to minimise enabling works and additional cost. Areas concerned are Haymarket, York Place to Picardy and Baltic Street Junction.	On Programme	On Programme	31-Oct-09	G Barclay

Period 6 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 6 report continues to be based upon an unapproved forecast on the information reported in May 2009. This will be updated once the above actions are progressed.

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 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 v49 of the design programme);
- Design changes as a result of the Prior and Technical Approvals process; and
- Consortium integrated design programme and validation

Agreement of a revised programme is one of the key priorities for the PMP and this was one of the key discussion topics at mediation. Discussions on programme revision and potential extension of time awards to BSC are continuing and remain one of the most significant differences between the parties. During Period 06 **tie** have formally rejected the BSC proposed Rev 2.0 programme.

The **tie** live programme currently predicts an Open for Revenue Service date in late **October 2012**. This has slipped slightly since last period and is mainly due to the lack of progress being achieved by INFRACO across the route compounded by delays caused by Utility Diversions at Haymarket, Leith Walk and Newhaven.

As per the previous period reporting **tie** retain an unapproved recalibrated baseline programme which reflects an Open for Revenue Service date of 23 Feb 2012. This is still a **tie** only view as, to date a recalibrated programme although now submitted by INFRACO has not been agreed with INFRACO. **tie** has commented on submissions received from INFRACO and following detailed discussions with both teams without resolution **tie**, as mentioned above, have now formally rejected the proposed Rev 2.0 submission. **tie** continue to record and monitor the causes and effects of delay.

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. Integration of these sections by BSC is now underway and the re-baselined programme assumes the all logic changes will be accepted by BSC.

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

Importantly, the re-baseline programme does not take account of many opportunities including:

1. Improved productivity rates – Princes Street and Depot are proving to be important tests in this regard;
2. Embargo relaxations;
3. Alternative construction methodologies to recover time;
4. Adjustments to the testing and commissioning phase (the original programme window has been held); or
5. Partial opening options.

2.2. Dispute Resolution

Transport Scotland and City of Edinburgh Council have been briefed on the use of the formal Dispute Resolution Process contained within the Infraco contract and this was reported to the full council Meeting on 20th August. Strong and full Council support was given to the strategy being adopted by **tie**.

During the period the number of items in dispute with BSC has risen to 6. The table below shows the stage of the process each of these disputes is in and indicates, where known, which have been referred to mediation and which to adjudication. This decision is made following the Chief Executive's meeting part of the internal DRP process. **tie** has implemented a robust "Challenge" process to ensure that before any issue is referred to DRP that it has been externally and thoroughly tested prior to referral.

DRP No	Subject	DRP process commenced	PD Meeting	Position Papers	CEO Meeting	Referral	Decision
3	Hilton Car Park	√	√	√	√	14/09	11/10
4	EOT1	√	√	√	√	Mediation 22/23 Oct	Mediation 22/23 Oct
5a	Gogarburn	√	√	√	21/09	30/09*	27/10*
5b	Carrick Knowe	√	√	√	21/09	30/09*	27/10*
5c(B)	Russell Road	√	√	15/09	2/10	11/10*	7/11*
A	MUDFA Rev 8	√	√	15/09	2/10	11/10*	7/11*

Commenced by **tie**

Commenced by BSC

*Dates are based on proceeding directly to Adjudication.

Significantly, during the period, as certain items have entered the DRP process, this has allowed **tie** to use a facility within the contract to instruct works in DRP to progress (this is a Clause 80.15 instruction). Instructions to this effect have been issued for 2 of the structures in DRP and work has subsequently started at Carrick Knowe Bridge as a result of this.

The lack of a commercially agreed programme and the decision to apply formal contractual measures to resolve outstanding issues with the BSC consortium presents further risks in relation to the attribution of additional costs and delay to completion of the project. **tie** Ltd has taken extensive legal and technical advice, including Counsel's opinion, and is confident of its position on the key matters in dispute. However, given the nature of the process and the complexity of certain issues, it is unreasonable to expect that all adjudication outcomes will be awarded in the favour of **tie** Ltd and it will also be open to the BSC consortium to use the contract to formally pursue their objectives.

We continue in this report to reflect an outturn estimate of £527.1m. 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.

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 the remainder of 2009.

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, and tie met with TS most recently on 9th September 2009.

The cost, programme and risk information in this Period 6 report continues to be based upon an unapproved forecast on the information reported in May 2009. This will be updated once the above actions are progressed.

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 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 v49 of the design programme);
- Design changes as a result of the Prior and Technical Approvals process; and
- Consortium integrated design programme and validation

Agreement of a revised programme is one of the key priorities for the PMP and this was one of the key discussion topics at mediation. Discussions on programme revision and potential extension of time awards to BSC are continuing and remain one of the most significant differences between the parties. During Period 06 **tie** has formally rejected the BSC proposed Rev 2.0 programme. This is likely to be a future DRP topic.

The **tie** live programme currently predicts an Open for Revenue Service date in late **October 2012**. This has slipped slightly since last period and is mainly due to the lack of progress being achieved by INFRACO across the route compounded by delays caused by Utility Diversions at Haymarket, Leith Walk and Newhaven.

As per the previous period reporting **tie** retain an unapproved recalibrated baseline programme which reflects an Open for Revenue Service date of 23 Feb 2012. This remains a **tie** only view as to date a recalibrated programme although now submitted by INFRACO has not been agreed with BSC.

2.3. Design

IFC Design

Approvals and Consents are measured at V48 and are progressing as follows:

- IFCs – Phase 1a 80 issued out of 124 (a number of new IFCs included in V45 –V47 programmes);
- Prior Approvals are progressing well with 91% granted, four left to be submitted (the RBS Gogarburn Tramstop, Murrayfield Accommodation Works, Modifications to Murrayfield TS retaining Wall & Gogar Interchange) and 6 left to be granted;
- Technical approvals also progress well with 82% granted (from an increased no. of TAA), Ten remaining to be submitted and 19 (7 from v31) left to be granted;
- Structures approvals are progressing well – 6 to date remain to be approved and all original structures in V31 have been approved;
- Roads approvals - Two areas remain outstanding for Technical Approval in Phase 1a (1A3 & 1C2);
- Scottish Water has sent formal acceptances to BSC for all sections excepting 1A3, 1C2 & 1C1. BSC have responded to these acceptances; the permit for construction for section 6 was issued 27/07/09;
- 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.

Phase 1a only	Number required		Number	
	v31	V49	Submitted	Granted
Prior Approvals	49	55	51 (93%)	50 (91%)
Technical Approvals	71	87	77 (86%)	70 (80%)

Reasons for design slippage are being reviewed and recorded each week at the design taskforce meeting which is focused on resolving outstanding design issues. This slippage has been addressed as part of the re-calibration of the programme. **tie** is identifying and implementing opportunities to mitigate the impacts of this slippage.

Although there is evidence of better management of SDS by BSC, this has not yet resulted in improved 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. V47 includes a number of design integration activities and the impact of these will be analysed over the coming period – 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.

2.4. Utility works (MUDFA)

Progress on MUDFA works during Period 6 is presented below (this excludes the remaining utility works being undertaken outwith the MUDFA contract on sections 1A & 7B):

Rev.08 Figures - Period 06 2009-10	Period		Delta	Cumulative		Delta
	Plan	Actual		Plan	Actual	
MUDFA PERIOD 06 PROGRESS						
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%	99.9%	-0.1%
Section 1c McDonald Road to Princes Street West	5.5%	2.2%	-3.3%	100.0%	91.3%	-8.7%
Section 1d Princes Street West to Haymarket	6.1%	1.4%	-4.6%	100.0%	98.0%	-2.0%
Combined Sections 1A-1B-1C-1D (On-Street) Newhaven Road to Haymarket	3.0%	1.0%	-2.0%	100.0%	96.8%	-3.2%
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	2.4%	0.8%	-1.6%	100.0%	97.4%	-2.6%

Key points to note are:

- Progress at the end of period 6 is 97.4% complete for all MUDFA works. 38,462 linear m of diversions have been completed, with 311 linear m achieved in the period against a planned 944 linear m;
- The majority of the works are now concentrated around the Haymarket and York Place to Picardy sections of the route. The reduced output is again representative of some of the congestion issues with existing utilities;
- Carillion works within Section 1A are complete, and tender award for the remainder of the Section 1A utilities diversions is expected during Period 7;
- SGN service connections on Leith Walk were completed on 11/09/09, and connection works are ongoing at Shandwick Place;
- BT cabling works continue progressing well at three locations;
- No significant safety incidents occurred during the period, and as-built progress has been positive and in maintaining alignment with agreed programme dates.

Section	Commentary
Section 1a Newhaven to Foot of the Walk	Plates 1-10 transferred out of Carillion's scope of works Plates 15, 16, 17, (Baltic St Junction) Design due 02 Oct 2009 Gas Service Transfers works continue in Constitution Street between Duke Street and Mitchell Street, 2 additional connections to do. Expected finish 11 Sept 2009 Gas Abandonments : Abandonments from Foot of the Walk to Mitchell St (Plates 18 to 21)-Access to deliver gas abandonments to be assessed.
Section 1b Foot of the Walk to McDonald Road	Gas main abandonment works continue – Finish moved to 28 September 2009 due to technical problems with the existing infrastructure. Water works on Leith Walk delayed due to pressure decay problem. Additional works required by Scottish water – (30 Additional service connections) - Finish date moved to 14 October 2009.
Section 1c McDonald Road to Princes Street West	Worksites at the Playhouse theatre has suffered delay due to underground structure, however design has been ratified and issued to Carillion. Work is in progress Worksite at York Place is predominantly on the South side of the Carriageway, through to North St Andrews Street Planned traffic management switch from Phase 2 York Place to Phase 7 is planned for the 19th September 2009 The Cellar removal works at the Conan Doyle Pub Have been ratified and works are ongoing at this time with a forecast 5 week duration, Revised SW commissioning sequence requested by SW which will impact on programme.

