



**Tram Project Board  
Report on Period 04 (2010/11)  
Papers for meeting 28<sup>th</sup> July 2010**

**09:30am – 12:00pm**

**Distribution:**

**Members and attendees**

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

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

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

**In addition – for information only**

Cllr Maggie Chapman  
Andy Conway  
Norman Strachan  
Iain Coupar

Cllr Tom Buchanan  
Frank McFadden  
Alan Coyle  
Gregor Roberts

Dennis Murray  
Ailie Wilson  
Susan Clark

TRAM PROJECT BOARD

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**Agenda Tram Project Board**  
**Brunel Suite – Citypoint, 2<sup>nd</sup> Floor**  
**28<sup>th</sup> July 2010 – 09.30am to 12.00pm**

**Attendees:**

David Mackay (Chair)	Cllr Phil Wheeler	Dave Anderson
Richard Jeffrey	Cllr Ian Perry	Stewart McGarrity
Bill Campbell	Cllr Allan Jackson	Alastair Richards
Cllr Gordon MacKenzie	Brian Cox	Graeme Bissett
Donald McGougan	Neil Scales	Mandy Haeburn-Little
Steven Bell	Kenneth Hogg	Andy Conway
Marshall Poulton	Peter Strachan	Alasdair Sim (Minutes)

## Apologies:

- 1 Review of Previous Minutes and Matters Arising (DJM)
- 2 5 Key Business Priorities (RJ)
  - 2.1 Building the Tram
    - Update on Progress with BSC (RJ)
    - Project Director Progress Report Period 04 (SB)
    - Change Requests & Risk Drawdown
  - 2.2 Preparing for Operations (AR)
  - 2.3 Building the Brand (MHL)
  - 2.4 Building the Team (RJ)
  - 2.5 Preparing for the Future (RJ)
- 3 AOB
- 4 Date of next meeting – 25 August 2010

## Tram Project Board Glossary of Terms

APA	Asset Protection Agreement	OJEU	Official Journal of the European Union
BCR	Benefit to Cost Ratio	OLE	Overhead Line Equipment
CCTV	Closed Circuit Television	PFI	Private Finance Initiative
CEC	The City of Edinburgh Council	PIN	Preliminary Information Notice
DFBC	Draft Final Business Case	PMP	Project Management Plan
DPOFA	Development Partnering & Operating Franchise Agreement	QRA	Quantitative Risk Analysis
DV	District Valuer (VO Agency)	RBS	Royal Bank of Scotland
EARL	Edinburgh Airport Rail Link	RIDDOR	Reporting of Injuries, Diseases and Dangerous Occurrences Regulations
ER	Employers Requirements	ROGS	Railway and Other Guided Transport Systems (Safety) Regulations
ETN	Edinburgh Tram Network	RPI	Retail Price Index
ETP	Edinburgh Tram Project	RTS	Regional Transport Strategy
FAT	Factory Acceptance Test	SAT	Site Acceptance Test
FBC	Final Business Case	SCADA	Supervisory Control and Data Acquisition
GVD	General Vesting Declaration	SDS	Systems Design Services
H&S	Health and Safety	SE	Scottish Executive
HMRI	Her Majesty's Rail Inspectorate	SESTRAN	South East of Scotland Transport Partnership
HR	Human Resources	SNH	Scottish Natural Heritage
ICP	Independent Competent Person	SRO	Senior Responsible Owner
Infraco	Infrastructure Contract	SRU	Scotland Rugby Union
ITN	Invitation to Negotiate	STAG	Scottish Transport Appraisal Guidance
JRC	Joint Revenue Committee	TEL	Transport Edinburgh Limited
KPI	Key Performance Indicator	TPB	Tram Project Board
LB	Lothian Buses	TRO	Traffic Regulation Order
LLAU	Limits of Land to be Acquired or Used	TTRO	Temporary Traffic Regulation Order
LOD	Limits of Deviation	Tramco	Tram Vehicle Supply and Maintenance Contract
LRT	Light Rapid Transit	TS	Transport Scotland
LRV	Light Rail Vehicle	TSS	Technical Support Services
LTS	Local Transport Strategy	UTC	Urban Traffic Controls
MUDFA	Multi Utilities Diversion Framework Agreement	VAT	Value Added Tax
NPF	National Planning Framework	VFM	Value For Money
NPV	Net Present Value		
NR	Network Rail		
NTS	National Transport Strategy		
OCIP	Owner Controlled Insurance Programme		
OGC	Office of Government Commerce		

**Edinburgh Tram Network Minutes**

**STRICTLY PRIVATE AND CONFIDENTIAL**

**Tram Project Board**

**30<sup>th</sup> June 2010 (09:30 to 12.35)**

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

<b>Members in Attendance:</b>			
David Mackay	DJM	Bill Campbell	WWC
Richard Jeffrey	RJ	Donald McGougan	DMcG
Cllr Gordon MacKenzie	GM		
<b>In Attendance:</b>			
Brian Cox	BC	Andy Conway	AC
Steven Bell	SB	Kenneth Hogg	KH
Stewart McGarrity	SMcG	Cllr Phil Wheeler	PW
Graeme Bissett	GB	Cllr Allan Jackson	AJ
Alastair Richards	AR	Cllr Ian Perry	IP
Peter Strachan (telecon)	PS	Ian Craig	IC
Neil Scales	NS	Mandy Haeburn-Little	MHL
Dave Anderson	DA	Alasdair Sim (minutes)	AS

**Apologies:**

**Alan Coyle, Marshall Poulton, Cllr Tom Buchanan**

<b>1.0</b>	<b>Introduction, Review of Previous Minutes and Matters Arising</b>	
1.1	DJM welcomed the participants to the meeting and noted the apologies.	
1.2	DJM asked the TPB to declare and confirm any conflicts of interest; there being none, he went on to emphasise the absolute requirement for strict adherence to commercial confidentiality, both in regard to the specific matters discussed and to papers referred to in the meeting.	
1.3	The minutes of the TPB from 2 June 2010 were taken as read and accepted as a true record.	
1.4	<p><u>Matters Arising</u></p> <p>Action Item 2.0: RJ noted that the supporting document discussed at the previous TPB setting out the chain of events to follow either termination or negotiated settlement for incremental delivery is work in progress. He noted that the document or parts thereof is available for viewing. It was agreed that this document is not for issue at this time.</p> <p>Action Item 3.1: SB noted that discussions are ongoing, but not yet concluded with the SUC's regarding betterment valuation and that this will be reported at a future TPB.</p> <p>Action Item 3.1: SB confirmed that the power connections to the Leith Walk Bus Trackers is scheduled (by SP) for August 2010.</p>	

	<p>Action Item 8.1: GB confirmed that discussions on finalising the governance arrangements had taken place with CEC on 29/06/10. The Board notes the urgency of concluding matters in this regard.</p> <p>All other actions identified in the previous TPB minutes have been closed out.</p> <p><u>Audit Committee Update</u> KH updated the Board on the Audit Committee held prior to the TPB Meeting:</p> <ul style="list-style-type: none"> <li>▪ The Committee recommended the approval of the Financial Accounts Statements by <b>tie</b> Limited. SMcG had drafted a Board Minute and Letter of Representation and this would be authorised and signed by the Chairman of <b>tie</b> Limited.</li> <li>▪ The Committee approved the Health and Safety Internal Audit Report.</li> <li>▪ Commercial Strategy: Deloittes are preparing an internal audit report on the Tram Project's Commercial Strategy. This is in draft form and subject to final comments from the Management Team. The <b>tie</b> Management Team is comfortable that the report reflects the position and that the processes and disciplines in place are appropriate.</li> <li>▪ Financial &amp; Risk Controls Internal Audit: The Committee and the Board gave their strongest endorsement to date of the financial controls in place and thanked everyone for their hard work.</li> <li>▪ ITC &amp; Security Audit Report: The audit noted that satisfactory data and document security arrangements are in place.</li> </ul>	
<b>2.0</b>	<b>Chief Executive's Update</b>	
2.1	<p><u>Commercial Update</u> RJ updated the Board on the two commercial strategies underway at present;</p> <p><i>Workstream A:</i></p> <ul style="list-style-type: none"> <li>▪ The Board authorisation from the 02/06/10 TPB has been actioned. RJ advised that the necessary documentation is in place to formally issue the Remedial Termination Notice to BSC; this advising Infracore of breach under Clause 90.1.2, giving the Consortium 30 working days to prepare and submit a remedial plan to address recorded breaches.</li> </ul> <p><b>The Board authorised the issue of the Remedial Termination Notice to BSC</b>, the Board will be advised by the <b>tie</b> Chief Executive on the release of this notice to BSC.</p> <p>RJ emphasised that commencing the process leading to termination of the contract (via the Remedial Termination Notice) does not mean cancellation of the project; and that as part of the Workstream A, work is underway to evaluate the implications of delivering the project under alternative arrangements. The TPB noted that under the project governance arrangements the authorisation for <b>tie</b> to terminate the contract is a Full Council decision.</p> <p><i>Workstream B:</i></p> <ul style="list-style-type: none"> <li>▪ Where BSC complete part of the project and <b>tie</b> reprocur the remainder</li> </ul>	

	<p>on an incremental basis.</p> <p>RJ reported that intensive negotiations are ongoing with BSC on this Workstream. RJ reported a cautious assessment that BSC would appear to becoming more engaged in the process following correspondence received from BSC late on 29/06/10.</p> <p>It was noted that there are three critical milestones to be monitored in relation to Workstream B, these being;</p> <ul style="list-style-type: none"> <li>▪ A conference call has been scheduled with senior BSC Board representatives for 050/7/10. DJM and RJ will represent <b>tie</b>. The TPB requested that DJM consider if this meeting should be in person rather than by telephone.</li> <li>▪ BSC have confirmed that the assured integrated design for the ETN to be completed by mid July and;</li> <li>▪ A Guaranteed Maximum Price (GMP) and programme to be submitted by BSC at the end of July. It was recognised that some negotiation around this submission will be required in early August. The value of this initial submission will determine if there is scope to take matters further or not.</li> </ul> <p>Both strategies were discussed in great detail and at length by the Board. The key points arising from this were:</p> <ul style="list-style-type: none"> <li>▪ The TPB noted that the Bilfinger Berger Board is scheduled to meet on 20/07/10.</li> <li>▪ DJM, DMcG and RJ are meeting with the Cabinet Secretary for Finance and Sustainable Growth and the Minister for Transport, Infrastructure and Climate Change on 28/07/10. It is paramount that clarity on the way forward has been established prior to this meeting (Price, programme and delivery mechanism).</li> <li>▪ Whilst every effort must be made to reach a satisfactory resolution to Workstream B, the Board agreed the timeframe to either pursue or reject this workstream is limited.</li> <li>▪ It is recognised that the indications from the critical milestones set out above will determine the likelihood of a positive outcome in this regard. RJ to advise the Board on progress.</li> </ul>	<p>RJ</p>
<p>2.2</p>	<p><u>Business Case Refresh</u></p> <p>Following the Council Meeting on 24/06/10, a motion was approved that the report on the outcome of the contractual negotiations to be presented before Council on 16 September 2010 should include a refreshed Tram Business Case based on the options now being explored by <b>tie</b>.</p> <p>The Councillors represented on the TPB (GM,IP, AJ and PW) set out the expectations for this refreshed Business Case, noting that this document should be a non-technical document and would include headline information on:</p> <ul style="list-style-type: none"> <li>▪ Patronage and revenues based upon the economic indicators, development timescales and incremental delivery options;</li> <li>▪ Gogar Intermodal Station to be included in the assessment;</li> <li>▪ TEL operating costs/surplus analysis;</li> </ul>	



	<ul style="list-style-type: none"> <li>What can be delivered within the available funding envelope.</li> </ul> <p>SMcG and AC to meet with GM, IP, AJ and PW to agree the specific content requirements for this document and advise the next TPB accordingly.</p>	SMcG/ AC
2.3	<p><u>Gogar Intermodal Station</u> The expectation of the Scottish Government is that the Gogar Intermodal Station will open simultaneously with Tram operations. RJ advised the Board that the delivery of the tram related aspects of Gogar Intermodal Station are not included in the core of the discussions ongoing with BSC (Workstream B) at present. BSC will be asked to present a price for these works based upon a non assured design (as the design work is not yet complete), and the risks associated with this in regard to cost and programme must be accepted by Transport Scotland as promoter of this scheme. This is a complex scheme to deliver with many critical interfaces between the tram and the heavy rail construction activities. NS referred RJ to raise delivery concerns with Network Rail via Robin Gisby (NR Operations &amp; Customer Services Director). The Board agreed that RJ should write to Transport Scotland raising these concerns formally.</p>	RJ RJ
2.4	<p><u>Change Register Update and Formal Dispute Resolution</u> RJ presented the value of changes agreed against the original BSC submissions, noting that £18.2m of changes has been agreed against submissions for the same items of £33.2m; representing an 82% reduction. RJ updated the Board on the current status of DRP matters, noting that a decision on MUDFA Rev8 is due on 16/07/10.</p>	
<b>3.0</b>	<b>Building the Tram</b>	
3.1	<p>SB presented the progress updates for Period 3.</p> <p><u>HSQE – Deliver a Tram Safely</u> There have been no reportable accidents during Period 3. The rolling 13 period AFR is 0.12, well below the target of 0.24 for the project. Three environmental incidents were reported during the period &amp; a formal request has been sent to BSC regarding the provision of the monthly audit reports relating to the Project Site Waste Management . BSC are still to deliver an updated Environmental Management Plan and an updated Invasive Species Plan. BSC formally notified for non-delivery.</p> <p><u>HSQE – Deliver a Safe Tram</u> Period 3 inspections indicate a score of 88% for IDC findings, giving an improvement of over 30% in the last 2 periods. An Audit carried out on the ETL on 4th June 2010 showed good development of systems. A tie process for organising information that will help to provide interim assurance has been agreed and a test of this process is being carried out on Princes Street and an interim report will be available 9th July.</p>	

<p><u>Code of Construction Practice</u> Compliance on COCP items has reduced marginally since Period 2 to 94%. The relevant contractors have been advised and remedial plans to be monitored going forward.</p> <p><u>Utilities</u> Utility Diversions are now complete at Haymarket, and final snagging, abandonments and SW tie-ins at York Place which are dependent on completions of SW works at The Mound (completion expected 03/07/10 for water, 11/07/10 for reinstatement). Utility Diversions continue to programme at Newhaven and Leith Docks with scheduled completion first week in July, and works continue on existing side entry manholes worksites in Section 1A. It was noted that no new works will commence in this section of the route at present.</p> <p><u>Embargo Preparations</u> SB reported that the guiding principle is that all works in the Summer Festival embargo area will be complete prior to the embargo. The main exception to this is telecoms cabling works, which are largely contained to manhole access. If required, any further exemptions will be requested on an as required, site by site basis over the next 4 weeks. This will include the traffic management reinstatement works which are ongoing at present and are limited to a certain extent by materials availability.</p> <p><u>Infraco - Progress</u> The progress achieved in the Period for INFRACO works was 1.3% against a plan of 3.2%. BSC progress generally focussed on off-street sections and the total cumulative completion is 19.2% in Period 3. Issues raised in Period 3 to note are:</p> <ul style="list-style-type: none"> <li>▪ Progress to various areas not taking place due to lack of engagement of Contractor following Issue of Instruction – Clause 80/Clause 34.1;</li> <li>▪ Contractual obligations not met to allow works to commence on street;</li> <li>▪ Further design slippage;</li> <li>▪ BSC now recording progress against incomplete REV 3A Programme despite Rev 1 being the agreed contract programme and rejection of Rev 3A by <b>tie</b>. They have been instructed to produce a compliant revised programme.</li> </ul> <p>Some remedial works are planned on Princes Street (bonding/mastic) for the weekend of 3/4 July. SB noted that these remedials are not related to weather conditions in the lead up to the Princes Street reopening, but are associated with design and workmanship issues.</p> <p>The Board discussed concerns raised by the cycle lobby around the interaction between cycles and setts/tram rails and noted that this issue had been discussed in detail at the Traffic Management Review Panel. It was agreed that ongoing discussions with SPOKES should be maintained.</p> <p>It was noted that works off-street are well underway, and the Board agreed that CEC members and the Scottish Parliament (MSPs) should be invited to attend organised site visits to assess progress (prior to September). Much of this construction work is not readily visible to the public. MHL to arrange.</p>	<p>MHL</p>
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3.2	<p><u>Change Requests and Risk Drawdown</u> SB reported there were seven draw downs on the risk allowance approved in Period 3 totalling £1,899,726. Based upon the revised project risk allowance this leaves a risk balance of £4,221,402. SB referred the Board to the paper setting out the DRP Legal Costs Increase (COP377 - £1.76m), noting that this change includes specialist advisor costs for the ongoing negotiations with BSC. <b>The Board approved this drawdown.</b></p>	
3.3	<p><u>Enabling/Accommodation Works</u> SB advised that the Murrayfield Turnstiles / Gates Contract has been awarded to Crummock Construction (+ £390K change), and that the South Gyle Access Sewer diversion tenders are under evaluation, with a recommend to award scheduled for 02/07/10. <b>The Board approved delegated authority to the Project Director to award this contract.</b></p>	
3.4	<p><u>Works in Section 1A</u> With incremental delivery of the Phase 1a scope of works looking increasingly likely, and no concluded financial arrangement in place between CEC and Forth Ports regarding contributions towards construction, SB recommended that BSC complete the civils related works in Section 1A that are in progress at present (Tower Place Bridge and Lindsay Road Retaining Wall), and that no new sections of works be commenced at this time. The Board discussed the estimated cost outcome (re- abortive works and claims) if BSC are instructed to stop works now, and <b>ratified the decision that the current ongoing civils works be completed.</b></p>	
3.5	<p><u>Finance</u> SMcG presented a year on year summary of the project spend to date broken down by project area/activity (including Infraco, MUDFA, Tramco, SDS, Resources, Land &amp; Property, Transportation Modelling, Legals and Insurances). The payments to BSC reflect the profile agreed in the Infraco Contract. DA asked that the Princes Street Supplemental Agreement Costs be separated out from the balance of Infraco costs.</p>	SMcG
<b>4.0 Preparing for Operations</b>		
4.1	<p><u>Tram Progress</u> AR reported all 27 trams now completed or in production and that trams 13, 14, 15 and 16 are in the finishing area. Tram 12 is completing the factory acceptance test. Trams 3 to 11 are completed and stored ready for delivery. To date more than 45,000 people have visited the tram on Princes Street and feedback is still largely positive.</p>	
4.2	<p><u>Operational Readiness</u> AR reported that Construction works at the depot 44% complete and that building fit-out is progressing well. External track works have commenced and the first crossing to be delivered on 1st July. The depot is scheduled to receive the first trams in late August/early September 2010.</p>	

	<p>AR outlined the Depot Commissioning sequence (3 stages) which should see trams undergoing dynamic testing at the depot and a section of test track in the early part of 2011.</p> <p>AR went on to note that the BROR committee met in Period 3, and agreed functionality for ITT to shortlisted ticketing tenderers. The committee noted the proposed depot commissioning steps and also the audit results for the operators safety management system. As agreed at the previous TPB, the committee has taken on the action to consider and review a co-located control room strategy. NS offered to arrange a visit to the integrated control room facility in Liverpool to inform this process.</p>	NS
<b>5.0</b>	<b>Building the Brand</b>	
5.1	<p>MHL updated the Board on branding, communications and stakeholder matters, noting that media attention on the project has heightened considerably over the period, and advised that this is likely to intensify until more certainty on the ongoing dispute, programme and price is publically available.</p> <p>MHL and IC reported that a process for integration planning is underway in partnership with Lothian Buses. The Board noted that this again reinforces the requirement to conclude the next phase of the legal and organisational arrangements in line with the governance objectives for TEL.</p> <p>MHL noted that the recent work undertaken on the Leith Business Hub has just been short-listed for a Council staff award for Working Together. Edinburgh Trams has been one of the lead partners in this project. The Board commended the efforts of all those involved in the 'One Family'.</p>	
<b>6.0</b>	<b>Building The Team</b>	
6.1	RJ reported a number of recent resignations within the organisation and noted that this may be linked to staff uncertainty over the future. This is an area of concern and one that will be closely monitored.	
<b>7.0</b>	<b>Preparing for the Future</b>	
7.1	No updates were reported to the Board.	
<b>8.0</b>	<b>Governance</b>	
8.1	The Board requested that the necessary steps be taken to conclude and formalise the Governance matters with due haste.	DA/GB
<b>9.0</b>	<b>AOB</b>	
9.1	DJM took the opportunity to note his appreciation to the whole team involved in the project over recent months (The Board, <del>tie</del> , TEL, CEC & LB) for their endurance, commitment and patience in challenging circumstances.	
<b>10.0</b>	<b>Date of Next Meeting</b>	
10.1	DJM thanked the Board for their participation and confirmed that the date of the next meeting will be <b>Wednesday 28<sup>th</sup> July 2010</b> commencing at <b>09:30hrs</b> .	
10.2	The meeting closed at 12.35.	

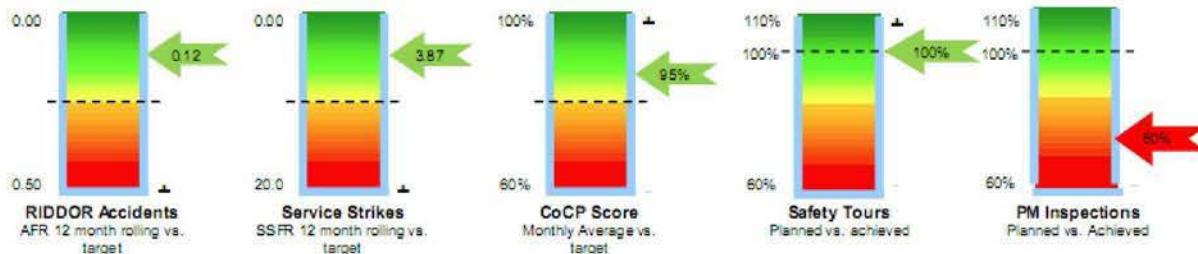
Prepared by Alasdair Sim, 1<sup>st</sup> July 2010

# Building The Tram Project Director Report - Period 04 [10/11]

## HSQE

### Deliver a Tram Safety

HS&E ACCIDENTS and INCIDENTS SUMMARY											
Total	Total Hours	>3 day	Major	Injury	NM/Unsafe Condition	Service Damage	ENV	RTA	MOP	AFR	SFR
Period	107,842	0	0	3	11	0	1	1	8	0.00	0.00
13 period rolling	1,602,027	1	1	22	216	62	25	7	75	0.12	3.87



There have been no reportable accidents during Period 4. The rolling 13 period AFR is being maintained at 0.12, well below the target of 0.24 for the project. *Post Period report note – a Reportable accident occurred at the Depot on 20/07/10; further details available upon request and this incident will be included in the P5 report.*

The frequency of service strikes for the project has improved overall from the previous period; all contractors have focused heavily on the safe digging practice. There have been no service strikes in Period 4. There has been an increase in reported Member of Public incidents. 3 cyclist accidents in Princes St, 2 excessive noise complaints, 2 ripped clothing. COCP compliance has increased slightly from 94% to 95% this period. There have only been 5 PM inspections recorded in Period 4 due to leave commitments but 100% of safety tours have been completed.

### Environment

A formal request has been sent to BSC regarding the provision of the monthly audit reports relating to the Project Site Waste Management Plans, currently no response received. A further letter to be sent Week 1 Period 5. 2 environmental incidents reported during Period 4; Lindsay Road - Readymix truck leaving site spilled concrete on to the road. Site cleared surplus away and called out road sweeper to clean; oil leak at Tower Place Bridge, dealt with in accordance with procedures.

### Deliver a Safe Tram

Section	Activity	Data Checked				
		IDC	ITP's	Design Variation/Change	As Built's	Asset Register
Carrick Knowe Bridge	ITP Status	0.5	1	1	0.5	N/A
Lindsay Road	Retaining Wall - Concrete; E&B	0.5	1	1	0.5	N/A
Depot	Access Bridge Piling	0.5	1	1	0.5	N/A
Murrayfield Wanderers	Sign off/Completion	0.5	0.5	1	1	N/A
<b>PD</b>	<b>Total (y)</b>	2	3.5	4	2.5	N/A
	<b>Max Possible Total (y)</b>	4	4	4	4	N/A
<b>Total</b>	<b>Percentage P3</b>	42%	91%	81%	77%	50%
	<b>Percentage P4</b>	43%	91%	83%	76%	50%

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

Four inspections were carried out during period – Carrick Knowe Bridge; Lindsay Road, Depot and Murrayfield Wanderers. The scores for Period 4 have remained consistent with no noticeable variations.

**Progress**

The progress achieved in the Period for INFRACO works was 1.3% against a plan of 3.2% this rate of progress similar to that achieved in recent periods, and reflects the level of activity underway, primarily in the off-street sections. However, BSC worked more hours in the period than normal which seems to suggest a lower productivity rate for the period. This will be discussed with BSC and monitored. BSC are undertaking very limited on-street works in the Leith Docks area at present.

The total cumulative INFRACO completion is 20.5% at end of Period 4.

**Progress Comparison with Period 3 - Infraco**

Period	Cumulative Progress (Actual)	Rev 1 Target
2010/11 Period 3	19.2%	89.2%
2010/11 Period 4	20.5%	92.4%

As per Period 03 2010-11, BSC continue to report only against their proposed Rev 3A (*mitigated*) programme which forecasts an Open for Revenue Service date of 23-Nov-13 and has been rejected by **tie**. The period 04 update to this programme indicates a Sectional “D” completion date (Open for Revenue Service) of 10-Dec-13 compared to the period 03 forecast of 13-Nov-13.

**tie** continues to monitor progress against the “live” programme which is based on the contractual Rev.1 Programme logic. This indicates a Sectional D completion in January-13. This has seen a 42 calendar day improvement in the period which is mainly due to the progress made on the earlier critical path activities such as the civil part of trackworks at the Depot and Section 7 thus reducing the overall critical path.

The critical path through this programme remains with the road and track works at the top of Leith Walk between Balfour Street and McDonald Road.

**Dispute Resolution**

The decision on MUDFA Rev 8 dispute was provided during the period and found substantially in favour of **tie**. The detailed reasons behind this decision are awaited from the adjudicator. Two other DRP’s (Depot Access bridge and Murrayfield Underpass – Clause 80/34 - are going through the adjudication process and decisions will be made in August.

**Design**

Concern remains regarding BSC’s management of SDS; **tie** are continuing to address this through the progression of an audit of BSC’s management of SDS. In summary:

- IFCs – Phase 1a: 175 issued out of 230 (76%)
- 52 out of 56 Prior Approvals are included in v59 have been granted
- 86 Technical Approvals out of 92 have been granted in V59

**Utility works**

Utility Diversions are complete at Haymarket and York Place (with the exception of final snagging and the requirement for Scottish Water tie-ins at York Place which are dependent on completion of SW works at The Mound). All outstanding utility works in the City Centre are programmed to complete pre-Embargo. Utility Diversions between Newhaven and Victoria Dock Bridge completed in Period 4 (excepting snagging works).

**Tramworks (INFRACO)**

INFRACO progress is primarily focussed on the off-street section between Haymarket and the Airport. Progress in Period 4 is summarised as follows:

Period 04 2010-11	Period		Delta	Cumulative		Delta	Project
	Plan	Actual		Plan	Actual		
<b>INFRACO PERIOD 04 PROGRESS (Contract Rev.01 Programme)</b>							
Section 1a Newhaven to Foot of the Walk	7.7%	0.7%	-7.0%	83.1%	1.2%	-81.9%	16.2%
Section 1b Foot of the Walk to McDonald Road	8.8%	0.0%	-8.8%	88.7%	1.3%	-87.4%	7.4%
Section 1c McDonald Road to Princes Street West	5.7%	0.0%	-5.7%	75.9%	0.0%	-75.9%	10.8%
Section 1d Princes Street West to Haymarket	0.0%	0.0%	0.0%	100.0%	42.1%	-57.9%	7.6%
<b>Combined Sections 1A-1B-1C-1D (On-Street) Newhaven Road to Haymarket</b>	<b>6.0%</b>	<b>0.3%</b>	<b>-5.7%</b>	<b>85.3%</b>	<b>8.4%</b>	<b>-76.9%</b>	<b>42.0%</b>
Section 2 Haymarket to Roseburn Junction	0.0%	3.0%	3.0%	100.0%	29.5%	-70.5%	4.2%
Section 5a Roseburn Junction to Balgreen Road	3.2%	0.1%	-3.1%	89.4%	6.1%	-83.3%	13.9%
Section 5b Balgreen Road to Edinburgh Park Central	0.0%	0.2%	0.2%	100.0%	42.1%	-57.9%	13.2%
Section 5c Edinburgh Park Central to Gogarburn	2.6%	1.7%	-0.9%	100.0%	9.7%	-90.3%	7.2%
Section 6 Gogar Depot	0.0%	5.2%	5.2%	100.0%	49.4%	-50.6%	11.9%
Section 7a Gogarburn to Edinburgh Airport	0.7%	2.5%	1.7%	100.0%	35.6%	-64.4%	7.6%
<b>Combined Sections 2A-5A-5B-5C-6A-7A (Off-Street) Haymarket to Edinburgh Airport</b>	<b>1.2%</b>	<b>1.9%</b>	<b>0.7%</b>	<b>97.4%</b>	<b>29.2%</b>	<b>-68.3%</b>	<b>58.0%</b>
<b>FULL ROUTE PHASE 1A NEWHAVEN ROAD TO EDINBURGH AIRPORT</b>	<b>3.2%</b>	<b>1.2%</b>	<b>-2.0%</b>	<b>92.4%</b>	<b>20.5%</b>	<b>-71.9%</b>	<b>100.0%</b>

Issues in the Period

- Progress to various areas not taking place due to lack of engagement of Contractor following Issue of Instruction – Clause 80/Clause 34.1;
- Contractors failure to comply with contractual requirements surrounding Permit To Commence having effect on progress of the works in various locations. Information being reviewed weekly;
- Further design slippage;
- BSC are recording progress against incomplete REV 3A Programme despite Rev 1 being the agreed contract programme and rejection of Rev 3A by tie, and;
- Outstanding Information from Network Rail continues to delay submission for Technical Approval for Gogar Intermodal Station.