Section 1d Princes Street West to Haymarket	CUS forecast for completion 29th November 2009 for Haymarket to Manor Place. Traffic Management Phase 4 installed ahead of Phase 3.5 to mitigate delays from BT overrun on manhole rebuild in Palmerston Place, Additional Traffic Management required at Grosvenor Street to accommodate structure crossing and SGN works. This will be intrusive due to location of structure. Gas Service Transfer and Abandonment programme to be integrated with current SGN works to allow for earlier completion of gas abandonment works. West Maitland Street cellars causing problems with service connections for gas and water. Solution identified . BT and Coms cabling works to commence on completion of CUS works. Current programme from BT shows 8 week duration.
Section 2 Haymarket to Roseburn Junction	As- Built drawings have been delivered to tie (08/09/2009) these will be reviewed by APM prior to being issued to INFRACO. BT & C&W cabling complete. Thus – 1 connection outstanding to Verity house. Termination in Verity house cannot be found.
Section 5a Roseburn Junction to Balgreen Road	MUDFA Diversions COMPLETE. Utilities transferred to infraco remain in Scotrail Depot
Section 5b Balgreen Road to Edinburgh Park Central	Sewer diversion at South Gyle Access bridge transferred to InfracoTelecoms proximity to South Gyle Access bridge West abutment & Bankhead Drive RW
Section 5c Edinburgh Park Central to Gogarburn	Utility diversion works complete. Telecoms re-cabling works underway.
Section 6 Gogar Depot	COMPLETE
Section 7a Gogarburn to Edinburgh Airport	Removed from CUS scope. Transferred: Being delivered by Farrans.

2.5. Tramworks (INFRACO)

The project continues to experience problems with slow progress for INFRACO works and, in particular, the appointment of direct BSC resource and the final appointment of the main package contractors. The BSC sub-contractors continue to operate with Limited Letters of Intent whilst awaiting conclusion of the full sub-contracts. 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 Haymarket viaduct, Russell Road bridge, Murrayfield pitches Retaining Wall, Baird Drive Retaining Wall, Carricknowe bridge, Depot building and Tower Place bridge, although in the period tie has issued instructions in relation to 2 structures in the DRP process to get work started. These are Carrick Knowe where BSC have not mobilised and Russell Road Retaining Wall 4.

The work has continued on a number of worksites including:

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

- In both the east and west sections of the site work has continued with track formation preparation, track slab construction, track laying and slab construction; central reserve works; carriageway formation preparation, sub-base and base course works and kerbing and footpath works. Work has now also commenced at both Lothian Road junction and at the foot of the Mound;
- A programme is being developed to ensure that both bus shelters and trackers can be installed and operational before the end of November;
- Princes Street is 64 % complete and due for handback to CEC by 28th November.

Section 5B Balgreen Road to Edinburgh Park Central:

- At the guided bus way section piling works started and 1/3rd of section now available to start Track works. Track works to commence early Period 7;
- Edinburgh Park Station Bridge: BSC continued to work on diaphragm construction, deck slab and cope – 74% complete.

Section 5C Edinburgh Park Central to Gogarburn:

- A8 underpass combined phase 1 & 2 is on hold. Further work required to quantify scope of work required by Scottish Power to confirm status of existing cables. Construction methodology has been agreed with Telecoms companies for a re-commencement in period 07.

Section 6 Gogar Depot

- Depot Access Road and Depot Building Foundations started on 31st August 2009 ; 76 out of 263 pours completed;
- Depot Building Steelwork due to start late September 2009.

Section 7 Gogarburn to Edinburgh Airport

- Gogarburn Bridge replacement piers and capping beam have been constructed. Bridge Decking works started. 64% complete;
- Gogar Culvert No.1 recommenced during Period 06;
- Gogar Culvert No.3 recommenced during Period 06.

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.

Milestones	Period 06		Cumulative (Short-Term)		Contract Planned to P06
	Planned	Actual	Planned	Actual	
Prelims	2	2	53	53	53
Construction	5	4	46	45	621

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		Delta	Cumulative		Delta
	Plan	Actual		Plan	Actual	
INFRACO PERIOD 06 PROGRESS (Contract Rev.01 Programme)						
Section 1a Newhaven to Foot of the Walk	5.1%	0.0%	-5.1%	31.4%	0.0%	-31.4%
Section 1b Foot of the Walk to McDonald Road	1.9%	0.0%	-1.9%	45.8%	1.5%	-30.8%
Section 1c McDonald Road to Princes Street West	1.3%	0.0%	-1.3%	13.5%	0.0%	-13.5%
Section 1d Princes Street West to Haymarket	1.1%	7.3%	6.2%	57.7%	19.0%	-38.7%
Combined Sections 1A-1B-1C-1D (On-Street) Newhaven Road to Haymarket	2.8%	1.6%	-1.2%	35.2%	4.4%	-30.8%
Section 2 Haymarket to Roseburn Junction	4.4%	0.0%	-4.4%	77.5%	12.6%	-64.9%
Section 5a Roseburn Junction to Balgreen Road	3.6%	0.0%	-3.6%	73.5%	3.5%	-70.0%
Section 5b Balgreen Road to Edinburgh Park Central	0.5%	4.0%	3.5%	84.1%	17.6%	-70.4%
Section 5c Edinburgh Park Central to Gogarburn	4.4%	0.0%	-4.4%	70.1%	2.8%	-66.5%
Section 6 Gogar Depot	1.9%	0.03%	-1.87%	86.4%	5.7%	-80.7%
Section 7a Gogarburn to Edinburgh Airport	5.0%	4.9%	-0.1%	55.8%	20.6%	-35.2%
Combined Sections 2A-5A-5B-5C-6A-7A (Off-Street) Haymarket to Edinburgh Airport	2.6%	1.9%	-0.7%	76.9%	10.9%	-66.0%
FULL ROUTE PHASE 1A NEWHAVEN ROAD TO EDINBURGH AIRPORT	2.7%	1.8%	-0.9%	60.4%	8.3%	-52.1%

Section	Commentary
Section 1a Newhaven to Foot of the Walk	Section 1A4 Lindsay Road under review. Design awaited to allow Utility diversions to be carried out for W1 Lindsay Rd RW which releases Infraco works in this section. Temp. Utility diversions at bridges complete. Infraco Bridges works start date depending on BDDI – IFC agreement.
Section 1b Foot of the Walk to McDonald Road	Roadworks due to commence post Leith embargo delayed awaiting MUDFA completion. Now likely to start Jan 10.
Section 1c McDonald Road to Princes Street West	Roadworks due to commence post Leith embargo delayed awaiting MUDFA completion. Section of Princes St between the Mound and Waverley bridge progressing.
Section 1d Princes Street West to Haymarket	Princes Street works re-started 23Mar09 and continue between South Charlotte Street and the Mound. Section between South Charlotte St and Lothian Rd commenced week 4 of Period 05. Tram Works in Haymarket are dependent on MUDFA completion in Dec.09.
Section 2 Haymarket to Roseburn Junction	Haymarket Viaduct temporary works design resolved although contractor has not yet mobilised following Christmas 2008 break. Verity House access rd complete 23rd May. All required consents in place for track installation. Commercial issues holding-up commencement of works.
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.
Section 5b Balgreen Road to Edinburgh Park Central	Temporary & permanent works re-design along with commercial resolution delaying various structures. Only progress in period is against S27 Edinburgh Park viaduct which is now 74% complete. All required consents in place for track installation. Carricknowe Bridge re start on Period 7.
Section 5c Edinburgh Park Central to Gogarburn	A8 Underpass recommenced during P13 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. Delayed awaiting BSC to resolve construction methodology issues with telecoms companies.
Section 6 Gogar Depot	Access road commenced .Building Foundations commenced
Section 7a Gogarburn to Edinburgh Airport	Gogarburn underbridge 64% complete. S30 Culvert No.1 and S34 Culvert No.3 change issues resolved and recommenced Period 6.

2.6. 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 10th tram. Internal fit out and wiring continues for Trams 2 & 3 and the first tram has started Factory Acceptance Tests. A contingency is being investigated for storage and testing should the first trams be complete before the depot is ready to receive them.

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

2.7. 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. Closely related to this, **tie** has recently notified Transdev of its intent to exercise its option to conclude the existing contractual arrangements as allowed for in the DPOFA contract. Discussions about an ongoing relationship are underway.

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. The detailed sequence and scope of testing and commissioning prior to systems Acceptance testing is to be programmed out and proposed by BSC in further detail in the next year.

To achieve these objectives there is a layered approach to the overall testing and commissioning as laid out in the table below.

What	Who	Status
Design assurance	BSC (SDS) / tie	Underway.
Quality	INFRACO	11 of the 37 BSC Inspections and Test Plans have been revised by BSC incorporating tie comments. tie have requested an update of the status of the remaining ITP's.
Systems Safety	INFRACO / Independent Competent Person(ICP) / TEL / Transdev	Started - Safety verification plan in place and process of verification already underway. The ICP has been appointed and has started his verification process.
Performance*	INFRACO / Transdev / TEL	Requirements set out in the employer's requirements and will be tested following completion of each section of the network.

BSC have produced Inspection and Test Plans (ITP's) for the current set of construction works, however they have not yet produced a consolidated Test and Commissioning Plan. Constituent elements are available from CAF, the tram manufacturer, the Operator and an overall framework from TEL exists to cover the activities.

It is intended over the next three periods to obtain collective engagement on testing and commissioning, and agreement to the formation of a multi-organisation, multi-disciplinary test coordination team.

Testing undertaken and witnessed in the period has included the A8 piles at Gogar and the first tram set of body shells, (weld quality, dimensional tolerances and water tightness).