**Tram works (TRAMCO)**

CAF is progressing well against its contractual programme for delivery of trams to Edinburgh, however the depot is not yet available to receive the trams:

- First 12 trams are completed and 13<sup>th</sup> is starting testing;
- Numbers 14 – 18 are in the finishing area with internal fit out and wiring underway, and
- Fabrication of the body shell of tram 27 is complete.

The first draft of the full Operational Readiness detailed programme information is now included in the Master Tram Project Programme.

The team are working closely with the BSC planners and team to monitor progress at the Depot and a number of meetings have been arranged for period 5.



A8 Underpass

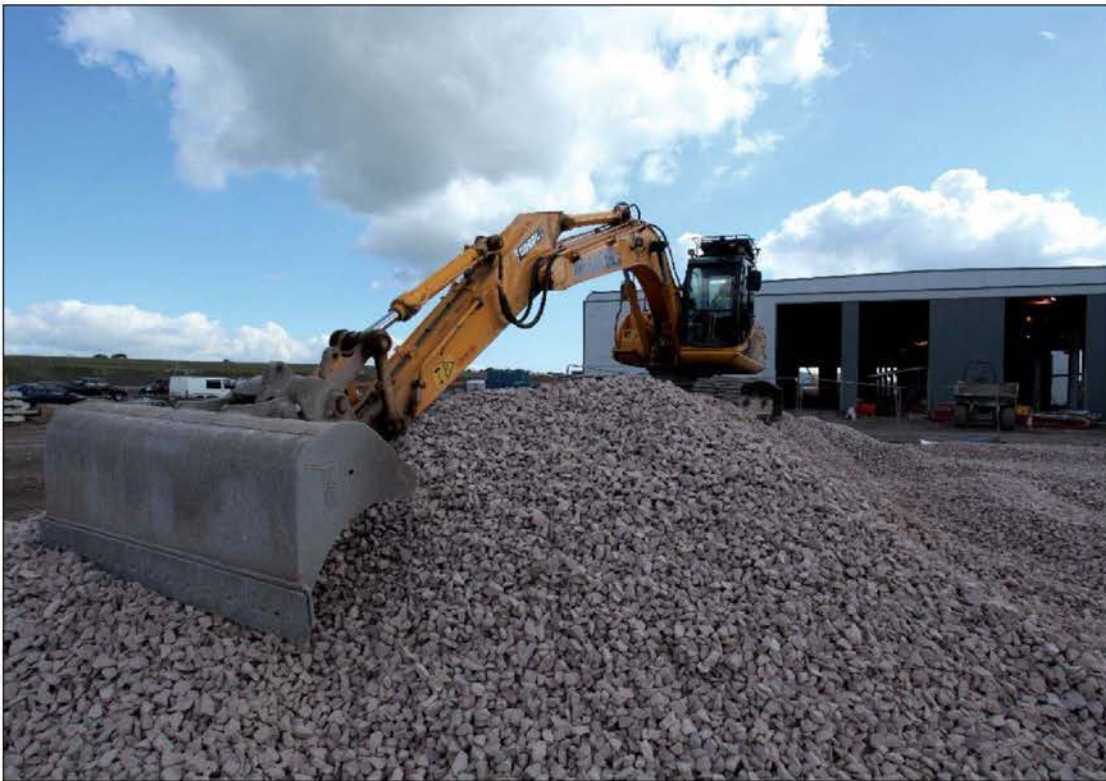


Rail Delivery Leith Docks





Gogar Depot Internals



Gogar Depot Externals

## Cost

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

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

Key cost related items to note in Period 4 are:

- COWD to date is £371.7m, with funding to date split to TS (£341.0m) and CEC (£30.7m).
- The budget for ETP in 2010/11, established in April 2010 is £142.2m (£153.3m 09/10). Transport Scotland funding for 2010/11 is £130.5m for ETP, with £11.7m funding available from CEC. See detailed cost report (section 3.1) for an explanation of budget and reforecast differences.
- Full year forecast for 2010/11 has been updated to £120.2m in-line with the FOG update. According to the latest forecast the TS share of funding has reduced (-£20.2m) from £130.5m (budget) to £110.3m (Q2 reforecast).
- Key sensitivities to the reforecast are identified in the main report.
- **TIE Ltd presented an updated forecast for 2010/11 and 2011/12 project spend to TS and CEC on 8<sup>th</sup> July. The presentation was a follow-up action to The Funders Operators Group (Transport Scotland, Edinburgh Council and TIE Limited) action minuted on 17<sup>th</sup> June 2010.**

### Actual YTD P4 & forecast P5-P13 FY10/11

£m	YTD P4	Forecast P5-P13,10/11	Forecast FY10/11
Infrastructure and vehicles	19.0	90.0	109.1
Utilities diversions	-0.3	-4.5	-4.9
Design	0.6	1.7	2.3
Land and compensation	0.3	0.0	0.3
Resources and insurance	4.2	9.2	13.4
<b>Base costs</b>	<b>23.8</b>	<b>96.4</b>	<b>120.2</b>
Risk allowance	0.0	0.0	0.0
<b>Total Phase 1a</b>	<b>23.8</b>	<b>96.4</b>	<b>120.2</b>

- ETP COWD in FY10/11 for Period 4 is £23.8m
- As previously reported and agreed with CEC and TS, initial milestones under the Infraco and Tramco contracts in the aggregate amount of £14.4m, in respect of advance material purchases, have been classified as prepayments. These will be reclassified as expenditure against funding in the periods when the related materials are delivered to site and incorporated in the works. The release will occur on the achievement of trackwork and structures milestones in 2010/11 and future years.

## Risk & Opportunity

There were six risk reviews held in the period. There were two draw-downs on the risk allowance approved in the period totaling £673,814. These are detailed later in the report. Based upon the revised project risk allowance this leaves a risk balance of £3,547,588.

The Project Risk Allowance at financial close was £30,336,196. This was increased in Period 1 by £17,982,993. Drawdowns to the end of Period 4 10/11 now total £44,771,601. The remaining risk balance based on the approved QRA plus the additional funding is £3,547,588.

Drawdown applications on the project risk and contingency allocations in Period 04 were £673,814.

## Stakeholders & Communications

Press coverage during the last four week Period has been relatively low. Coverage in the Evening News was limited throughout Period 4 and included one misleading story regarding BT Cabling work on Broughton Street and York Place which was clarified with both the journalist and the public via Facebook.

Branding and Signage projects continue to be progressed across the tram route during Period 4. The Tram Mock-up, which is currently sited at Edinburgh Airport, is due to be wrapped in vinyl designs to promote the upcoming Festival period in the city centre on 23<sup>rd</sup> July. Signage displaying tram messages will also be installed alongside the Airport Tram Stop and will feature the joint branding of Edinburgh Trams and Inspiring Capital. The same key message signage will be placed on the Broomhouse Road viaduct and will contain short positive wording about the trams benefits.

Monthly integration meetings have been taking place between members of the Edinburgh Trams and Lothian Buses communications and customer service teams in preparation for an operational service. At the most recent meeting the topics of joint branding opportunities were discussed, along with an outline of our ongoing School Programme, Tramformers, and FOI structure. Communication continues on a regular basis between businesses and residents to keep them informed of the progress being made on the project and of any works due to commence in their area.

Five new Freedom of Information requests are in the process of being collated during Period 4, while 2 requests are with the Scottish Information Commissioner.

The total number of Customer Service enquiries have increased by 18 during Period 4 to 291. The majority of correspondence continues to be via Email (127) or Phone (123), while enquiries logged through Meetings with stakeholders and residents have risen by 10 since Period 3 to 27. Information Requests made up 88% of these enquiries totalling 255, an increase of 30 during the last 4 weeks.

## Period 04 2010/11 – Papers for Consideration

**Paper to:** TPB **Meeting date:** 28 July 2010  
**Subject:** Project Change Control Update – Period 04, 2010/11  
**Preparer:** Mark Hamill

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## Summary

This paper is to update the Tram Project Board with the current status regarding approved project change orders and their implications on the overall Tram Project Budget. To the end of Period 2, £42.1m had been drawn down from the project risk allowance.

In Period 04, an additional £673,814 has been drawn down leaving a risk allowance of £3.5m.

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

Description	Base cost	Risk	Total
<b>Position at Financial Close (PCB)</b>	<b>481,680,811</b>	<b>30,336,196</b>	<b>512,017,007</b>
<b>Increase in budget</b>		<b>17,982,993</b>	<b>530,000,000</b>
Changes to end Period 3	1,899,726	-1,899,726	
<b>Position at end Period 3</b>	<b>525,778,598</b>	<b>4,221,402</b>	<b>530,000,000</b>
Period 04 Changes	673,814	-673,814	
<b>Position at end Period 3 (CAB)</b>	<b>526,452,412</b>	<b>3,547,588</b>	<b>530,000,000</b>

## Changes Approved in Period 04

### City Centre Reinstatement using Rubber Kerbs and Guardrails (COP366 - £578,282)

This change was for the removal of the mass barrier currently in place in the city and replacing the same with re-usable rubber kerbing units and associated white lining/refuge islands together with the installation of pedestrian guard rails in certain locations.

This change was approved following the agreement that the current temporary traffic management in place throughout the city centre should be lifted and the traffic management measure should be replaced to its previous arrangements in so far as practical.

The requirement to replace the traffic management currently in place with a semi permanent solution was identified following discussions with stakeholders and the requirement to maintain business as usual in terms of traffic and pedestrian flows and also to make the city centre as aesthetically pleasing as possible.

### Murrayfield Modifications - Gatehouse Works (COP387 - £95,532)

This is a change due to an increase from the original scope to the increased scope of works issued at Tender Stage. The original scope sent to BSC through the change process did not allow for new fencing, an automatic gate and retractable bollards. Subsequently the decision was taken to tender the works, including the increased scope, outwith the consortium with the tender resulting in an award to Crummocks.





FOISA exempt

Yes  
 No

## Primary risk register

**1011 Period 04 Top 5 Risks**

ARM Risk ID	Cause	Risk Description Event	Effect	Risk Owner	Significance	Black Flag	Treatment Strategy	Previous Status	Current Status	Due Date	Action Owner
343	General delay to programme with various causes e.g. failure to obtain approvals on time, contractor issues, access after completion of utility diversions	Delay to completion of project	Increased out-turn cost due to delay plus revenue loss	S Bell	High - 2030		Access maps showing areas available	On Programme	On Programme	30-Nov-10	F McFadden
							Clause 34 / 80.15	On Programme	On Programme	31-Aug-10	S Bell
							Contractually assertive workstreams to progress programme	On Programme	On Programme	29-May-10	S Bell
							DRP Mudra Rev 8 response	On Programme	On Programme	31-Aug-10	S Bell
							DRP on programme management (EOT1)	Complete	Complete	30-Oct-09	S Bell
							Enhanced management focus on various workstreams and options relating to progress of the project	Complete	Complete	30-May-10	Richard Jeffrey
							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



**1011 Period 04 Top 5 Risks**

ARM Risk ID	Cause	Risk Description Event	Effect	Risk Owner	Significance	Black Flag	Treatment Strategy	Previous Status	Current Status	Due Date	Action Owner
*1077	Base Date Design Information to issued For Constructions (BDDH-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 - 23.3%		Continued DRP / Adjudication Process	On Programme	On Programme	31-Jul-10	S Bell
							Contract interpretation and technical expert witness work	On Programme	On Programme	31-Jul-10	S Clark
							Deploy alternative utilities contractors to progress utilities	On Programme	On Programme	30-Nov-10	F McFadden
							Enhanced management focus on various workstreams and options relating to progress of the project	Complete	Complete	31-May-10	Richard Jeffrey
							Establish a process which will act as a control mechanism for design changes. (If one exists already then ensure process is complied with)	Complete	Complete	30-Jun-09	T Glazebrook
							Intensive Mediation Marathon 29/6/09 to 6/7/09 to try and resolve issues.	Complete	Complete	30-Jun-09	S Bell
							Mediation resulted in no overall agreement on BDDI - IFC although it gave useful background information. Strategy paper to be presented to TPB on 29 July to seek approval for way forward including utilising necessary contract mechanisms (DRP, audit etc)	Complete	Complete	14-Aug-09	S Bell
							Of the issues previously highlighted as going through DRP, 1 has been ruled in favour of tie, 2 have been agreed, 2 have been ruled in BSC's favour and this is being reviewed by tie. Further issues are due to enter DRP in December 09 and January 10.	Complete	Complete	31-Jan-10	S Bell
							PA1 challenge	On Programme	On Programme	31-Aug-10	S Bell
							Resolution Strategy approved - 1st DRP to go 10th August, audit requests to BSC for information going w/c 3.8.09	Complete	Complete	10-Aug-09	S Bell
Siemens 33 initiative to achieve Airport to Bankhead Drive	On Programme	On Programme	31-Aug-10	S Bell							