*Pre-system acceptance testing includes both Factory Acceptance Tests(FATs), site Acceptance Tests (SATs), Sub-system integration tests (SITs) and System commissioning Tests(SCTs). Once a section of the network is physically completed and the SITs are satisfactorily completed then the formal acceptance process requires BSC to carry out and pass a series of systems Acceptance Tests in order to achieve Sectional Completion. These are shown in the table below.

Test	Test Name	Test Description	Programme
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T1	Post Commissioning Test	To demonstrate that each Section of the ETN in sequence is able to perform in an acceptably safe manner and deliver the required run times. This is the gateway test to driver training.	Post Commissioning Test immediately follows successful commissioning of each section and is required for progressing to Driver Training.
T2	Performance Test 1	After Phase 1a is complete and has passed Test T1, this test demonstrates that Phase 1a is able to perform satisfactorily before starting the three-month Shadow Running period. This is the gateway test to shadow running.	Performance Test 1 will immediately precede the Shadow Running period and is a requirement for progressing to this phase of the programme.
T3	Pre-operations Test	The test covers a seven day period during the latter part of the Shadow Running phase of the programme using the initial 6/12 tph service timetable.	Pre-operations Test shall immediately precede the Service Commencement Date.
T4	Network Performance Test	The Test is carried out over a 28 day period in Passenger Service to establish that the ETN can reliably operate.	To be completed within twelve months of the Service Commencement Date.
T5	Network Reliability Test	Reliability Testing of key sub-systems in Passenger Service.	To be completed within twelve months of the Service Commencement Date.

This whole process can be described by the following flowchart.

Stage	Flow Chart	Tests	Description
8	Passenger Service	Network Performance (T4) and Reliability Test (T5)	The date upon which the Edinburgh Tram Network starts in public service
			PASSENGER SERVICE COMMENCEMENT
7	Shadow Running	Pre-Operations Test (T3)	The period of Tram operations that simulates full public service operation including running to published timetable and calling / dwelling at Tramstops before the ETN enters public service
			ENERGISATION OF COMPLETED PHASE OF THE ETN
6	Test Running & Driver Familiarisation	Performance Test 1 (T2)	The period post-ETN commissioning used to complete driver and control room staff training and gain confidence to enter Shadow Running Phase
			ENERGISATION OF SECTION OF THE ETN
5	Commissioning	Post-Commissioning Test (T1)	All subsystems, including the tram, are fully-integrated to form the ETN and are tested to demonstrate that they work together successfully and meet the Employer's Requirements
			ENERGISATION OF SECTION OF THE ETN
4	Set to Work Tests	System Integration Test	The point at which subsystems have been installed and then tested to prove they meet their requirements with both Type tests and Site Acceptance tests
			LIMITED ENERGISATION OF PART OF THE ETN
3	Installation / Construction	Site Tests	Once the subsystem has successfully passed Factory Acceptance Tests installation / construction at site will take place and as appropriate a delivery test undertaken.
2	Factory Acceptance Tests	FAT	Thorough demonstrable testing of the subsystem at Infraco's premises
1	Build / Manufacture		Manufacture and assembly of the System by the Infraco
D	Design		The scope of the works designed through Approval in Principle and Approved for Construction & Manufacturing Drawings; with associated verification and validation test and integration plans complete

2.8. 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. The St James centre re-development remains as amber as commencement of this project is now indicated towards the completion of the Tramworks and therefore interfaces should diminish.

External Projects	Promoter	Project Description	Potential Conflict	Tram Contract Dates		Project Dates		Comments
GREEN - No conflict anticipated but being monitored. AMBER - Managing any conflict. RED - Conflict which causes programme concern / unknown effect on tram programme.				Start	Finish	Start	Finish	
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.
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 re-furbishment. The renovation of the external facades including the renovation of the external masonry, the overhauling of the existing windows, the renewal of the existing rooflights and roof covering, the renovation of the existing rainwater pipes and the moving some of the existing window bars to the inside. 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 elavators	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	Under the revised Waverley Steps programme received 7/5/9 Tramworks will be complete in this area prior to Waverley Steps works progressing. Downgraded from Amber to green May09. PLI (Public Liability Inquiry) held and refreshed

								programme due in Period 6
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	Jun-10	May-12	Under the revised Waverley Steps programme received 7/5/9 Tramworks will be complete in this area prior to Waverley Steps works progressing. Downgraded from Amber to green May09. PLI (Public Liability Inquiry) held and refreshed programme due in Period 6
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	Although the tram main construction works will be complete by end Mar-10 this area will be re-visited in Q4 2010 for OHL installation.
NATO Conference		date of the conference is Friday 13th November 2009 to Tuesday 17th November 2009 (inclusive) and it will be held at the EICC, Morrison Street, Edinburgh. 600+ delegates expected	Potential Interface with Infraco works at Haymarket junction	Jan-10	Nov-10	13-Nov-09	17-Nov-09	Haymarket junction re-construction is 6 phases although not now expected to commence until Jan.2010
Princes Street Hotel	Deramore Property Group	Redevelopment of existing buildings at 121 - 123 Princes Street to 80,000 square feet 3 floor of retail and 100 bedroom hotel	Direct clash with Infraco programmed works in Princes Street during blockade	Mar-09	Nov-09	Early 2009	Jun-11	Infraco works progressing with no Interface problems

Princes Street Property	asediqbal consulting	Site clearance and redevelopment at 125a Princes Street on all 3 floors to convert to an EasyHotel	Access through BSC worksite. Internal strip-down ongoing and access required for debris removal.	Feb-09	Nov-09	TBA	TBA	Infraco works progressing with no Interface problems
New Hotel in Haymarket	Tiger Developments	New build hotel	Utility diversions continue until Jul.2009 Potential Interface with Infraco works at Haymarket junction commencing Jul.2009	Jan-10	Sep-11	TBA	2012	Haymarket junction re-construction is 6 phases although not now expected to commence until Jan.2010. Meeting held with Tiger Developments, Capita Simmons (Project Managers), Dunne Construction (enabling contractor) and CEC on Friday 22nd August 08. Outcome is that risk is greatly diminished.
Haymarket Interchange	First Scotrail	Capacity Increase Project - Installation of new lifts and walkways from Haymarket Terrace	Utility diversions continue until late June 2009 Potential Interface with Infraco works at Haymarket junction commencing July 2009	Jan-10	Sep-11	Dec-11	Dec-12	NR/Edinburgh Tram Project Delivery Group Meeting 11 Buchanan House, Edinburgh 08 April 2009 ScotRail are required under their franchise to install lifts due to the uncertainty over the integrated scheme at Haymarket. ScotRail will progress but it will be at the end of their Franchise 2011/12.

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 recived 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
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	Aug-08	Oct-11	Oct-09	Mar-11	SDS Revised design information (v48) received early Period 6. Gogar Interchange Programme to be updated and re-issued.

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 August 2009 with TS. A further session will be arranged during Period 07.

2.9. Other

Gogar Surface Station

At the end of Period 6 **tie** the baselined design phase is 15% complete compared with 19% planned. The cost of work done is £130k compared with £170k planned. The forecast outturn remains unaffected.

The impact of Gogar Interchange on **tie**'s Authorised Undertaker role for EARL needs to be regularised to ensure that any potential conflict of interest is addressed. This is being pursued directly with Transport Scotland.

Programme & Milestones

Activity	Baseline Planned	Latest forecast
Complete prelim design of additional tram stop	10/8/09	18/9/09
Submit Structures Technical Approval application	19/11/09	8/1/10
Submit Prior Approval application	26/11/09	15/1/10
Receive Prior Approval	5/2/10	12/3/10
Receive Structures Technical Approval	5/2/10	8/3/10
IFC	26/2/10	22/3/10

tie is currently forecasting that there will be 24 calendar days slippage to the IFC drawings for the tram elements of the Gogar Interchange. There are opportunities to improve on the existing design programme. **tie** is investigating these in Period 7 with BSC & SDS.

Progress on specific activities

Following confirmation of Network Rail's preferred scheme at the end of Period 5, and the subsequent construction meeting held with TS, CEC, NR and **tie**, work has progressed in earnest on several aspects of the design. In particular:

- sighting study has been completed and has been issued;
- SDS topographical survey has been completed and has been issued;
- work has been started on design of the canopy over the roof of the tramstop – meetings have taken place between SDS's architect and the manufacturer of the EFTE material recommended by Mott MacDonald;
- work has started on the design of the Northern Retaining Wall and the completion of the topo survey will allow this to progress;
- revised landscaping plan has been received by SDS from Mott MacDonald.

SDS has confirmed that there is now no major item of information holding up design. SDS is awaiting results of the Mott MacDonald topo survey but these are helpful rather than essential at this stage.

Integrated Programme Development

tie will update its programme for Gogar Interchange by 22/9 to incorporate the updated Infracore design programme. This programme will then be adjusted together with TS & NR to produce an agreed integrated programme for the Gogar Interchange.

Overall design co-ordination

Project management meetings have continued between **tie**, TS and NR and a further design workshop took place on 19 August. Network Rail is arranging a further workshop for Period 7 as well as regular contact between designers.

Cost reporting

Mott MacDonald has provided revised plans and sections and **tie** will produce an update of the budget cost for discussion with Transport Scotland in Period 7 in line with provision of revised estimates by Network Rail. This reflects the slower progress made by SDS as the optioneering exercise was being completed.

Temporary traffic regulation orders (TTROs)

- Weekly visual summary being produced of all tram traffic management throughout the city.
- No major traffic switches implemented in the period.
- Traffic management planning ongoing for Princes St Phase 3, Haymarket and Picardy Place.
- It is looking increasingly likely that buses will be returning to Princes Street at the end of November – this will be confirmed by CEC on 29 September 2009. Traffic Management plans for this major traffic switch are currently under development.

Traffic regulation orders (TROs)

- A TRO programme is in place to ensure that the first order TRO 1, which will allow for operation of the tram system, envisages the order being made in July 2010.
- The informal consultation process for this has been completed and BSC have incorporated minor design revisions into the final design. **tie** received a set of TRO drawings on 19 August 2009.
- Following TPB and pending CEC approval on 22 September, it is expected that the statutory consultation process to commence in early October 2009.

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. Now they have sent it for tender to Volker Rail and Atkins Rail. They are expecting a response during Period 07. They should include the programme of those works for the immunisation solution for NR infrastructure.
- 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.

Third party interfaces

- NR – the Bridge Agreements are not yet concluded. There is an outstanding issue on indemnities to close out. CEC are taking this matter up directly with TS. The Operating Agreement draft with NR is currently on hold pending resolution of the same indemnities issue that is concerning CEC with the Bridge Agreement. Both matters are with CEC for resolution.
- Forth Ports – Forth Ports have introduced a new clause into the Agreement drafting which seeks to link payment for the Tram works with the Planning Approval for the Leith Harbour Development, this is unacceptable to CEC and the matter has been raised for resolution at a senior level.
- 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** plan to take the matter up directly with TS;
- Building fixings – the process of lodging court submissions has commenced with 9 applications lodged in the period. The building fixing programme will commence in Spring 2010
- 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.
- Network rail and CEC have signed a side agreement which addresses the concerns **tie** had over possible conflicts with tram construction works. As a result **tie** have withdrawn their objection to the TAWS Order.

BAA - Burnside Road (BAA) Raynesway Construction.

- Works commenced on 10th August 09 and are currently on programme.
- Enabling works at the Balfour Beatty Compound are complete.
- Utility diversion on programme, including the HV diversion completed early.
- Piling works commenced on 3rd September 09 however access problems, partly resulting from the heavy rain, and mechanical problems have delayed progress. The design of the piles and the abutments was changed due to the final bridge design, requiring additional piles and tie-beams. The Contractor is assessing the impact on the programme, however, this is not anticipated to affect the Completion Date.
- The Coach Park and taxi rank barriers and the pay station were successfully relocated but with 1 week delay to allow re-assessment of the control system following difficulties during the cabling works. This has not affected the Critical Path. The East End Service Yard barrier installation has been postponed to w/c 14th September 09. This is currently a non-critical activity and is linked to the CCTV camera relocation.
- Generally planned Completion Date is maintained for January 2010.

Section 7B Utilities

- MUD works – The MUD contractor (Farrans) continues on site
- The installation of the gas main is now 95% complete requiring tie-ins at both ends.
- The multi-utility trench is 75% installed and backfilled.
- The foul main relay under the walkway is complete.
- Approximately 100m of the foul main remains to be laid at the south end of the multi-track at a different invert to the gas main. We have been unable to locate the existing foul main in this area and have prepared a plan for extending the diversion to the existing pumping station approximately 25m away across Burnside Road.
- Jointing of BAA HV cables completed as planned.
- Planned Completion Date of 2nd October 09 is at risk due to the impact of the original Kier relay and lower productivity than planned.

Hilton Car Park & Phase 1

- INFRACO – No works have commenced. Reviewable Tram Works Design (RTWD) Issued. BAA response received. Formal DRP started.

Section 1 Utilities

- Invitation to Tender documents (ITT) sent to 5 companies (Farrans, Morrisons, Raynesway, Clancy Docwra and UUPLC). Tenders returned on 11-Sept-09.

Fast link modifications (Front Line)

- Works completed.
- BT manhole is to be built after the Scottish Power cable has been diverted

Murrayfield Pitches (Souters)

- Final accounts now agreed. Subject to works being carried out during maintenance and establishment period.

Archaeological works at Constitution Street (Frontline):

- The archaeological works have now recovered in excess of 280 skeletons and this figure will rise beyond the 300 mark prior to the end of the works.
- Reinstatement of the next area approximately 20 metres long commenced
- Because of the large number of skeletons found and potential post excavation works the budget for this work is under threat. This is being reviewed and will be reported in future reports once the scale of post excavation works including carbon dating, reporting and re-interment is scoped.

3 Headline cost report

2.10. Current financial year

	FY 09/10			FY 09/10			FY 09/10			COWD To Date	Costs To Go	Total AFC
	COWD Period			COWD Year To Date			COWD Full Year Forecast					
	Actual	Budget	Variance	Actual	Budget	Variance	Forecast	Budget	Variance	Actual	Forecast	Forecast
Total Project COWD	7.197	13.280	-6.083	47.807	54.158	-6.350	119.728	150.072	-30.343	278.827	248.272	527.099
Other Funding	0.594	1.097	-0.502	3.947	4.472	-0.524	9.886	12.391	-2.505	23.022	17.993	41.015
Demand on TS	6.603	12.184	-5.581	43.860	49.686	-5.826	109.842	137.680	-27.838	255.805	230.279	486.084

- The lack of an agreed commercial programme and the decision to apply formal contractual measures to resolve outstanding issues with the BSC consortium will present potential further risks in relation to the attribution of additional costs and delay to completion of the project. **tie** Ltd has taken extensive legal and technical advice, including Counsel's opinion, and is confident of its position on the key matters in dispute. However, given the nature of the process and the complexity of certain issues, it is unreasonable to expect that all adjudication outcomes will be awarded in favour of **tie** Ltd and it will also be open to the BSC consortium to use the contract formally to pursue their objectives.
- We continue in this report to reflect an outturn estimate of £527.1m. 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 forecast accurately a revised budget outturn. It is also not possible at the present time to predict the conclusions of reviews of contingency programme delivery options, including possible additional sources of funding.
- ***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 clearer during the remainder of 2009.***
- ***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.***
- The budget for Phase 1a in 2009/10 is £150.1m which has been 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. It is anticipated that a fully agreed programme will not be made available and/ or agreed by the Infraco contractor until key commercial issues have been resolved.
- In order to ensure that key works are progressed **tie** have instructed the Infraco to begin works at Carrick Knowe and Russell Road via clause 80/15 letters. A rate of progress letter (clause 61) has also been raised for Gogar.
- The outturn figure for 2009/10 of £119.7m has been fully re-assessed in period 6 in-line with **tie**'s latest internal view of programme coupled with Project Managers informed view of Infraco deliverables in 2009/10. The reduction in forecast this month is in-line with the high-side sensitivity flagged in the period 5 TS report. Note: key assumptions to the £119.7m reforecast are detailed in the Executive Summary Section of this report.
- In addition to the forecast phase 1a (£119.7m) 2009/10 costs, the budget also includes costs of £3.2m which relate to the postponement of Phase 1b Infraco construction contract. A payment of £3.2m was made to the Infraco Contractor in August relating to phase 1b costs.
- Funding available from TS for the project in 2009/10 is £149m. The TS share of this year's updated forecast (£122.9m) is £112.8m, giving available headroom of £36.2m.

Actual YTD P6 & forecast P7-P13 FY09/10

£m	YTD P6	Forecast P7 - P13,09/10	Total FY09/10
Infrastructure and vehicles	32.0	52.9	84.9
Utilities diversions	7.5	0.8	8.3
Design	1.2	1.3	2.5
Land and compensation	0.7	0.9	1.6
Resources and insurance	6.4	8.5	15.0
Base costs	47.8	64.4	112.2
Risk allowance	-0.0	7.5	7.5
Total Phase 1a	47.8	71.9	119.7

- Phase 1a COWD to Period 6 is £47.8m (Period 5 is £40.3m) against budget £54.2m. The main drivers for the -£6.4m variance are: the timing of Infraco works costs forecast in 2009/10 offset by MUDFA costs incurred over the original plan.
- Tramco production activity is running two months ahead of schedule; this is reflected in the Tramco construction works forecast profile. It should be noted that the Tramco forecast has been amended with the release of the advanced payment now being smoothed periodically rather than quarterly to avoid 'spikes' in the cash application.
- 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.

2.11. Current financial year profile**Profile for FY09/10 - Phase 1a only**

£m	Q1 (p1-3)	Q2 (p4-6)	Q3 (p7-10)	Q4 (p11-13)	Total FY09/10
Infrastructure and vehicles	15.8	16.2	31.7	21.2	84.9
Utilities diversions	3.2	4.3	2.1	-1.3	8.3
Design	0.7	0.4	0.7	0.6	2.5
Land and compensation	0.6	0.1	0.8	0.0	1.6
Resources and insurance	2.9	3.5	5.0	3.6	15.0
Base costs	23.2	24.6	40.3	24.2	112.2
Risk allowance	0.0	-0.0	4.4	3.1	7.5
Total Phase 1a	23.2	24.6	44.6	27.3	119.7

- A full reforecast of the Infraco 2009/10 cost profile was produced in period 6 in lieu of **tie** receiving any updated agreed programme from the Infraco contractor. The 2009/10 reforecast has been informed by linking the latest **tie** programme to Infraco constructions milestones and taking Project Managers 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
- The latest forecast for 2009/10 shows base cost of £112.2m and risk £7.5m, giving a total phase 1a cost of £119.7m. Outturn has been reduced by (-£30.4m) from period 5 to period 6, with movements arising mainly as a result of the re-assessment of Infraco construction milestone achievement.
- The cost profile above shows a ramp-up in activity throughout 2009/10, with base costs increasing from £23.2m in Q1 to a peak of £40.3m in Q3. This reflects the anticipated shift in Infraco milestone activity from Q1 to Q3.
- Note: Utilities diversions -£1.3m forecast in Q4 relates to final betterment elements forecast against utilities providers.