**1011 Period 04 Top 5 Risks**

ARM Risk ID	Cause	Risk Description Event	Effect	Risk Owner	Significance	Black Flag	Treatment Strategy	Previous Status	Current Status	Due Date	Action Owner
1091		Excavation of soft, unsuitable material below Earthworks outline	Additional cost and programme delay	F McFadden	High - 25/30		Donaldsons to carry out surveys	Complete	Complete	30-Jul-09	C Neil
							Enhanced management focus on various workstreams and options relating to progress of the project	On Programme	On Programme	30-May-10	Richard Jeffrey
							Extent of soft ground being investigated. External specialist advice deployed.	On Programme	On Programme	30-May-10	M Paterson
							Iterative testing approach in order to maximise value	On Programme	On Programme	31-Jul-10	C Neil
							Technical challenge against Donaldsons designs	On Programme	On Programme	31-Jul-10	C Neil
1101	Unreasonable behaviour of BSC commercial management	Unrealistic estimates being submitted for potential changes	Programme delay while disputes regarding estimates are resolved	F McFadden	High - 25/30		Additional resource from T&T	Complete	Complete	30-Jul-09	M Paterson
							Agreed with BSC for independent evaluation to get benchmark	Complete	Complete	30-Jul-09	M Paterson
							All estimates to be scrutinised by the commercial team and, where appropriate, challenge made to BSC. Additional resource (T&T) being used to check estimates to reduce delay and other commercial resources on these areas	On Programme	On Programme	30-Dec-10	M Paterson
							Clause 34/80 issues using DRP for disputed values	On Programme	On Programme	31-Aug-10	S Bell
							Enhanced management focus on various workstreams and options relating to progress of the project	On Programme	On Programme	30-May-10	R Jeffrey
							Legal challenge to Clause 80 and BSCs interpretation thereof	On Programme	On Programme	31-Jul-10	S Bell

**1011 Period 04 Top 5 Risks**

ARM Risk ID	Cause	Risk Description Event	Effect	Risk Owner	Significance	Black Flag	Treatment Strategy	Previous Status	Current Status	Due Date	Action Owner
1094		Roads throughout works require full depth reconstruction	Programme impact plus additional costs. £1.5m cap applies to only 4 areas. (PA 12) Also affects (PA 14)	F McFadden	High		Carry out surveys to confirm extent of roads requiring full depth reconstruction	Complete	Complete	30-Jun-09	C Neil
							Intensive engagement with CEC, palette of options, methodology being agreed	On Programme	On Programme	31-Jul-10	C Neil
							Suite of options from surveys to be reviewed and agreement reached	On Programme	On Programme	30-Jul-10	C Neil
							tie developed on-street proposal	On Programme	On Programme	31-Aug-10	S Bell

## **Period 04 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

### Overall

The cost, programme and risk information in this Period 04 report continues to be based upon an unapproved forecast on the information reported in May 2009. This will be updated once agreement is reached with BSC on a new revised programme.

As per Period 03 2010-11, BSC continue to report only against their proposed Rev 3A (*mitigated*) programme which forecasts an Open for Revenue Service date of 23-Nov-13 and has been rejected by **tie**. The period 04 update to this programme indicates a Sectional "D" completion date (Open for Revenue Service) of 10-Dec-13 compared to the period 03 forecast of 13-Nov-13.

**tie** continue to monitor progress against the "live" programme which is based on the contractual Rev.1 Programme logic. This indicates a Sectional D completion in January-13. This has seen a 42 calendar day improvement in the period which is mainly due to the progress made on the earlier critical path activities such as the civil part of trackworks at the Depot and Section 7 thus reducing the overall critical path.

The critical path through this programme remains with the road and track works at the top of Leith Walk between Balfour Street and McDonald Road.

**tie** are in receipt of two independent experts' views and reports on an attainable Rev3 programme proposals both of which indicate that Revenue Service is still achievable by late 2012, if a pro-active approach is taken by the Contractor. It should be noted however that the longer the current impasse remains the more unlikely a late 2012 completion becomes.

Overall the relationship with BSC is suffering in the following key areas:

- The refusal of BSC to progress works whilst Clause 80 Changes are being agreed;
- Work unable to start on-street where sites are available and accessible as BSC contractual obligations are not satisfied;
- Resolution of the contractual interpretation on BDDI-IFC (pricing assumption 1, development and completion of design), and
- Refusal by BSC to progress works under **tie** instruction in relation to Clauses 80/34/22/65
- Refusal of BSC to provide any further information in relation to the currently agreed contact programme.

Linked to all of the above is the provision of a programme to completion capable of acceptance.

Progress remains behind the master programme, primarily due to:

- Finalisation of the agreement of change delaying the commencement of work even though instructed to progress by **tie**;
- Greatly diminishing incomplete utility diversions in the On-Street sections caused in part by traffic management constraints;
- Contractual obligations not met to allow works to commence on street;
- Slow mobilisation of INFRACO, including lack of formal sub-contracts being in place;
- Failure of INFRACO to submit preparatory paperwork in a timely manner and of a suitable content i.e. Work Package Plans, Method Statements etc;
- Requirement for re-design of temporary works;
- Design slippage since novation of design to INFRACO (now recorded in v59 of the design programme);
- Design changes as a result of the Prior and Technical Approvals process; and
- Consortium integrated design programme, assured and validation.

There has been no new Infraco works on-street other than those already progressed with works continuing at both Lindsay Road RW's and at Tower Place bridge, due to a lack of agreement on programme going forward, suitable sub contractor arrangements and completion of final design assurance checks by BSC.

Section	Description	Contract Programme Rev.01	BSC Forecast (P02) Rev.01	BSC Planned Rev 3A Prog.	BSC Forecast (P03) Rev.3A	BSC Forecast (P04) Rev.3A	BSC Movement in Period Cal Days (e) – (d)	tie Live Forecast (P03) Rev.01**	tie Live Forecast (P04) Rev.01**	tie Movement in Period Cal Days (h) – (g)
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)
Section A	Depot completion	01-Jun-10	17-Aug-11	12-Aug-11	23-Aug-11	11-Jul-11	43	06-Jun-11	02-Jun-11	4
Section B*	Test Track Available	01-Jul-10	06-Apr-12	07-Nov-11	14-Nov-11	14-Nov-11	0	06-Apr-12	24-Feb-12	42
Section C	All Phase 1a Construction complete	10-Mar-11	29-Nov-12	27-May-13	17-May-13	13-Jun-13	-27	15-Sep-12	04-Aug-12	42
Section D	Open for Revenue Service	06-Sep-11	28-May-13	23-Nov-13	13-Nov-13	10-Dec-13	-27	14-Mar-13	31-Jan-13	42

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

## Contractual Strategy & Dispute Resolution

### Dispute Resolution (Infraco)

In total, 15 items have now been referred to the formal dispute resolution process – 11 by tie and 4 by Infraco. Three have been resolved through negotiation, three through external mediation and nine were referred to adjudication. It is important to note that overall, the application of DRP to disputed matters has reduced BSC's claims for additional payment from £18.2m to £7.6m in relation to those DRPs which have actually reached a financial settlement (9 of the 15).

In the period we received one adjudicator decision. This was in relation to the MUDFA Rev 8 dispute. Both parties have only received the adjudicator decision but the detail behind it remains to be provided. However, the decision has found significantly in favour of tie.

- The Depot Access Bridge dispute is in the adjudication process with hearings completing during week commencing 9<sup>th</sup> August.
- The Murrayfield underpass DRP (Clause 80/34) is in the adjudication process with a decision expected on 6<sup>th</sup> August.

DRP No	Subject	Nature of Dispute	Launched or planned	PD Mtg	Position Papers	CEO Meeting	Referral	Decision
A	MUDFA Rev 8	Programme	√	√	√	√	√	Decision awarded substantially in favour of tie.
5o	Depot Access Bridge	BDDI to IFC	√	√	√	√	√	Referred to financial panel by BSC. Decision due by xxx
C	Murrayfield Underpass	Clause	√	√	√	√	√	Referred to the legal panel by BSC. Decision due 6 <sup>th</sup> August.

Launched by tie
Launched by BSC

A strategic review of commercial and contractual options is underway and is reported to the Tram Project Board and Transport Scotland each period.

As part of the negotiations, **tie** has continued with the contractually assertive approach to management of the contract.

Commercial Update (MUDFA)

The value of the Enabling Works and Disruption Claim remain critical to achieving resolution of the account and further discussion with Carillion will take place over the next period to try reach agreement without referral to a third party.

*Changes* – Agreement has been reached in the period of all Changes where there is no dispute as to entitlement. A senior management meeting took place between Carillion and **tie** on the 8<sup>th</sup> July to discuss and agree the remaining entitlement issues associated with the changes in the final account. Unfortunately agreement was not reached and further senior management discussions will take place in the next period.

*Re-measurement of Works* – The measurement and valuation of remeasured works is concluded and agreed with Carillion. However Carillion have been unable to provide all back-up documentation in the form of testing and sign off certificates and is currently being pursued. In the interim **tie** has made a deduction from the agreed value of works until all required information has been received.

*Enabling Works* – In the period Carillion have submitted a revised enabling works account to **tie** together with back up information. The revised submission is contained within 45 lever arch files and will therefore take some time to review. Tie have advised Carillion that they will assess 25% of the submission and revert to them with their findings. This will be carried out in prior to the end of the next period.

*Disruption Claim* – **tie** have written to Carillion asking for back-up data relating to their revised disruption claim received last period. To date this information has not been forthcoming.

**Design**

**IFC Design**

V59 was submitted to **tie** on 30 June10 with a progress date of 07 June10. There has been an improvement of 40 days to the delivery of the Murrayfield Stadium RW IFC. However, there are 29 IFCs with a slippage of more than 20 days in the period, the biggest slippage of which was the Cathedral Lane Substation, with a slippage of 42 days from V58. Concern remains regarding BSC's management of SDS; **tie** are continuing to address this through the progression of an audit of BSC's management of SDS.

v59 data has been used to inform the programme updates. **tie** have included these into the live programme.

- IFCs – Phase 1a: 175 issued out of 230 (76%)
- 56 Prior Approvals are included in v59 – 52 of which have been granted – those remaining include the RBS Gogarburn Tramstop, Modifications to Murrayfield TS retaining Wall, Gogar Interchange, Canopy & Boundary Treatment at Airport Kiosk and OLE pole locations.
- 86 Technical Approvals out of 92 have been granted in V59
- Roads approvals - One area remains outstanding for Technical Approval in Phase 1a (1C2- Picardy Place to St Andrew Square);
- Scottish Water has sent formal acceptances to BSC for all sections with the exception of 1C2 (Picardy Place to St Andrew Square) & 1C1 (McDonald Rd to Picardy Place).
- Sections 1B, 1D, 1C3, 5B & 5C close reports have been signed off by CEC, subject to BSC concluding any concessions included in the reports during construction. CEC are reviewing all other sections based on the prioritisation list provided by BSC.

Design approvals status in Period 04 is summarised below:

Phase only	1a	Number Required	Number

	V26	v31	V55	V56	V58	V59	Granted
Prior Approvals	44	49	56	56	56	56	52
Technical Approvals	53	71	91	92	92	92	86
IFC	71	81	231	233	231	230*	175

\*reduction in of IFCs from V58-V59 is due to the removal of 1A3 Roads IFC from the SDS programme

Reasons for design slippage are being reviewed and recorded twice monthly at the design taskforce meeting, which is focused on resolving the outstanding design issues. **tie** is identifying and implementing opportunities to mitigate the impacts of this slippage. It should be noted that this is a consortium issue to manage, and **tie** will provide support in this respect. However, **tie** is testing, through audit, the management of SDS by BSC.

**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.

### Utility works

Utility Diversions between Newhaven and Victoria Dock Bridge completed in Period 4 (excepting snagging works).

The required remedial and snagging works in Leith Walk are compounding the delay caused to Infraco on the Northbound carriageway, however the Southbound carriageway is available to BSC. BT are continuing with telecoms re-cabling activities - the Northbound carriageway between Jane St – Foot of the Walk are on programme to complete early Period 5 whilst the cabling works between MacDonald Rd – Jane St has a forecast completion in September 2010.

Utility Diversions are complete at Haymarket and York Place (with the exception of final snagging and the requirement for Scottish Water tie-ins at York Place which are dependent on completion of SW works at The Mound). All outstanding utility works in the City Centre are programmed to complete pre-Embargo.

The tender process is on hold at Baltic street until **tie** receive IFC drawings from SDS - which remain outstanding.

The delay of telecoms cabling work in parts of St Andrew Square would impact upon the commencement of Tram works which were programmed to start in June 2010 if Infraco and **tie** resolved other disputed matters.

### Tramworks (INFRACO)

The progress achieved in the Period for INFRACO works was 1.3% against a plan of 3.2% this rate of progress similar to that achieved in recent periods, and reflects the level of activity underway, primarily in the off-street sections. However, BSC worked more hours in the period than normal which seems to suggest a lower productivity rate for the period. This will be discussed with BSC and monitored. BSC are undertaking very limited on-street works in the Leith Docks area at present. The total cumulative completion is 20.5% at end of Period 4. 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.