2.12. Total project anticipated forecast cost**Re-baselined Phase 1a 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	84.9	102.6	34.3	297.8
Utilities diversions	18.4	33.4	8.3	0.0	0.0	60.1
Design	21.4	4.7	2.5	1.1	0.1	29.8
Land and compensation	16.8	1.7	1.6	0.1	0.8	21.0
Resources and insurance	42.7	15.8	15.0	10.6	9.8	93.8
Base costs	130.0	101.0	112.2	114.3	44.9	502.5
Risk Allowance	0.0	0.0	7.5	9.6	7.5	24.6
Total Phase 1a	130.0	101.0	119.7	123.9	52.5	527.1
Phase 1b postponement	3.0	0.0	3.2	0.0	0.0	6.2
Total Phase 1a and Phase 1b	133.1	101.0	122.9	123.9	52.5	533.3

- 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 Project Management assessment of deliverables. The AFC for Phase 1a above includes an unapproved increase of £15.1m to the project risk allowance. The approved cost estimate for delivery of Phase 1a of the project remains at £512m. The phasing of the £527.1m has been updated in period 6 by **tie**, and will be further updated when there is an updated agreed programme with the Infraco contractor.
- The latest forecast view includes £3.2m of costs relating to Phase 1b which crystallised as contractually payable to BSC due to the postponement of Phase 1b (this will require to be covered by current funding). Coupled with the re-baselined forecast, there is £11.7m of funding headroom within the £545m total funding available.

4 Time schedule report

2.13. 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 October 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	Actual / current forecast date live
Approval of DFBC by CEC	21 Dec 06A	21 Dec 06A
MUDFA – commencement of utility diversions	02 Apr 07A	02 Apr 07A
TRO process commences	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	22-Feb-09A
Tramco / INFRACO – award following CEC / TS approval and cooling off period and SDS novation.	28 Jan 08	14 May 08A
Construction commences	14-Apr-08	14-May-08A
First track installation commences – on street	03-Nov-08	Jun 2009A
Carrick Knowe Bridge commences	21-Aug-08	19-Aug-08A
A8 underpass commences	08-Aug-08	28-Aug-08A
Haymarket viaduct commences	08-May-08	01-Sep-08A
Edinburgh Park viaduct commences	06-Aug-08	01-Sep-08A
Tram mock-up delivered	Oct 2008	Nov 2008A
Demolition of Wanderers clubhouse	25-Aug-08	28-Sep-09
Edinburgh Park viaduct complete	24-May-09	12-Dec-09
Princes Street re-opened	01-Aug-09	25-Nov-09
NR immunisation complete	Nov 2009	Dec 2009
Utilities works complete	Nov 2008	Dec 2009
All demolition work complete	22-Aug-08	04-Mar-10
All Issue for Construction (IFC) drawings delivered (inc Gogar interchange design)	21-Jan-09	22-Mar-10
Haymarket viaduct complete	08-Dec-08	19-Apr-10
All consents and approvals granted	18-May-09	Mar-10
Design assurance complete	20-Jan-09	Mar-10
1 st Tram delivered	09-Apr-10	09-Apr-10
Carrick Knowe bridge complete	11-May-09	24-May-10
A8 underpass complete	14-Jul-09	15-Jun-10
Roseburn viaduct commences	20-Jan-09	06-Aug-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
1 st section (other than depot) complete ready for energisation (2)	25-June-10	Mar-11
Commission Section 2 (Haymarket to Roseburn junction)	11-Jan-10	Mar-11
Final tram delivered	17-Jan-11	17-Jan-11

Driver training commences (depot only)	Dec-10	Jan-11
Commission Section 6 (depot)	25-Mar-10	Jun-11
Roseburn viaduct complete	20-Apr-10	Jul-11
Test track complete	23-Apr-10	Oct-11
Commission Section 7 (Gogar to Edinburgh Airport)	25-June-10	Oct-11
Commission Section 1 (Newhaven to Haymarket)	11-Mar-11	May-12
Commission Section 5 (Roseburn junction to Gogar)	09-Nov-10	Apr-12
Driver training commences (excludes depot)	Nov 2010	May-12
System testing complete off street	09-Dec-10	May-12
Construction Line 1a complete	17-Jan-11	May-12
System testing complete on street	16-Feb-11	Jun-12
Letter of "no objection" from Independent Competent Person to commence tram running	17-Apr-11	Jun-12
Shadow running starts	18-Apr-11	Jul-12
Shadow running complete	July 2011	Oct-12
Letter of "no objection" from Independent Competent Person to commence revenue service	July 2011	Oct-12
Open for revenue service	July 2011	Oct-12

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.

2.14. Key issues affecting schedule

Programme is one of the priorities of the PMP and a refresh of the key issues affecting schedule will be provided in future periods following engagement with BSC.

2.15. 12-week look-ahead

Milestones	Actual / current forecast date
6 Depot Access Roads – Track & Stabling	17-Aug-09A
6 – Depot Building Foundations	01-Sep-09A
7 Gogar Culvert No.3	15-Sep-09A
7 Gogar Culvert No.1	21-Sep-09S
5B Trackworks Bankhead to Edinburgh Park Stn	21-Sep-09S
7 Gogarburn bridge beams	25-Aug-09A
1B Complete Utility diversions Foot of the Walk to Balfour Street	25-Sep-09F
5A Demolition of Wanderers Clubhouse	28-Sep-09S
5A Construct New Scotrail Carpark	28-Sep-09S
6 – Depot Building Steelwork	05-Oct-09S
1A3 Commence Temporary Platforms and Demolition Tower Place bridge	05-Oct-09S
7 Complete Utility diversions Ingliston Park and Ride to Airport	09-Oct-09F
2A S19 Haymarket viaduct re-commences	16-Oct-09S
1D Complete Road and Track works Lothian Rd junction	22-Oct-09F
5B Trackworks Balgreen Rd Saughton Road North	26-Oct-09S

5B Trackworks Saughton Rd to Bankhead (Guided Busway)	26-Oct-09S
5B Trackworks Edinburgh Park Stn to Edinburgh Park Central	26-Oct-09S
1B Complete Utility diversions Balfour Street to McDonald Road	30-Oct-09F
2A Track works Haymarket to Roseburn Junction	30-Oct-09S
5A W3/W4 Russell Road retaining walls	02-Nov-09S
5B South Gyle Access bridge sub-structure	09-Nov-09S
5A S20 Russell Road bridge	20-Nov-09S
1C Complete Road & track installation on Princes Street*	25-Nov-09F
1D Complete Utility diversions Haymarket to Shandwick Place	23-Dec-09F
1C1 Complete Utility diversions McDonald Road to Picardy Place	21-Jan-10F
1C2 Complete Utility diversions Picardy Place to St Andrew Sq	08-Mar-10F

A = Actual date

S = Forecast Start Date

F = Forecast Finish date

5 Risk and opportunity

2.16. Review of risk register

Summary

There were twelve risk reviews held in the period. Two items were close on the Infraco concerns register and 7 items added. There were sixteen risk draw downs approved in the period totaling £731,675. These are detailed later in this report. This leaves a risk and contingency balance of £8,780,397 (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
20/8/09	Review of Project Risk Allowance (QRA)	Project Risk Manager Infraco Director Infraco Construction Directors (x2) Infraco Commercial Mgr	Review of current risks within QRA and their allowance. Identification of new risks.
25/8/09	Change and Risk Review	Project Risk Manager Infraco QS Infraco Commercial Mgr	Review of current and proposed changes against risk allowance
2/9/09	Programme impact review on Infraco Concerns Register	Project Risk Manager Programme Manager	Review of programme impacts
7/9/09	Structures Risk Review	Project Risk Manager Project Manager	Risks and Treatment Plans Reviewed
7/9/09	Roads and Drainage Risk Review	Project Risk Manager Project Manager	Risks and Treatment Plans Reviewed
7/9/09	Signalling, Communication and Control (SCC) Risk Review	Project Risk Manager SCC Project Risk Manager	Risks and Treatment Plans Reviewed
7/9/09	Depot Risk Review	Project Risk Manager Project Risk Manager	Risks and Treatment Plans Reviewed
7/9/09	Network Rail	Project Risk Manager Project Risk Manager	Risks and Treatment Plans Reviewed
8/9/09	Mudfa Risk Review	Project Risk Manager Mudfa Construction Director	Risks and Treatment Plans Reviewed
8/9/09	High-level Infraco Risk Review	Project Risk Manager Infraco Director	Risks and Treatment Plans Reviewed
8/8/09	Princes Street Risk Review	Project Risk Manager Project Manager	Risks and Treatment Plans Reviewed
9/9/09	Section 1A Risk Review	Project Risk Manager Project Manager	Risks and Treatment Plans Reviewed