Progress continues to be 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 04 (TO 17/7/2011)		Cumulative (Achieved To Date)	Contract
	Planned	Actual	Actual	Planned to P04
Prelims	0	0	69	75
Construction	12	6	149	1086

Period 04 2010-11	Period		Delta	Cumulative		Delta	Project
INFRACO PERIOD 04 PROGRESS (Contract Rev.01 Programme)	Plan	Actual		Plan	Actual		Wtg
Section 1a Newhaven to Foot of the Walk	7.7%	0.7%	-7.0%	83.1%	1.2%	-81.9%	16.2%
Section 1b Foot of the Walk to McDonald Road	8.8%	0.0%	-8.8%	88.7%	1.3%	-87.4%	7.4%
Section 1c McDonald Road to Princes Street West	5.7%	0.0%	-5.7%	75.9%	0.0%	-75.9%	10.8%
Section 1d Princes Street West to Haymarket	0.0%	0.0%	0.0%	100.0%	42.1%	-57.9%	7.6%
<b>Combined Sections 1A-1B-1C-1D (On-Street) Newhaven Road to Haymarket</b>	<b>6.0%</b>	<b>0.3%</b>	<b>-5.7%</b>	<b>85.3%</b>	<b>8.4%</b>	<b>-76.9%</b>	<b>42.0%</b>
Section 2 Haymarket to Roseburn Junction	0.0%	3.0%	3.0%	100.0%	29.5%	-70.5%	4.2%
Section 5a Roseburn Junction to Balgreen Road	3.2%	0.1%	-3.1%	89.4%	6.1%	-83.3%	13.9%
Section 5b Balgreen Road to Edinburgh Park Central	0.0%	0.2%	0.2%	100.0%	42.1%	-57.9%	13.2%
Section 5c Edinburgh Park Central to Gogarburn	2.6%	1.7%	-0.9%	100.0%	9.7%	-90.3%	7.2%
Section 6 Gogar Depot	0.0%	5.2%	5.2%	100.0%	49.4%	-50.6%	11.9%
Section 7a Gogarburn to Edinburgh Airport	0.7%	2.5%	1.7%	100.0%	35.6%	-64.4%	7.6%
<b>Combined Sections 2A-5A-5B-5C-6A-7A (Off-Street) Haymarket to Edinburgh Airport</b>	<b>1.2%</b>	<b>1.9%</b>	<b>0.7%</b>	<b>97.4%</b>	<b>29.2%</b>	<b>-68.3%</b>	<b>58.0%</b>
<b>FULL ROUTE PHASE 1A NEWHAVEN ROAD TO EDINBURGH AIRPORT</b>	<b>3.2%</b>	<b>1.2%</b>	<b>-2.0%</b>	<b>92.4%</b>	<b>20.5%</b>	<b>-71.9%</b>	<b>100.0%</b>

### ON-STREET

Item	Period Comp 01 %	Period Comp 02 %	Period Comp 03 %	Period04 Comp %
<b>Section 1 Newhaven Road to Haymarket</b>				
Lindsay Rd RW's	2.0%	2.0%	3.0%	6.7%
S17 Tower Place bridge	0.3%	4.2%	5.0%	10.7%
1B Leith Walk (Foot of the Walk – McDonald Rd)	1.3%	1.3%	1.3%	1.3%
1D Princes Street to Haymarket	42.1%	42.1%	42.1%	42.1%

### OFF-STREET

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

Item	Period Comp 01 %	Period Comp 02 %	Period Comp 03 %	Period04 Comp %
<b>Section 02 Haymarket to Roseburn Junction</b>				
S19 Haymarket viaduct	51.9%	58.4%	60.8%	68.2%
Trackwork Haymarket to Roseburn junction	0.6%	0.6%	1.2%	1.7%
<b>Section 05A Roseburn Junction to Balgreen Road</b>				
W3/W4 Russell Road Retaining Walls	19.4%	19.4%	19.7%	19.7%
Murrayfield Wanderers Clubhouse Accommodation Mods	80.0%	80.0%	90.0%	96.0%
<b>Section 05B Balgreen Road to Edinburgh Park Central</b>				
S23 Carricknowe bridge	47.8%	55.0%	69.1%	69.7%
Trackwork Balgreen to Saughton	27.6%	27.6%	28.1%	28.1%

Trackwork Saughton to Bankhead (includes Guided Busway)	66.3%	72.4%	75.0%	75.0%
Trackwork Bankhead to Edinburgh Park Station	43.5%	43.5%	43.5%	43.5%
Trackwork Edinburgh Park Station to Edinburgh Park Central	9.5%	9.5%	9.5%	9.5%
S27 Edinburgh Park viaduct	91.2%	92.4%	92.9%	93.2%
<b>Section 05C Edinburgh Park Central to Gogarburn</b>				
Trackwork Edinburgh Park Central to Gyle Centre	10.2%	10.2%	10.2%	10.2%
A8 underpass (Excluding utilities works)	10.5%	10.5%	13.9%	16.1%
S32 Depot Access bridge	1.7%	5.0%	12.3%	25.2%
Trackwork Gyle to Depot Stop	0.0%	0.0%	0.0%	0.9%
Trackwork Depot Stop to Gogarburn	7.4%	7.4%	7.4%	8.1%
<b>Section 06 Gogar Depot</b>				
Depot Earthworks & drainage	78.8%	96.0%	96.0%	97.1%
Depot Trackworks & OLE Bases	0.0%	0.0%	4.3%	12.8%
Depot building	23.9%	35.8%	44.5%	55.0%
Depot Sub-station	0.0%	3.0%	15.0%	21.0%
Depot Access Roads	11.0%	33.0%	40.2%	43.6%
Depot in totality	24.6%	36.8%	44.2%	49.4%
<b>Section 07 Gogarburn to Edinburgh Airport</b>				
Gogar Landfill	0.0%	0.0%	4.6%	10.0%
Gogarburn Bridge	90.0%	98.5%	98.5%	98.5%
S30 Gogar Culvert No.1	100.0%	100.0%	100.0%	100.0%
Trackwork Gogarburn to Ingliston P&R	0.0%	0.0%	8.2%	21.0%
Hilton Hotel Carpark Phase 1	100.0%	100.0%	100.0%	100.0%
S31 Gogar Culvert No.2	100.0%	100.0%	100.0%	100.0%
S34 Gogar Culvert No.3	100.0%	100.0%	100.0%	96.0%*
W14A&B / W15C&D Gogarburn RW's	22.0%	22.0%	22.0%	22.0%
Trackwork Ingliston Park & Ride to Edinburgh Airport	4.10%	8.30%	14.0%	19.8%

\* Gogar Culvert No.3 -Remedial works to be done due to the new flooding model

Section	Commentary
<b>Section 1a Newhaven to Foot of the Walk</b>	No agreed programme for recommencing main works in this section Works are progressing on the Lindsay Road RW (1A & 1C), with BSC taking possession of Old Port Road in the period, works continuing on Tower Bridge
<b>Section 1b Foot of the Walk to McDonald Road</b>	No agreed programme for recommencing in this section
<b>Section 1c McDonald Road to Princes Street West</b>	No agreed programme for recommencing in this section
<b>Section 1d Princes Street West to Haymarket</b>	No agreed programme for recommencing in this section
<b>Section 2 Haymarket to Roseburn Junction</b>	<p><u>Haymarket Viaduct</u></p> <p>Work on the east abutment and deck slab continued during the period. Tramstop drainage and backfill continued during the period. W21 internal retaining wall completed during the period.</p> <p><u>Haymarket Yards</u></p> <p>Track drainage works continued during the period. BSC Estimate for the soft ground Change awaited.</p> <p><u>Russell Road Bridge</u></p> <p>Further SI works carried out to establish rock head level. Coring to the existing bridge abutments also completed. BSC still to progress agreement of the 24" gas main protection methodology with SGN. Actual works now likely to mid August 2010, subject to Temporary works approvals by NR and SGN approvals for protection to the gas main.</p>

Section	Commentary
<p><b>Section 5a Roseburn Junction to Balgreen Road</b></p>	<p>Temporary &amp; permanent works re-design along with commercial resolution delaying various structures. All required consents in place for track installation.</p> <p><u>Murrayfield Pitch relocation works</u></p> <p>An unsuccessful trial has been carried out to mitigate against the floodlight system overheating – formal comment is now awaited from Souters and their further suggestion as to practical solutions. Until the floodlight issues are resolved SRU remain determined not to accept handover of the facilities.</p> <p><u>Accommodation works for SRU:</u> Commenced in the period with Crummocks on site and progressing well on a 14week programme.</p>
<p><b>Section 5b Balgreen Road to Edinburgh Park Central</b></p>	<p>Temporary &amp; permanent works re-design along with commercial resolution delaying various structures.</p> <p><u>Eathworks Balgreen Road to Carrick Knowe Bridge</u></p> <p>Earthworks are not progressed during the period.</p> <p><u>Carrick Knowe Bridge</u></p> <p>Construction of the deck slab was completed during the period. Constructed of the maintenance galleries at the abutments continued during the period. Removal of the soffit support system is planned for 17/18 July 2010.</p> <p><u>Guided Busway</u></p> <p>Earthworks to link the guided busway to Carrick Knowe bridge commenced during the period.</p> <p><u>South Gyle Access Bridge</u></p> <p>Tender for South Gyle Sewer Diversion completed with Barhale being named as preferred bidder. At the time of writing works due to commence 26<sup>th</sup> July with a 15 week programme.</p> <p><u>Bankhead Drive</u></p> <p>No works by BSC during the period.</p> <p><u>Edinburgh Park Bridge</u></p> <p>Construction of the north approach ramp continued during the period. Construction of the south approach ramp continued during the period.</p> <p><u>Busgate</u></p> <p>Excavation progressed for the tram drainage on the north side from Bankhead Drive towards Cultins Road. Ground water at 3m depth has resulted in running sand located.. SDS has provided BSC with a solution, requiring an additional layer of 500mm 6B/C stone. The excavation to formation level for the tram is now 90% complete, pending final trimming.</p>
<p><b>Section 5c Edinburgh Park Central to Gogarburn</b></p>	<p><u>A8 Underpass</u></p> <p>Phase 1/2: Blinding concrete completed and works commenced to main deck slab soffit. A8 underpass continues but progress has suffered due to high rock levels and these are being addressed with BSC.</p> <p>Phase 4: Piling works commenced. 35 of 51 piles completed. SGN gas main site cleared. Sewer grouting completed by end of this Period.</p> <p><u>Depot Access Bridge</u></p> <p>North Abutment: East and west wingwalls completed.</p> <p>South Abutment: Kingpost installation completed and temporary anchor installation completed with excavation 50% completed to formation by period end.</p>

Section	Commentary
	<p><u>Edinburgh Park Central to Gyle Tram Stop</u></p> <p>BSC installed the traffic management at the Gyle roundabout on 28<sup>th</sup> June 10 and commenced trial holes in the footpath in advance of constructing the temporary site access for the earthworks in this section, however the Permit to Commence Works had not been authorised due to the lack of required documentation</p>
<p><b>Section 6 Gogar Depot</b></p>	<p>Depot works progressing well with details now available to washing plant area and rest of floor slab which is now allowing completion of these areas to be end of July.</p> <p>Depot Building works: Accommodation area: Electrical installation from LV panel progressing. Building envelope completed awaiting delivery and installation of doors and louvers. Workshop area affected by no progress in period to tram wash slab.</p> <p>External works: Drainage works 85% complete. Ductwork installation commenced and 10% complete by period end.</p> <p>Track Laying: Commenced on site end of this period in Area 1 of stabling area.</p>
<p><b>Section 7a Gogarburn to Edinburgh Airport</b></p>	<p>Gogarburn Bridge: Area available for Siemens track laying. No works in period.</p> <p>IPR to EAL: Retaining wall W14 and W15 completed with exception of handrail. Drainage works 55% completed. Embankment upfill approximately 85% completed. Works commenced to BAA phase B north of Eastfield Avenue on 5<sup>th</sup> July 2010.</p> <p>Surcharge area completed in period with settlement being monitored. Settlement to date has been over 60mm but is now obviously slowing. This will be closely monitored and it is hoped at this stage that the criteria to commence permanent construction will be met within the allowed consolidation period.</p> <p>Gogarburn to IPR: Embankment fill approximately 85% complete. Drainage works 80% completed.</p> <p><u>BAA approvals</u> : BAA approvals in place for Construction Phase A and B. Works cannot commence to Construction Phase C until BSC have obtained CEC/BAA approvals for the revised retaining wall design (W14C and D).</p>

Other Progress Points to note in Period 4:

- On 1<sup>st</sup> July 2010, Network Rail's Infrastructure Safety Review Panel supported our safety argument for modifying their track circuits against the effects of our traction supply stray current.
- First signalling interlocking FAT successfully completed and witnessed in Braunschweig, Germany
- Depot S&C FAT successfully witnessed in Sofia, Bulgaria

Issues in the Period

- Progress to various areas not taking place due to lack of engagement of Contractor following Issue of Instruction – Clause 80/Clause 34.1;
- Contractor's failure to comply with contractual requirements surrounding Permit To Commence having effect on progress of the works in various locations. Information being reviewed weekly;
- Further design slippage;
- BSC are recording progress against incomplete REV 3A Programme despite Rev 1 being the agreed contract programme and rejection of Rev 3A by tie, and;

- Outstanding Information from Network Rail continues to delay submission for Technical Approval for Gogar Intermodal Station.

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

CAF is progressing well against its contractual programme for delivery of trams to Edinburgh, however the depot is not yet available to receive the trams.

CAF is awaiting delivery of the Factory Acceptance Routine Test certificates for Units 3- 9 following completion of an inspection by the Tram Inspector (Unit 10 was checked by the Tram Inspector earlier in the period). The invitation to gain the Factory Acceptance Routine Test Certificate for Units 11 and 12 is still to be issued.

The first **draft** of the full Operational Readiness detailed programme information is now included in the Master Tram Project Programme.

A number of meetings have now been held with TEL and indicative dates supplied to TEL to allow a review of the programme and the potential impact to their driver recruitment and training programme based on the current **tie** live programme. A full update will be put in place at the conclusion of the Rev 3 Recovery Programme exercise.

The Operational Readiness team are working towards taking delivery of the 1<sup>st</sup> & 2<sup>nd</sup> Trams at the Depot at the End of August. The team are working closely with the BSC planners and team to monitor progress at the Depot and a number of meetings have been arranged for period 5.

### **Preparing for Operations**

We have been planning in detail the first three stages of preparation for the Testing & Commissioning phases as well as the operational introduction of trams. As part of the process, the Benefits Realisation & Operational Readiness Committee was formed and is reporting to the TPB, and an integrated programme has been developed.

Planning for commissioning of the Depot the plant and equipment and the trams is being discussed and programmed. This is leading the prioritisation of elements of the delivery works in order to optimise the testing and commissioning period. The key stages are detailed in the diagrams below:

The OJEU of the ticketing equipment for the tram system, to link it with the existing Lothian Buses ticketing system has progressed to the stage where we are going to shortlist and seek final tender submissions from which to select a preferred bidder. Significant effort is being made on programming and planning the preparing for operations activities, including recruitment and training of both operations and maintenance staff. The maintenance of completed infrastructure assets is being worked on with BSC maintenance representatives.

### Interface with other projects

The projects identified in the matrix below have the potential to impact or conflict with some or all of the following aspects of the Edinburgh Tram Construction programme.

External Projects	Promoter	Project Description	Potential Conflict	Tram Dates	Contract	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.
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	Nov-10	Jun-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 facadesy, the overhauling of the existing windows, the renewal of the existing roof lights and roof covering. Additionally, it is proposed that an external ramp is formed to the front main entrance to allow disabled access.	Interface with Infraco works on St Andrew Street / York Place	Nov-10	Jun-11	Oct-09	Nov-11	
St.Andrew Square Development	CEC	Demolition of existing buildings bordering South Side St.Andrew Square, South St David Street and Meuse Lane	Infraco Programme	Apr-10	Jun-10	TBA	TBA	Infraco activities will not commence until Apr2010
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
Gogar Intermodal Station Project	Transport Scotland	New intermodal station and tramstop to east of Gogar Depot	Gogar Rail Works being staged around wider Edinburgh Tram Network.	Dec-09	Oct-11	Oct-10	Mar-12	Gogar Intermodal Station Project Programme under review and being developed in conjunction with NR and TS.