Risk Register

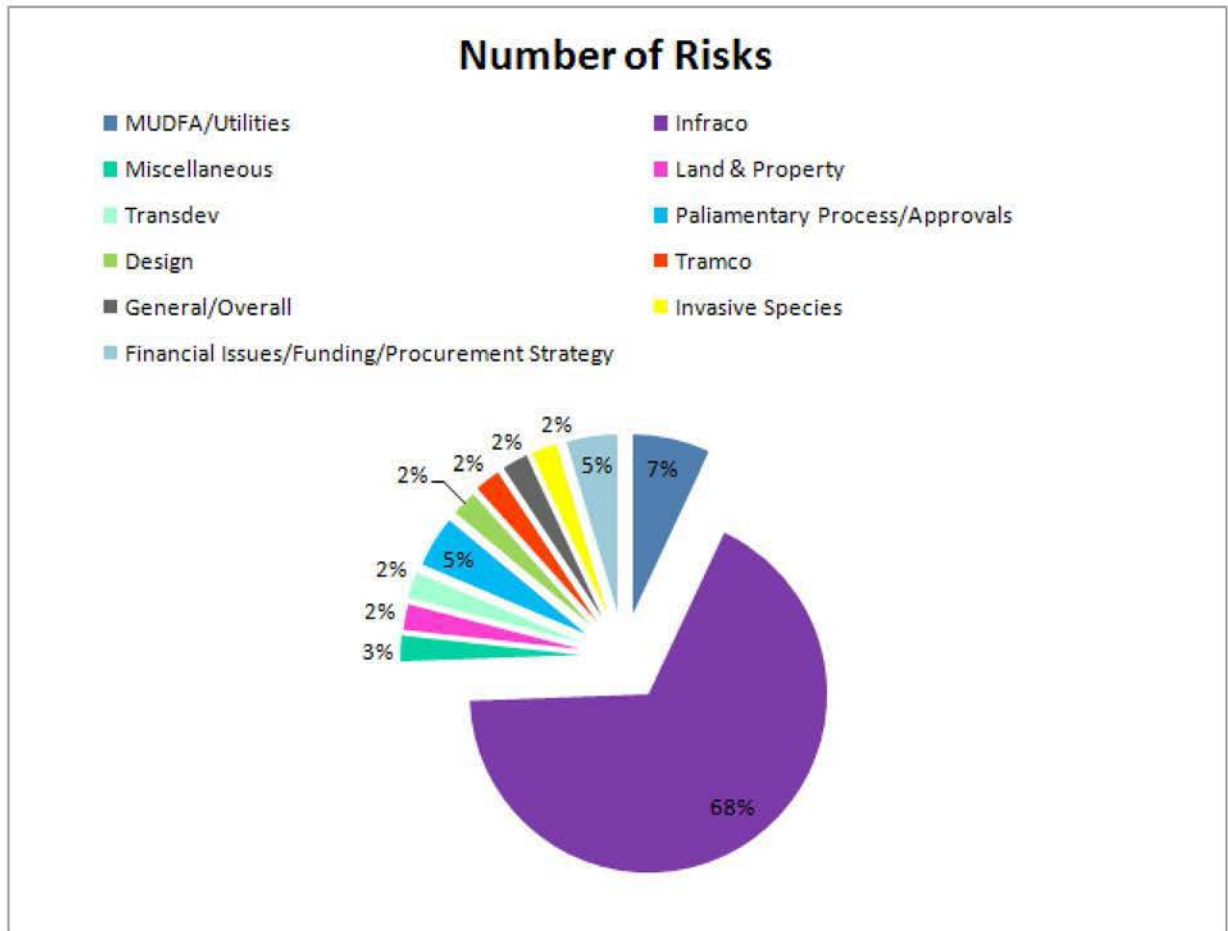
The Primary Risk Register is attached at Appendix D. The Primary Risk Register contains those high impact risks which are impacting (or have the potential to impact) the project at this moment in time. In addition, the potential risks identified in regard to programme slippage are being reviewed periodically and will form part of the updated QRA. There are 43 risks in the risk register. The top five project risks are listed on the following pages.

Top 5 Risks - Period 6 2009/10

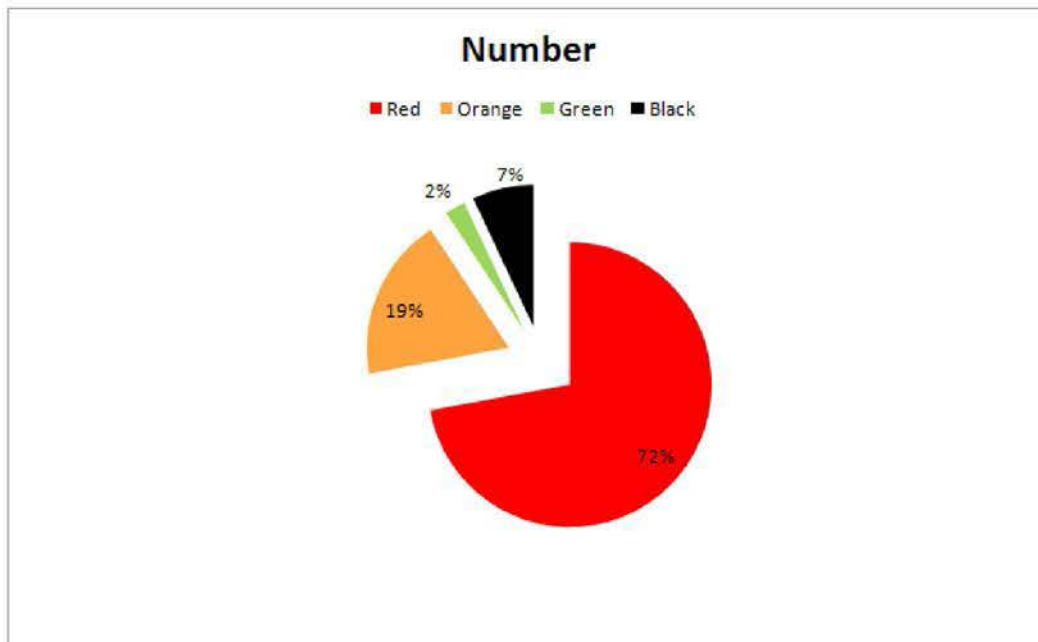
Risk Description											
ARM Risk ID	Cause	Event	Effect	Risk Owner	Significance	Black Flag	Treatment Strategy	Previous Status	Current Status	Due Date	Action Owner
343	General delay to programme with various causes e.g. failure to obtain approvals on time; parliamentary processes, contractor issues.	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)	Undefined	Undefined	30-Jul-09	S Bell
							Liason between tie/BSC programme managers	On Programme	On Programme	30-Dec-11	T Hickman
							Programme Management Panel process	On Programme	On Programme	30-Dec-11	F McFadden
							Weekly tie/BSC commercial meetings	On Programme	On Programme	30-Dec-11	M Paterson
1077	Base Date Design Information to Issued For Constructions (BDDI-IFC). Lack of visibility of design changes between November 2007 and May 2008	Tramworks price based on a design which may have been altered. Unclear who authorised design change.	Additional cost and programme delay	S Bell	High - 25.00		Establish a process which will act as a control mechanism for design changes. (if one exists already then ensure process is complied with)	Complete	Complete	30-Jun-09	T Glazebrook
							Intensive Mediation Marathon 29/6/09 to 6/7/09 to try and resolve issues.	Complete	Complete	30-Jun-09	S Bell
							Mediation resulted in no overall agreement on BDDI - IFC although it gave useful background information. Strategy paper to be presented to TPB on 29 July to seek approval for way forward including utilising necessary contract mechanisms (DRP, audit etc)	Complete	Complete	14-Aug-09	S Bell
							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
							Six issues going through DRP process. Anticipated conclusion mid-November 09	N/A	On Programme	13-Nov-09	S Bell

1090	Initial costs for Burnside Road works higher than anticipated	Cost of works at Burnside Road exceed that allowed in project budget.	Additional Cost	F McFadden	High - 25.00	Costs being reviewed and tender documents sent out April 09.	Complete	Complete	30-Jun-09	F McFadden
						Tender docs issued based on scheme design information. Pre-tender estimate produced and final design ongoing. Delivery of tenders final outcome can be predicted.	Complete	Complete	30-Jul-09	F McFadden
1091		Excavation of soft, unsuitable material below Earthworks outline	Additional cost	F McFadden	High - 25.00	Donaldsons to carry out surveys	Complete	Complete	30-Jul-09	C Neil
						Extent of soft ground being investigated. External specialist advice deployed.	On Programme	On Programme	31-Dec-09	M Paterson
1101	Unreasonable behaviour of BSC commercial management	Unrealistic estimates being submitted for potential changes	Programme delay while disputes regarding estimates are resolved	F McFadden	High - 25.00	Additional resource from TNT	Complete	Complete	30-Jul-09	M Paterson
						Agreed with BSC for independant evaluation to get benchmark	Complete	Complete	30-Jul-09	M Paterson
						All estimates to be scrutinised by tie commercial team and, where appropriate, challenge made to BSC. Additional resource (T&T) being used to check estimates to reduce delay.	On Programme	On Programme	30-Dec-10	M Paterson
1094		Roads throughout works require full depth reconstruction	Programme impact plus additional costs. £1.5m cap applies to only 4 areas.	F McFadden	High - 24.00	Carry out surveys to confirm extent of roads requiring full depth reconstruction	Complete	Complete	30-Jun-09	C Neil
						Suite of options from surveys to be reviewed and agreement reached	On Programme	On Programme	31-Oct-09	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 items were closed in the Infraco Concerns Register in the period.

Discipline	Risk description			
	Risk Number	Cause	Risk Event	Effect
Section 1D	54	Utilities works are not complete on Princes Street	Clash between Tramworks and Utilities	Delay to programme, extension of time claim. Additional cost.
Depot	69	Section 21 agreement required with SW as depot is being built over existing sewer	Delay in obtaining section 21 agreement with SW	Delay to programme, extension of time claim. Additional costs.

The following items were added to the Infraco Concerns Register in the period.

Discipline	Risk description			
	Risk Number	Cause	Risk Event	Effect
Section 5A	108		Presence of Japanese Knotweed behind the Viking Building preventing progress of Russell Rd retaining wall W4. Ground contamination (oil plume) also problematic.	Additional cost delay
Section 5B	109		Presence of Giant Hogweed to be treated prior to progressing tramworks at Edinburgh Pk Central	Additional cost and delay
Section 5C	110		Presence of live THUS and Easynet services adjacent to south half of retaining wall	Additional cost and delay
Section 1A	111		Delay to completion of utility diversions causes delay to Infraco works	Additional cost and delay
Section 1A	112		Agreement with Forth Ports not yet in place with knock-on effect to Infraco works	Additional cost and delay
Section 1A	113	Forth Ports and CEC unable to agree on planning and layout of Road 8.	Planning permission for Ocean Terminal/Tram Plaza and Road 8 not yet in place	Additional cost and delay. Lost opportunity for TM while tramworks take place on Ocean Drive
Section 1A	114	Road not delivered to adoptable standard	CEC refuse to adopt road.	Delay to operation of tram

The risks relating to Section 1A will be subject to further review in the form of a risk workshop to be held in Period 7.

2.17. 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 Hill	164	42	In conjunction with MUDFA, undertake trial excavations to confirm locations of utilities and inform designer. All complete but section 1A1 and York Place to Picardy Place outstanding.	30/10/2009	Yes	No	No	Period 8
A Hill	139	42	In conjunction with MUDFA, undertake trial excavations to confirm locations of utilities and inform designer. All complete but section 1A1 and York Place to Picardy Place outstanding.	30/10/2009	Yes	No	No	Period 8
C Kerr	932	362	tie/TSS to undertake assurance review as necessary	30/10/2009	Yes	No	No	Period 8
C Neil	1078	647	Engagement between tie and BSC at different levels. Regular review of BSC management of third parties as per Employers Requirements.	31/10/2009	Yes	No	No	Period 8
D Burns	869	644	Length of Line 1a to be re-surveyed on regular basis	30/10/2009	Yes	No	No	Period 8
D Sharp	44	467	Fortnightly meetings of Approvals Task Force	30/10/2009	Yes	No	No	Period 8
D Sharp	279	634	Fortnightly meetings of Approvals Task Force	30/10/2009	Yes	No	No	Period 8
D Sharp	271	559	Assure the quality and timing of submissions	31/10/2009	Yes	No	No	Period 8
D Sharp	271	637	Fortnightly meetings of Approvals Task Force	31/10/2009	Yes	No	No	Period 8
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	31/10/2009	Yes	No	No	Period 8
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	31/10/2009	Yes	No	No	Period 8
G Barclay	1084	654	Assess TM implications to minimise enabling works and additional cost	31/10/2009	Yes	No	No	Period 8
W Biggins	911	628	Liase with Scottish Power to agree and approve method of crossing tunnel	30/09/2009	Yes	No	No	Period 7
M Paterson	1094	673	Suite of options from surveys to be reviewed and agreement reached	31/10/2009	Yes	No	No	Period 8
S Clark	977	682	TRO strategy approved by board, discussion to be held with CEC head of transport to reduce risk of legal challenge.	31/10/2009	Yes	No	No	Period 8
T Glazebrook	932	365	Undertake regular liaison during Immunisation Works design development (attend progress meetings with NR contractor)	30/10/2009	Yes	No	No	Period 8

2.18. Cost Quantative Risk Analysis

The Project Risk Allowance at financial close was £30,336,196. The Project Risk Allocation has reduced by £731,675 in the period. Total drawdowns to the end of Period 6 09/10 now total £21,555,799. Remaining risk balance based on the approved QRA is £8,780,397.

All existing risks, as well as those recently added, are being reviewed to ensure the QRA output is as accurate as is reasonably possible. It is accepted that the additional risks and increase in QRA output are currently unapproved. These are within the unapproved range in costs provided to TS on 26th May. tie will continue to report on the risk allocation at Financial Close until a new budget (with an updated QRA) is approved.

Transport Edinburgh

Edinburgh Trams

Lothian Buses

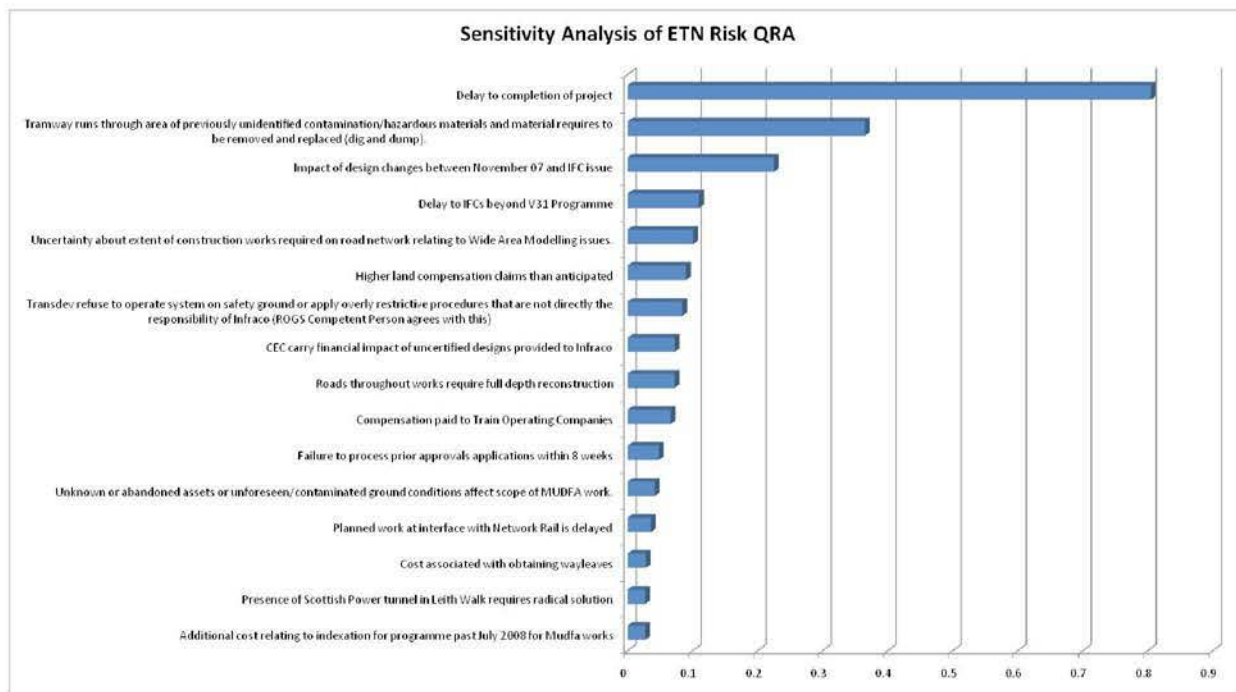
FOISA
exempt
 Yes
 No

Risk drawdown

The following table includes the approved drawdown applications on the project risk allocation in Period 6.

Description	Owner	Value (£)
Stage 1 Design Change - Balfour Street Crossing	Mike Paterson	8,796
Gogar Castle Tree Felling	Mike Paterson	1,162
Soil Investigation, Contaminated Material at Haymarket Depot	Mike Paterson	54,987
Replace MASS Barrier at St Andrews Square	Mike Paterson	22,897
Gogarburn Culverts S20,S31 and S34	Mike Paterson	13,368
Section 7 Additional West Embankment Starter Layer	Mike Paterson	36,616
Section 6 Depot Secondary Steelwork	Mike Paterson	2,356
Increase in Gross Amount of Change orders issued	Mike Paterson	341,179
Haymarket Internal retaining wall	Mike Paterson	14,208
Stage 1 Design Change - Water of Leith Bridge Sewer / Foundation Conflict	Mike Paterson	32,068
Stage 1 Design Change - Section 1D Haymarket Taxi Stance	Mike Paterson	26,215
Stage 1 Design Change - Design changes to Airport Kiosk	Mike Paterson	13,175
Stage 1 Design Change - Gyle Stop Cycleway widening	Mike Paterson	11,700
Stage 1 Design Change - NIL further future proofing	Mike Paterson	95,563
Stage 1 Design Change - Design of Canopy and boundary treatment at Airport Kiosk	Mike Paterson	49,982
Stage 1 Design Change - Existing Batter to North of Gogar Depot Drainage	Mike Paterson	7,403
	Total	£731,675

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.

2.19. 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.

6 Health, safety, quality and environment

2.20. 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	124,881	0	0	1	15	9	0	0	1	0.00	7.21
13 period rolling	1,592,205	1	3	30	225	178	3	16	58	0.25	11.18



There have been no reportable accidents during Period 6. The 13 period AFR is 0.25 compared to the target, 0.24 accidents per 100,000hrs worked. There has been a decrease in the overall service strike frequency for the project, however, a number of water services have been struck by BSC. A new 'record of service damage' form is being used to help identify areas of causation.

Directors Safety tours and Project Manager inspections have achieved 100% of those planned, however, a concerted effort is still having to be made to carry out joint inspections with the contractor. Further CoCP inspections have been carried out by **tie**, details of which are contained in Appendix B. Joint **tie** / BSC inspections have identified the main issues on BSC sites as – Provision of PPE, Housekeeping and Planning and Management. These issues have been addressed directly on site and are being monitored.

There have been a number of joint excavation inspections carried out by **tie** and CUS. Remedial actions required and implemented at 9 out of 17 excavations assessed. Premature removal of trench support in advance of reinstatement operations contributed to the negative findings. Learning points acted on by CUS management.

Works at Edinburgh Airport with Farrans and Raynesway have not been progressing as well as could be expected. A number of incidents including service strikes, fences being blown over and near misses involving plant have occurred. **tie** Infracore Director has met with Farrans Director to discuss and resolve issues.

MUDFA as-builts and utility handover process is progressing (estimated 10% complete) but remains a cause for concern (against site work estimated 97% complete).

An Operative twisted his ankle on site and this resulted in the operative being absent from work. The operative returned to work Friday 11th September.

Environment

The report from BSC on the environmental fuel spill at the Farrans site at Gogar Burn was finally received. It will now be reviewed by **tie**. BSC have intimated that SEPA have notified them that there will be no enforcement action taken. This is yet to be substantiated.