									Inextricably linked to the wider Edinburgh Tram Network programme.
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Colour code

Amber	Managing any conflict
Red	Conflict which causes programme concern / unknown effect on tram programme

This matrix continues to be reviewed by **tie** to identify any potential impacts on the Tram programme as early as possible in order to manage them.

**Other****Gogar Intermodal Station**

- Discussions with BSC in respect of wider ETN Project issues continue. Transport Scotland has expressed a desire that these discussions include agreement on Gogar Intermodal. **tie** has reservations that inclusion of Gogar Intermodal Project in the ongoing discussions could lead to disruption and delay in resolving the wider project issues. **tie** will continue to seek agreement on Gogar Intermodal Project at the appropriate time.
- A change in policy by CEC which now requires all Prior Approvals to be submitted to the Planning Committee will lead to a delay in achieving IFC. The committee will now review the scheme on 28<sup>th</sup> July 2010. CEC Planners have recommended it be approved. Discussions will take place with BSC with respect to the programme for Technical Approvals, which **tie** believe to be introducing additional and unnecessary delay. Efforts will be made to recover the delay associated with this by seeking to accelerate production of IFC once the Prior Approval has been granted. This will depend on availability of the SDS design team, which is a separate team from the core ETN team.
- Siemens revised Estimate for design has been reviewed. £309k of the £327k Estimate has been agreed. The remaining £18k relates to commercial management cost which may be covered by consortium overhead. A letter instructing Siemens to progress the design was issued w/e 21 May 2010. The value of revised Siemens design remains within the value previously agreed with Transport Scotland.
- **tie** have agreed to take responsibility for a revised road drainage design at the A8 which has arisen from Network Rail's sewer design. This is due to the optimum solution being likely to overlap with BSC construction activity. An Estimate has been requested from BSC for the design aspect of this work. A meeting was held with Scottish Water, where SW agreed to pro-actively seek a more effective solution.
- **tie** have very little visibility of progress on legal agreements and remain concerned that progress will not be achieved by the agreed date of October 2010. **tie** cannot accept responsibility for any delay associated with legal agreements not being reached in line with the needs of the construction programme. The land transfer from CEC to Network Rail cannot proceed ahead of other agreements being substantially complete because the land transfer needs to include servitudes in favour of **tie**/TEL to allow access to and through this land for the operation and maintenance of the ETN. It is understood that a meeting to discuss legal agreements has been arranged between CEC, Network Rail and Transport Scotland for early in Period 5.
- Other agreements required include TEL/First ScotRail and Scottish Water Section 21's (Both for **tie** and NR).
- A meeting was held on 19<sup>th</sup> May 2010 between **tie**, Transport Scotland and Network Rail to review overall cost estimates with an objective of identifying any gaps in scope/ estimate between the parties, particularly in physical and management interfaces. A number of minor areas require updating, but no major issues were identified.
- BSC now include a narrative on Gogar Intermodal (Design and Construction staging activity) within their period report. The content and quality of reporting is limited. **tie** will seek to have this improved upon.
- The BSC/SDS Estimate for the revised scope which includes the requirement for the sewer protection wall introduced to **tie** by Transport Scotland / Network Rail has been agreed and these works have now been instructed. **tie** have agreed to provide a copy of the Estimate as part of the substantiation of additional costs agreed with Transport Scotland.



Forecast Cost to Complete Design

Forecast Outturn Original		Forecast Outturn Revised	
SDS	£440K	SDS	£540K
JRC	£30K	JRC	£45K
<b>tie</b>	£100K	<b>tie</b>	£120K
Siemens	£350K	Siemens	£327K
<b>Total</b>	<b>£880K</b>	Construction Staging	£30K
		ICP	£20K
		Name Change	£15K
		A8 Drainage	£20K
		Legal Costs	£50K
		<b>Total</b>	<b>£1,167K</b>

Design progress

At the end of Period 2 **tie** assesses the design phase as 85% complete for the increased scope.

Cost reporting

Cost of work done to date is £950k versus the £880k originally forecast and the £1,167k revised AFC.

Period 4 Progress

Finalisation of the sewer location has allowed the design to progress. The Prior Approval application was completed and submitted on 18 March 2010. Additional information as requested by CEC has been provided and **tie** have been advised that the submission will be considered at the committee meeting on 28<sup>th</sup> July with a recommendation for approval.

SDS has submitted revised runtime analysis incorporating the Gogar Intermodal Station. The runtime analysis will be used to support revised patronage calculations for the Edinburgh Tram Network. **tie** have received Transport Scotland approval to progress this with the JRC modelling work.

Detailed design continued for the tram stop structure and the northern retaining wall. **tie** have received programme information on this from BSC, which has not been accepted by **tie**, but which is reflected below. **tie** will review this programme with BSC to seek to mitigate the delay that has been introduced. With respect to the Retaining Wall, information on loadings remains outstanding from Network Rail and **tie** has asked both TS and NWR to push their designer for this information urgently. CEC has agreed to review the design as a priority and this is reflected in the revised dates below. The SDS forecast will be revised upon receipt of the required Network Rail information.

Programme milestones

Activity	Planned	Period 6 forecast	P4 forecast / Actual
Complete prelim design of additional tram stop	10/8/09	18/9/09	30/9/09 (A)
Submit Structures Technical Approval application	19/11/09	8/1/10	11/6/10
Submit Prior Approval application	26/11/09	15/1/10	18/3/10 (A)
Receive Prior Approval	5/2/10	12/3/10	28/07/10
Receive Structures Technical Approval	5/2/10	8/3/10	15/10/10
IFC by SDS of civils design and outline systems design	26/2/10	22/3/10	30/10/10
IFC by Siemens of detailed systems design	-	-	30/10/10

Overall design co-ordination

Project management meetings have continued between **tie**, TS and NR and fortnightly conference calls have taken place between **tie**, NR and the respective designers. Design co-ordination is now largely dealing with detailed engineering issues rather than issues of principle.

The issue on the Tram Stop roofing material has now been resolved following **tie** intervention.

Tram design issues

BSC previously identified a need to discuss the reduced headroom for the OLE through the tram stop with the Independent Competent Person. The **tie** engineering team have discussed this further with BSC and have received confirmation that this is no longer an issue. Final confirmation will be sought during the Design Review carried out in accordance with the Infraco Contract.

Scope of **tie** works

The scope of **tie** works now includes an allowance for external legal costs in relation to land or agreements. It is likely that **tie** will need legal advice in relation to agreements with Network Rail. **tie** expects that the extent of this will become clearer once Network Rail tables some draft agreements for review. Note that to date, no draft agreements have been received from Network Rail.

Long-lead items / abortive works

**tie** has reviewed the long-lead items/abortive works previously identified against latest programme forecasts and presented a paper to Transport Scotland on options for dealing with long lead items and associated costs and risks. Transport Scotland has confirmed that **tie** should take steps to minimise the abortive costs on the basis that the Gogar Intermodal will go ahead. CEC and Transport Scotland are discussing terms of a grant extension that will also cover abortive costs.

**tie** has confirmed to BSC the OLE pole heights to be ordered through the Gogar Intermodal area in order to minimise abortive costs.

**tie** has confirmed to BSC that the turnout required as part of the Gogar Intermodal scheme are to be procured, and the ETN scheme turnout for this area will not now be procured, to minimise abortive costs.

Drainage for the earthworks at the Depot is currently being installed to the west of the Depot Access Bridge. There is no option that does not involve some abortive cost if Gogar Interchange goes ahead as drainage must **tie** into the sewer that will be relocated by Network Rail. **tie** has identified ways of minimising the cost of those abortive works.

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

Construction Staging

**tie** have previously advised Transport Scotland that the potential impact of Gogar Intermodal programme to ETN could be in the region of 6 months. Transport Scotland have sought and been given an assurance that this appraisal was one of several scenarios to be tested that **tie** will be investigating further scenarios with a view to improving this outcome. Following discussion with Transport Scotland, **tie** held a Construction Staging meeting with TS, Network Rail and BSC on 12 July 2010. The primary aim of the Construction Staging meeting was to identify the actions required by all parties to allow BSC to meet high level milestones. The meeting focussed particularly on BSC scope, however **tie** would suggest similar discussions focusing specifically on Network Rails scope will be necessary. The target dates discussed would minimise the impact of Gogar Intermodal works on the wider Edinburgh Tram project, however there are significant commercial and legal matters that require to be overcome to achieve this. **tie** are now preparing a request for an Estimate from BSC that reflect the discussions held.

**tie** have advised Transport Scotland of areas of work which would require to be implemented immediately to minimise/mitigate delay to the Gogar Intermodal works and the impact on ETN. This is very minor work, however Transport Scotland have requested further detail on costs associated with this work. **tie** will provide this, however this will delay commencement of these works. **tie** would suggest contingency funding should be agreed between **tie** and Transport Scotland that will allow similar issues to be actioned immediately by **tie** in future.

## Other Reporting Streams Progress

The following sections describe progress on other areas of the project during Period 4.

### Temporary traffic regulation orders (TTROs)

TM rationalisation in the City Centre is on programme to complete in Period 5. These measures aim to return the City Centre (as much as is feasible) to the pre-tramworks arrangements by using temporary kerbing.

### Traffic regulation orders (TROs)

A Report is being prepared for submission to Council (Transport Infrastructure & Environment Committee) on 21 September regarding the recommendation to make TRO1 as submitted. Should any modifications be required, these to be picked up in a future TRO.

### Network Rail

The Immunisation Calculations Study has now been submitted for NWR Infrastructure Safety Review Panel (ISRP). The BSC study confirms that 14 FETR will be required for the immunisation solution. NR Signalling Immunisation (EMC) Test Plan will be developed to include all verification and validation tests that will evidence that there is no significant safety issue for NR assets failing 'wrong side'. No information provided for this by BSC for formal issue. However **tie** has reviewed a draft proposal informally. These documents were compiled into the Case for Safety – Signalling and delivered to ISRP (Infrastructure Safety Review Panel) on 14<sup>th</sup> June 2010 for a further ISRP on 01/07/2010. NWR I-SRP 'Noted & Supported' the immunisation study on 01/07/2010. FETR implementation started on 07/07/2010 and is expected to be completed by the end of August 10.

### Murrayfield

Works commenced in the period to realign fencing, relocate turnstiles, create a new gatehouse and access to the stadium complex.

### South Gyle Access Sewer

Tender for South Gyle Sewer Diversion completed with Barhale being named as preferred bidder. Works due to commence 26th July with a 15 week programme.

### Burnside Road Realignment

Newgate and RCL continued to monitor the barrier system software, but some operational instability still exists and steps are being taken to resolve these.

## Headline cost report

### Current financial year

	FY 10/11			FY 10/11			FY 10/11			COWD To Date Actual	Costs To Go Forecast	Total AFC Forecast
	COWD Period			COWD Year To Date			COWD Full Year Forecast					
	Actual	Budget	Variance	Actual	Budget	Variance	Forecast	Budget	Variance			
Total Project COWD	3.751	7.767	-4.016	23.848	34.622	-10.773	120.236	142.245	-22.009	371.691	173.309	545.000
Other Funding	0.310	0.641	-0.332	1.969	2.859	-0.890	9.928	11.745	-1.817	30.690	14.310	45.000
Demand on TS	3.441	7.126	-3.684	21.879	31.763	-9.884	110.308	130.500	-20.192	341.001	158.999	500.000

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

Given the continuing commercial uncertainties with the Infraco and continuing delays to the project it is considered unlikely that the full scope of Phase 1a will be completed within the available funding envelope of £545m. It is not however possible at the present time to accurately forecast a reliable outturn cost until the key commercial issues are resolved through the contractual and legal process

**TIE Ltd presented an updated forecast for 2010/11 and 2011/12 project spend to TS and CEC on 8<sup>th</sup> July. The presentation was a follow-up action to The Funders Operators Group (Transport Scotland, Edinburgh Council and TIE Limited) action minuted on 17<sup>th</sup> June 2010.**

The review of spend for 2010/11 has resulted in a tuning down of forecast from £142.3m (budget) and £143.0m (Q1) forecast to a Q2 forecast of £120.2m. Sensitivities to the £120.2m were flagged to CEC and TS, and tie committed to keeping TS and CEC updated as to the progress of project Carlisle and any material impacts on the Projects spend profile.

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. COWD to date is £371.7m, with funding to date split to TS (£341.0m) and CEC (£30.7m).

#### Actual YTD 4 & forecast P5-P13 FY10/11

£m	2010/11 to P4	Forecast P5-P13, 10/11	Forecast FY10/11
Infrastructure and vehicles	19.0	90.0	109.1
Utilities diversions	-0.3	-4.5	-4.9
Design	0.6	1.7	2.3
Land and compensation	0.3	0.0	0.3
Resources and insurance	4.2	9.2	13.4
<b>Base costs</b>	23.8	96.4	120.2
Risk allowance	0.0	0.0	0.0
<b>Total Phase 1a</b>	23.8	96.4	120.2

YTD 2010/11 COWD is £23.8m in period 4, +£0.6m ahead of the P3 forecast for P4.

The Full year forecast for 2010/11 has been updated to £120.2m (£143.0m Q1) in this report.

Key Risks and sensitivities to the £120.2m forecast for are:

- SUC betterment +£4.5m
- Infraco Main works progress up to -£23.5m (indicative view of last quarter Infraco spend). OR slippage sensitivity of £7.8m per period
- Project Carlisle – structure of outcome will influence spend profile

As previously reported and agreed with CEC and TS, initial milestones under the Infraco and Tramco contracts in the aggregate amount of £14.4m, in respect of advance material purchases, have been classified as prepayments. These will be reclassified as expenditure against funding in the periods

when the related materials are delivered to site and incorporated in the works. The release will occur on the achievement of trackwork and structures milestones in 2010/11 and future years.