No environmental incidents have occurred during Period 6

2.21. 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
Princes St	OLE Pad Foundations	0	1	1	N/A	1	0.5
Guided Busway	OLE Pad Foundations	0.5	0.5	1	N/A	N/A	N/A
Princes St	Track works	0.5	1	1	0.5	1	0.5
Gogar Depot	Building Foundations	0.5	0.5	1	0.5	0.5	N/A
PD	Total (y)	1.5	3	4	1	2.5	1
	Max Possible Total (y)	4	4	4	2	3	2
Total to date	Percentage	25%	71%	88%	50%	80%	63%

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

Action taken from Period 5 – Deliver a safe tram metrics have been used in an area prior to construction starting. A Safety Verification Audit was carried out during Period 6 which highlighted 7 Findings, 3 of which were observations, 1 Major Finding and 3 Minor findings. The major finding was that no Systems Integration Plan was in place and there was no timescale for delivery of the plan, however, subsequent lower tier plans were in place. BSC did not deliver a presentation on Change Management to the PSCC however, presentations were delivered to the ICP on Tramstops.

Period 6 “Deliver a Safe Tram” inspection metrics were carried out on 4 activities across the project, 2 at Princes Street, 1 at the guided bus-way and 1 at the Depot.

Of the activities checked, an increased number show partial evidence of having gone through BSC’s Inter-Disciplinary Check process, however, this was still only ad-hoc through CVI’s and SDS internal IDC process as opposed the full BSC process. There is still an upward trend.

There are a number of hazards still open on the BSC project hazard log. A meeting between BSC, tie and Transdev is planned for the end of September to facilitate addressing the open hazards.

Inspection and Test Plans, the contractors’ process for quality control during construction continues to appear to be to a good and acceptable standard.

Changes to design on site were backed up by technical queries from BSC to SDS, however there was no evidence to show if the change had been assessed for the need to go through the IDC process. This is still outstanding from previous inspections. A presentation from BSC was due to take place at September PSCC but did not, this has been rescheduled.

Evidence that as-built information was being recorded and stored in the appropriate way to facilitate future records and the Asset Register was provided during the inspections

Action to be taken

Further areas not yet under construction to be checked using metrics

A presentation from BSC to tie will be given in October regarding the BSC design change process.

Report from Safety Verification Audit held during period 6 to be completed and action from findings to be followed up

Schedule of forthcoming internal IDC workshops requested from BSC by tie.

Discuss mitigation action with the Project Management for areas about to start construction

7 Stakeholder and Communications

2.22. Media / Press Activity

Media Coverage for Period 6 has been extensive as usual, with articles relating to the project appearing daily in various local newspapers and intermittently in national publications.

Positive news pieces included a story in The Herald with regard to a Carbon Emissions report by the Scottish Government. Coverage of the progress made on the Gogarburn bridge works and the Princes Street reinstatement also made for positive press for the project. A profile of our extensive archaeological works for the Edinburgh Trams website was conducted using Bit TV. John Lawson, Head of Archaeology CEC and two contractors, Headlands and GUARD, were interviewed as part of the profile.

Upcoming media stories for Period 7 include a profile on Women and Construction, a "Day in the Life of the Logistics team" piece along with a story highlighting the new Tramformer scheme for Primary Schools which promotes awareness of the project and safety around worksites. Another profile piece concerning Richard Jeffrey having reached 4 months on the project will be printed during the first week of Period 7.

2.23. Customer Service Activity

Overall, correspondence from Period 6 has fallen by 99 contacts from Period 5. Each week logged under 100 contacts, with week 3 only recording 59 contacts.

Correspondence via email, phone calls and face to face meetings continue to remain the main formats for enquiry by the public. Contacts logged by phone call (141) and email (95) claimed the majority of the overall correspondence. Contacts logged via Face to Face meetings totalled 59 for Period 6, a drop of 50 contacts from Period 5 where correspondence reached 109. The remaining contacts for Period 6 consisted of 4 letters, while no contacts were received by TCA Report or Fax.

Information requests constitute the majority of all correspondence for Period 6, with 219 out of the total 299 contacts made regarding information on the project and its various components. This trend has not differed from previous Periods, however the total requests for information dropped by 106 from Period 5. Typical enquires included information on Gas Abandonment works on Leith Walk, parking suspensions, Haymarket works and timescales for various works sites across the route.

Period 6 Complaints (43) and COCP Complaints (14) have increased since Period 5 by 14 and 4 contacts. Weeks 1 and 3 especially logged high numbers of complaints with 10 and 17 being recorded by the Customer Service team. With 17 complaints during week 3, issues concerning alleged inconsistent information on notifications and lack of completion dates on signage at work sites. COCP complaints were logged concerning similar issues of signage not being accurate.

Employment and Logistics figures remained high throughout Period 6 compared to previous periods with 7 and 5 contacts being made. The remaining contacts were spread over the remaining categories with no emerging trends.

2.24. Public Information Planning

Various pieces of signage have been produced for different areas and events. Open for Business signage was designed and produced for Frederick Street, Murrayfield and the Conan Doyle bar. Banners were also made for the Edinburgh Festival firework display.

Transport Edinburgh

Edinburgh Trams

Lothian Buses

FOISA
exempt
 Yes
 No

Preliminary designs and illustrations for new Tram Information Boards are ongoing along with investigatory signage options for Leith Walk and Shrub Hill as part of Open for Business. The new tram film which was filmed in April has now been finished and the final copy completed.

Continued liaison with local traders in the Princes Street area has brought about signage being cleared from the west end of Princes Street now that the main track works are progressing further towards the mid to east end.

Two new signs have been designed to be placed at the Princes Street junctions with Hanover Street and Fredrick Street advertising the businesses on these two streets. These signs will be installed in the next week. This was welcome by the retailers in these areas.

Notifications will go out next week regarding the change in traffic management at the Lothian Road junction which will take effect on the weekend of 2nd October 2009. Three notifications have also been issued for the Haymarket area during Period 6. Notifications were also delivered concerning the closure of Laurie Street, with a diversion route being put in place to assist traffic wishing to enter Constitution Street.

A strategy planning meeting has taken place in preparation for works on York Place and London road, while consultations with Broughton Community Council are to take place regarding works in the area. Regular meetings are also held with Parliamentary MSPs regarding the project and its progress.

2.25. Website / Internet Communications

There were 13102 visits to the www.edinburghtrams.com website this period, with the number of followers on twitter rising to 222 against last period's 116. Facebook interaction and membership has also risen with 290 'fans' now following our facebook page as compared with last period's 183.

Video podcasts were introduced half-way through the period to www.edinburghtrams.com and the Apple iTunes store. While it is not possible to track how many people subscribe for these updates via iTunes, 773 people accessed the podcast feed on our servers, indicating that at least this many people viewed the podcast online or downloaded it.

RSS feeds which actively push information to users were accessed 1430 times this period. For the first time on www.edinburghtrams.com, "Local Updates" were pushed down to second place, with podcasts becoming our most popular RSS item. The community pages which house information on COCP feedback are also more popular this period than ever before with 27 users receiving RSS updates for this information.

Part of this shift in usage patterns is explained by the increasing popularity of our facebook and twitter pages. 551 people accessed the local updates page via links posted on these pages as opposed to 510 users viewing it by access from the parent site. Responses to social network posts are also remarkably swift.

Participation in online discussion forums on our facebook site has increased, with users now posting some of their own discussion threads about topics which are of interest to them. Feature items seem to be particularly popular, notably pieces done on our archaeological discoveries during utilities work and a regular photo feature explaining different construction practices.

To make best use of facebook, we need to actively develop content people wish to interact with. At present, photos and video are the most popular content on our site, while discussion boards are growing in popularity. 88 interactions with facebook users were logged to 14th September. Interactions are posted on each user's wall, encouraging their networks of friends and contacts to visit the Edinburgh Trams page.

Transport Edinburgh

Edinburgh Trams

Lothian Buses

FOISA
exempt
 Yes
 No

2.26. Logistics

Period 6 Logistics figures again remain constant at roughly 340 inbound deliveries per week. Outbound deliveries however dropped significantly from the 70 recorded during Period 5. Between week 1 and week 2 during Period 6 Outbound deliveries dropped by 27, from 34 to 7 deliveries. Figures for boxes, cages and rails delivered as part of the inbound deliveries also dropped by around 400 each between week 1 and 2 also. Superdrug delivery point has been moved to Hanover Street due the street being cleared of difficulties.

2.27. Partner and Stakeholder Communications

In the last month, Tramformer presentations have been conducted at 17 primary schools in Edinburgh. Recruitment is now under way, and 2 pupils are being selected from each participating school. Visits to sites will take place next month.

We have also been involved in running workshops in conjunction with Scottish Businesses for Communities. The pilot programme ran at Craigmoynton High School this month, 8 workshops were run to a total of 80 Primary 7 pupils.

Edinburgh Trams was represented at the Scottish Transport Convention on the 15/09/09 with an information stand and employees on hand to discuss with attendees the progress of the project.

Presentations were given to the following during Period 6:

- Forty One Club
- Tadashi Ito – Professor of Engineering from the University of Japan
- Leith Retired Workers Group

A representative from the project attended the Edinburgh Chambers of Commerce AGM Breakfast.

2.28. Freedom of Information Requests

For Period 6, a total of 8 Freedom of Information requests have been dealt with. Of the 8 requests, 5 were completed, 2 are waiting to be signed off for completion while one request is still in progress. One request has also gone to the Information Commissioner for consideration.

2.29. Winter Festival

A Marketing and PR working group has been set up comprising of professionals from City of Edinburgh Council, **tie**, DEMA, Winter Festivals and retailers in the City Centre. The group is continuing to meet to discuss the proposals for this year's Winter Festival and to insure the success of the festive celebrations.

A report on the Princes Street Christmas proposals will be considered at the next Policy and Strategy Committee on 29 September. This will consider the main options for managing Princes Street over the Winter Festivals period in light of discussions undertaken with city centre retailers, and to determine when buses, taxis and cycles will be returned to Princes Street following the completion of the tram construction works. An update will be provided in the next report.

Transport Edinburgh

Edinburgh Trams

Lothian Buses

FOISA

exempt

Yes

No