## Current financial year profile

### Profile for FY10/11

£m	Q1 (p1-3)	Q2 (p4-6)	Q3 (p7-10)	Q4 (p11-13)	Total FY10/11
Infrastructure and vehicles	16.7	15.7	45.3	31.4	109.1
Utilities diversions	-0.4	-0.7	-2.8	-1.0	-4.9
Design	0.5	0.6	0.6	0.6	2.3
Land and compensation	0.2	0.2	0.0	0.0	0.3
Resources and insurance	3.2	3.2	3.9	3.2	13.4
<b>Base costs</b>	<b>20.1</b>	<b>18.9</b>	<b>47.1</b>	<b>34.1</b>	<b>120.2</b>
Risk allowance	0.0	0.0	0.0	0.0	0.0
<b>Total Tram</b>	<b>20.1</b>	<b>18.9</b>	<b>47.1</b>	<b>34.1</b>	<b>120.2</b>

- Costs for 2010/11 are forecast at £120.2m. *Note: This forecast is sensitive to the key risks as identified above.*
- The latest forecast is based upon **tie** Project Managers view as at the end of period 3, updated and amended in-line with the assumptions presented to TS on 8<sup>th</sup> July.
- The original TS share of the budget (£130.5m) has been reduced to a forecast of £110.3m.**

## Project cashflow forecast

### Re-baselined Phase 1a Cash Profiling

£m	Cum FY07/08	Actual 08/09	Actual 09/10	FY 10/11	FY 11/12	AFC
Infrastructure and vehicles	30.6	45.2	83.5	109.1	68.8	337.1
Utilities diversions	18.4	33.4	10.6	-4.9	0.0	57.6
Design	24.4	4.7	2.1	2.3	0.5	34.0
Land and compensation	16.8	1.7	1.6	0.3	0.0	20.5
Resources and insurance	42.9	16.0	15.9	13.4	7.6	95.8
<b>Base costs (inc 1b)</b>	<b>133.1</b>	<b>101.0</b>	<b>113.8</b>	<b>120.2</b>	<b>76.9</b>	<b>545.0</b>
Risk Allowance	0.0	0.0	0.0	0.0	0.0	0.0
<b>Total</b>	<b>133.1</b>	<b>101.0</b>	<b>113.8</b>	<b>120.2</b>	<b>76.9</b>	<b>545.0</b>

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

**Per the note in 3.1 the 'AFC' figures of £545m does not reflect an approved and reliable Anticipated Final Cost for the Edinburgh Tram Project, but point to 'our best view' of the spend profile of the funding currently made available for the delivery of the entirety of phase 1a.**

The TEL board have approved a risk allowance within the current funding arrangements of up to £48.2m, which takes the current agreed budget up to £530.0m.

## Time schedule report

### Report against key milestones

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

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

Milestones	Baseline programme date	Actual / current forecast date tie live prgm
Construction Line 1a complete	17-Jan-11	Aug-12
System testing complete on street	16-Feb-11	Sep-12
Letter of "no objection" from Independent Competent Person to commence tram running	17-Apr-11	Nov-12
Shadow running starts	18-Apr-11	Nov-12
Shadow running complete	July 2011	Jan-13
Letter of "no objection" from Independent Competent Person to commence revenue service	July 2011	Jan-13
Open for revenue service	July 2011	Jan-13

**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.

**Key issues affecting schedule**

- Lack of agreement on the on-street construction programme preventing critical areas at Leith walk and Picard Place commencing;
- Continued refusal of the consortium to act on instructions issued under Clause 80.13 and 80.34;
- Completion of redesign of the permanent works to allow commencement of the construction of structures from Baird Drive through to Balgreen Road.

**12-Week look-ahead**

Until the revised programme is in place the forecast for the next 12 weeks continues to be generated from the **tie** Live programme including latest updated information from both BSC and **tie** Project Managers.

Note that due to the uncertainty surrounding the On-street section of the Infraco works, that these works have been removed from the 12 week forecast other than for areas that are currently underway.

Milestones	Actual / current forecast date
5A - Murrayfield Stadium Accommodation Works (excludes clubhouse)	28-Jun-10A
1A4 - Lindsay Rd Retaining Wall A+C	19-Jul-10C
1A3 – S17 Construction Works Tower Place bridge	19-Jul-10C
1A1 - Continue S-E-Ms Bernard Street to Foot of the Walk	19-Jul-10C
1C2 - Telecoms Works Picardy Place to St Andrew Square	19-Jul-10C
2A –Trackworks Haymarket to Roseburn Junction -1135m	19-Jul-10C
2A – Haymarket viaduct	19-Jul-10C
5A - Construct New Scotrail Carpark	19-Jul-10S
5A - W3 Russell Road retaining wall	19-Jul-10C
5A - W4 Russell Road retaining wall	19-Jul-10C
5B - Trackworks Balgreen Rd Saughton Road North	19-Jul-10C
5B - S23 Carricknowe bridge	19-Jul-10C
5B – Trackworks Bankhead to Edinburgh Park Station	19-Jul-10C
5C - W16 Commence Gyle Stop RW	19-Jul-10S
5C - A8 Underpass	19-Jul-10C

Milestones	Actual / current forecast date
5C - S32 Depot Access bridge	19-Jul-10C
5C – Trackworks Gyle to Depot	19-Jul-10C
5C - Trackworks Depot Stop to Gogarburn	19-Jul-10C
6 – Depot Sub-station	19-Jul-10C
6 - Depot Building	19-Jul-10C
6 – Depot Access Roads	19-Jul-10C
7 – Trackworks Gogarburn to Ingliston Park and Ride	19-Jul-10C
7 – Gogar Landfill	19-Jul-10C
7 - W14/W15 Gogarburn RW	19-Jul-10C
7 – Trackworks Ingliston Park and Ride to Edinburgh Airport	19-Jul-10C
5C – Trackworks Edinburgh Park to Gyle	19-Jul-10S
5B - Bankhead Drive TS	23-Jul-10S
5B – S26 South Gyle Access bridge Sewer Diversion	26-Jul-10S
1B – Telecoms Works Jane Street to Foot of the Walk	30-Jul-10F
1C1 - Utility Diversions McDonald Rd to Picardy Place	30-Jul-10F
5A - Demolition of Wanderers Clubhouse continues	30-Jul-10F
1C1 - Telecoms - BT Installation Works 1C07 - (Greenside Lane to Gayfield Street South)	01-Aug-10S
1C1 - Telecoms - BT Installation Works 1C08 - (Annandale Street to Montgomery Street)	01-Aug-10S
6 – Complete Depot Earthworks	06-Aug-10F
1C3 – Telecoms Works St Andrew Square to Princes Street West	09-Aug-10F
1D – Telecoms cabling Haymarket to Crescents	09-Aug-10F
5B - Trackworks Saughton Rd to Bankhead (incl Guided Busway)	31-Aug-10F
5B – Edinburgh Park Stn – Edinburgh Park Central Trackworks	31-Aug-10S
5A - W18 Murrayfield TS RW	03-Sep-10S
5A – S21B Murrayfield Stadium RW	08-Sep-10S
5C - Complete S27 Edinburgh Park Station bridge	04-Sep-10F
5B - Saughton Rd TS	11-Aug-10S
1A4 – Telecoms Newhaven to Ocean terminal	23-Aug-10F
1A3 - Telecoms Ocean Terminal to Victoria Dock	23-Aug-10F
1A3 - Continue Utility Diversions Ocean Terminal to Port of Leith	23-Aug-10F
1B – Telecoms Works Jane Street to McDonald road	13-Sep-10F
5A - S20 Russell Road bridge	27-Sep-10S

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



## Risk and opportunity

### Review of risk register

#### Summary

There were six risk reviews held in the period. There were two draw-downs on the risk allowance approved in the period totaling £673,814. These are detailed later in the report. Based upon the revised project risk allowance this leaves a risk balance of £3,547,588.

#### Risk and Opportunity Reviews

The following reviews took place in the period:

Date	Format of review	Attendees	Comments
6/7/10	Project Risk Register Review	Project Director Deputy Project Director Commercial Director Engineering Director Project Risk Manager	Risks and Treatment Plans Reviewed (update of register underway)
12/7/10	Section 1C and 1D	Project Risk Manager Project Manager	Risks and Treatment Plans Reviewed
13/7/10	Depot and Section 7	Project Risk Manager Project Manager	Risks and Treatment Plans Reviewed
13/7/10	Section 7 Airport	Project Risk Manager Project Manager	Risks and Treatment Plans Reviewed
14/7/10	Infraco Risk Review	Project Risk Manager Infraco Construction Director	Risks and Treatment Plans Reviewed
15/7/10	Section 2 and Section 5	Project Risk Manager Project Manager	Risks and Treatment Plans Reviewed

#### BSC Consortium Risk Management

A further letter was received on this from BB. The letter is unclear regarding dates and attendees at workshops and **tie** will respond in Period 5.

#### 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.

**1011 Period 04 Top 5 Risks**

ARM Risk ID	Cause	Risk Description Event	Effect	Risk Owner	Significance	Black Flag	Treatment Strategy	Previous Status	Current Status	Due Date	Action Owner
343	General delay to programme with various causes e.g. failure to obtain approvals on time, contractor issues, access after completion of utility diversions	Delay to completion of project	Increased out-turn cost due to delay plus revenue loss	S Bell	High - 23.3%		Access maps showing areas available	On Programme	On Programme	30-Nov-10	F McFadden
							Clause 34 / 80.15	On Programme	On Programme	31-Aug-10	S Bell
							Contractually assertive workstreams to progress programme	On Programme	On Programme	29-May-10	S Bell
							DRP Mudra Rev 8 response	On Programme	On Programme	31-Aug-10	S Bell
							DRP on programme management (EOT1)	Complete	Complete	30-Oct-09	S Bell
							Enhanced management focus on various workstreams and options relating to progress of the project	Complete	Complete	30-May-10	Richard Jeffrey
							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

**1011 Period 04 Top 5 Risks**

ARM Risk ID	Cause	Risk Description Event	Effect	Risk Owner	Significance	Black Flag	Treatment Strategy	Previous Status	Current Status	Due Date	Action Owner
*1077	Base Date Design Information to issued For Constructions (BDDH-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 - 21.3%		Continued DRP / Adjudication Process	On Programme	On Programme	31-Jul-10	S Bell
							Contract interpretation and technical expert witness work	On Programme	On Programme	31-Jul-10	S Clark
							Deploy alternative utilities contractors to progress utilities	On Programme	On Programme	30-Nov-10	F McFadden
							Enhanced management focus on various workstreams and options relating to progress of the project	Complete	Complete	31-May-10	Richard Jeffrey
							Establish a process which will act as a control mechanism for design changes. (If one exists already then ensure process is complied with)	Complete	Complete	30-Jun-09	T Glazebrook
							Intensive Mediation Marathon 29/6/09 to 6/7/09 to try and resolve issues.	Complete	Complete	30-Jun-09	S Bell
							Mediation resulted in no overall agreement on BDDI - IFC although it gave useful background information. Strategy paper to be presented to TPB on 29 July to seek approval for way forward including utilising necessary contract mechanisms (DRP, audit etc)	Complete	Complete	14-Aug-09	S Bell
							Of the issues previously highlighted as going through DRP, 1 has been ruled in favour of tie, 2 have been agreed, 2 have been ruled in BSC's favour and this is being reviewed by tie. Further issues are due to enter DRP in December 09 and January 10.	Complete	Complete	31-Jan-10	S Bell
							PA1 challenge	On Programme	On Programme	31-Aug-10	S Bell
							Resolution Strategy approved - 1st DRP to go 10th August, audit requests to BSC for information going w/c 3.8.09	Complete	Complete	10-Aug-09	S Bell
Siemens 33 initiative to achieve Airport to Bankhead Drive	On Programme	On Programme	31-Aug-10	S Bell							

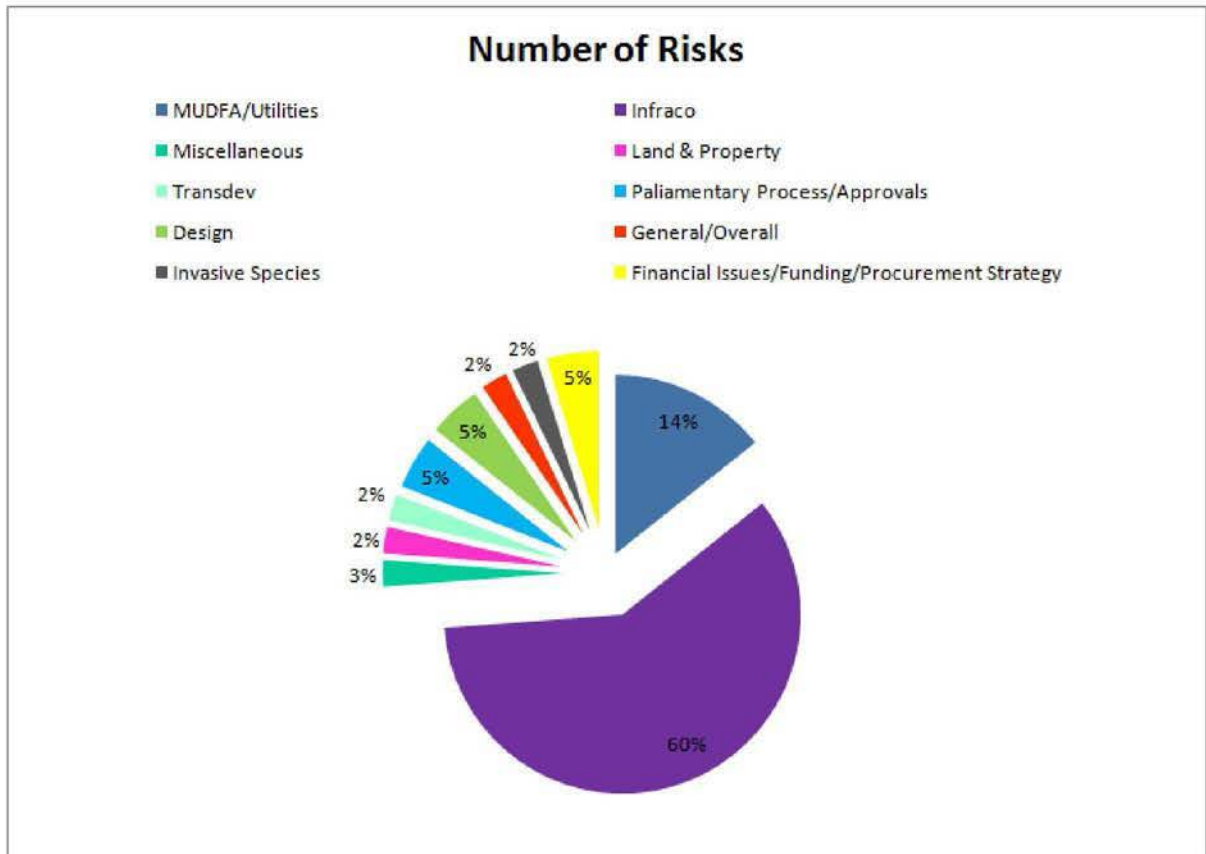
**1011 Period 04 Top 5 Risks**

ARM Risk ID	Cause	Risk Description Event	Effect	Risk Owner	Significance	Black Flag	Treatment Strategy	Previous Status	Current Status	Due Date	Action Owner
1091		Excavation of soft, unsuitable material below Earthworks outline	Additional cost and programme delay	F McFadden	High	25.00	Donaldsons to carry out surveys	Complete	Complete	30-Jul-09	C Neil
							Enhanced management focus on various workstreams and options relating to progress of the project	On Programme	On Programme	30-May-10	Richard Jeffrey
							Extent of soft ground being investigated. External specialist advice deployed.	On Programme	On Programme	30-May-10	M Paterson
							Iterative testing approach in order to maximise value	On Programme	On Programme	31-Jul-10	C Neil
							Technical challenge against Donaldsons designs	On Programme	On Programme	31-Jul-10	C Neil
1101	Unreasonable behaviour of BSC commercial management	Unrealistic estimates being submitted for potential changes	Programme delay while disputes regarding estimates are resolved	F McFadden	High	25.00	Additional resource from T&T	Complete	Complete	30-Jul-09	M Paterson
							Agreed with BSC for independent evaluation to get benchmark	Complete	Complete	30-Jul-09	M Paterson
							All estimates to be scrutinised by the commercial team and, where appropriate, challenge made to BSC. Additional resource (T&T) being used to check estimates to reduce delay and other commercial resources on these areas.	On Programme	On Programme	30-Dec-10	M Paterson
							Clause 34/80 issues using DRP for disputed values	On Programme	On Programme	31-Aug-10	S Bell
							Enhanced management focus on various workstreams and options relating to progress of the project	On Programme	On Programme	30-May-10	R Jeffrey
							Legal challenge to Clause 80 and BSCs interpretation thereof	On Programme	On Programme	31-Jul-10	S Bell

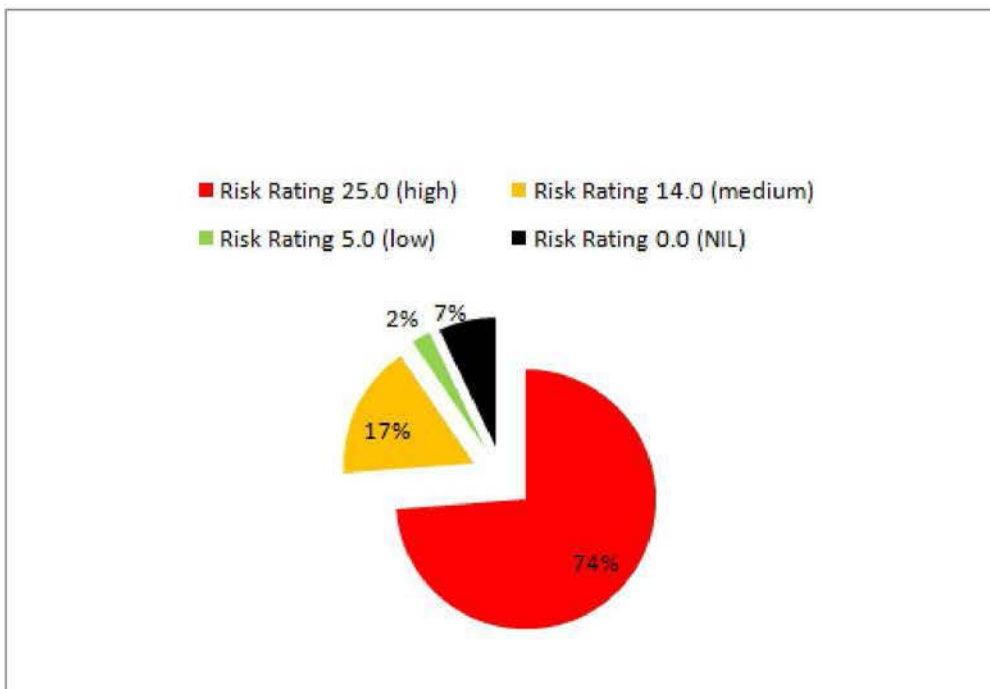
1011 Period 04 Top 5 Risks

ARM Risk ID	Cause	Risk Description Event	Effect	Risk Owner	Significance	Black Flag	Treatment Strategy	Previous Status	Current Status	Due Date	Action Owner
1094		Roads throughout works require full depth reconstruction	Programme impact plus additional costs. £1.5m cap applies to only 4 areas. (PA 12) Also affects (PA 14)	F McFadden	High		Carry out surveys to confirm extent of roads requiring full depth reconstruction	Complete	Complete	30-Jun-09	C Neil
							Intensive engagement with CEC, palette of options, methodology being agreed	On Programme	On Programme	31-Jul-10	C Neil
							Suite of options from surveys to be reviewed and agreement reached	On Programme	On Programme	30-Jul-10	C Neil
							tie developed on-street proposal	On Programme	On Programme	31-Aug-10	S Bell

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 item was added to the Infraco Concerns Register in the period.

	Risk Number	Cause	Risk Event	Effect
Section 7	25	Additional design and construction required to provide suitable formation	Insufficient allowance for ground improvement in area of Gogar landfill	Additional cost and potential programme implications
Section 7	44	Utilities delay in completion of service diversions in Burnside Rd	Tramworks delay to trackwork and Edinburgh Airport Tram Stop	Delay to programme and additional cost
Structures	46	Utilities delay in completion of IP Gas Main diversion at south portal of A8 underpass	Tramworks delay to completion of A8 underpass	Delay to programme and additional cost
Section 7	85	BAA to not accept design for Burnside rd	tie/BSC are unable to gain BAA consent for the design	Delay to critical works.
Section 7	86	Design costs exceeds amount allowed for in project budget for Burnside Rd	Unable to conclude the design in time or to cost	Delay to critical works. Cost overrun

**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
C Neil	1104	700	Utility conflicts being identified	31/08/2010	Yes	No	No	Period 06
C Neil	1104	701	Following identification of conflicts potential solution such as protection measures to be identified	31/08/2010	Yes	No	No	Period 06
C Neil	1091	705	Technical challenge against Donaldsons designs	31/07/2010	Yes	No	No	Period 05
C Neil	1091	706	Iterative testing approach in order to maximise value	31/07/2010	Yes	No	No	Period 05
C Neil	1094	673	Suite of options from surveys to be reviewed and agreement reached	30/07/2010	Yes	No	No	Period 05
C Neil	1094	708	Intensive engagement with CEC, palette of options, methodology being agreed	31/07/2010	Yes	No	No	Period 05
C Neil	931	729	Conflicts Register	31/08/2010	Yes	No	No	Period 06
C Neil	1104	727	Timetable for utility conflicts resolution	31/08/2010	Yes	No	No	Period 06
D Sharp	279	634	Fortnightly meetings of Approval Task Force	31/07/2010	Yes	No	No	Period 05
D Sharp	271	559	Assure the quality and timing of submissions	31/07/2010	Yes	No	No	Period 05
D Sharp	271	637	Fortnightly meetings of Approval Task Force	31/07/2010	Yes	No	No	Period 05
F McFadden	914	573	SDS to obtain consent for design in accordance with programme requirements - SGN and Scottish Power. Complete with the exception of plates 1-10 and 15-17 the redesign of the affected utilities at Baltic Street	31/08/2010	Yes	No	No	Period 06
R Bell	52	726	Design Task Force	31/08/2010	Yes	No	No	Period 06
S Bell	343	721	Clause 34 / 80.15	31/08/2010	Yes	No	No	Period 06
S Bell	343	722	DRP Mudfa Rev 8 response	31/08/2010	Yes	No	No	Period 06
S Bell	1077	703	Continued DRP / Adjudication Process	31/07/2010	Yes	No	No	Period 05
S Bell	1077	720	PA1 challenge	31/08/2010	Yes	No	No	Period 06
S Bell	1077	724	Siemens 33 initiative to achieve Airport to Bankhead Drive	31/08/2010	Yes	No	No	Period 06
S Bell	1101	707	Legal challenge to Clause 80 and BSCs interpretation thereof	31/07/2010	Yes	No	No	Period 05
S Bell	1101	730	Clause 34/80 issues using DRP for disputed values	31/08/2010	Yes	No	No	Period 06
S Bell	1094	725	tie developed on-street proposal	31/08/2010	Yes	No	No	Period 06
S Clark	1077	704	Contract interpretation and technical expert witness work	31/07/2010	Yes	No	No	Period 05
W Biggins	911	628	Liase with Scottish Power to agree and approve method of crossing tunnel.	31/07/2010	Yes	No	No	Period 05

## Cost Quantative Risk Analysis

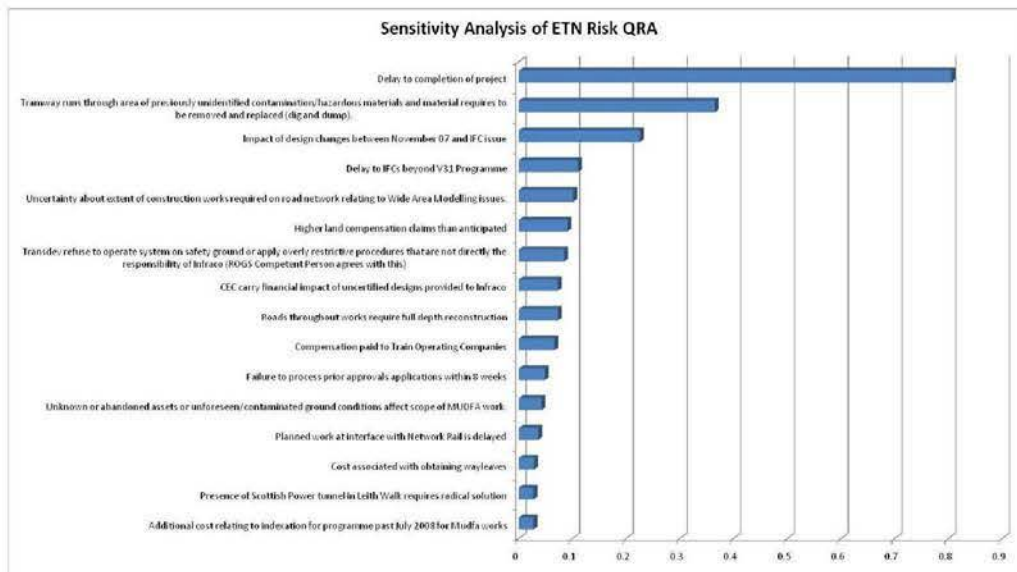
The Project Risk Allowance at financial close was £30,336,196. This was increased in Period 1 by £17,982,993. Drawdowns to the end of Period 4 10/11 now total £44,771,601. The remaining risk balance based on the approved QRA plus the additional funding is £3,547,588.

### Risk drawdown

The following table illustrates the drawdown applications on the project risk and contingency allocations in Period 04.

Description	Owner	Value (£)
Replacement of Rubber kerbs and Guardrails city centre	Thomas Caldwell	578,282
Murrayfield Modifications - Gatehouse Works	Mike Paterson	95,532
<b>Total</b>		<b>£673,814</b>

### Sensitivity analysis of approved cost QRA.



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

### Schedule QRA

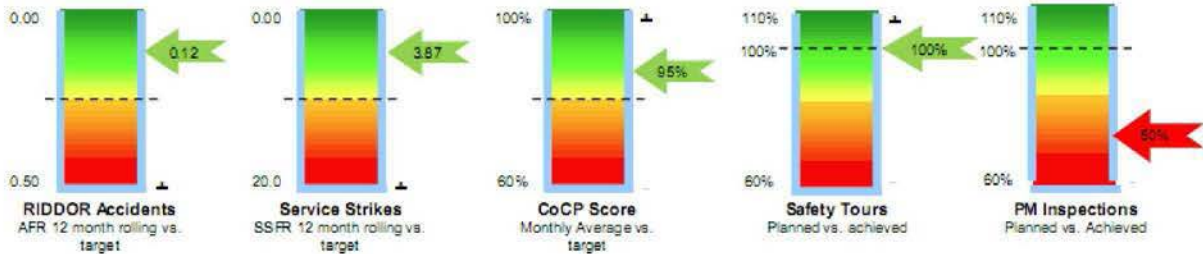
tie is currently working with the supplier of Active Risk Manager (ARM – the risk management software which tie uses) with a view to integrating Primavera and ARM so that a schedule risk analysis can be developed. A schedule QRA will be created following agreement of the recalibrated programme.



## Health, safety, quality and environment

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

HS&E ACCIDENTS and INCIDENTS SUMMARY											
Total	Total Hours	>3 day	Major	Injury	NM/Unsafe Condition	Service Damage	ENV	RTA	MOP	AFR	SFR
Period	107,842	0	0	3	11	0	1	1	8	0.00	0.00
13 period rolling	1,602,027	1	1	22	216	62	25	7	75	0.12	3.87



There have been no reportable accidents during Period 4. The rolling 13 period AFR is being maintained at 0.12, well below the target of 0.24 for the project. *Post Period report note – a Reportable accident occurred at the Depot on 20.07.10; further details available upon request and included in the P5 report.*

A tie/BSC senior management discussion is still required to close out the Guided Busway RIDDOR incident. Formal correspondence sent to BSC regarding the possibility of exposing tie and the project to risk of prosecution under the CAR regulations due to lack of Site Drainage Plans and controls. Response received and further information obtained; information appears satisfactory but checks will be made on its understanding on site.

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The Near Miss which occurred with the BAM RRV on the Guided Busway has been investigated and a report produced by BSC. tie have commented on the initial information received and carried out a final review. BSC have closed out all issues raised by the near miss and are now more robust in the exact utilisation of lift plans and implementation of lifting regulations. BSC H&S have increased audits on lifting events to ensure BSC compliance.

After the incident with the overturning dumper in Period 2 which resulted in the driver's positive drug test, BSC have introduced a project specific Drug and Alcohol Policy on the contract which covers random testing for all parties carrying PTS cards and "for cause" testing following any incident/accident. There has been no information regarding the monitoring of Drug taking at Grahams site – Letter to be sent to BSC acknowledging D&A policy and requesting further information.

**Environment**

A formal request was sent to BSC regarding the provision of the monthly audit reports relating to the Project Site Waste Management Plans; currently no response received a further letter to be sent Week 1 Period 5.

Regrowth of Japanese Knotweed observed at Russell Road and Roseburn, this is covered by the TCM guarantee. TCM to visit site 13<sup>th</sup> July 2010 and advise course of action. BSC currently not carrying out treatment on Invasive Species in line with the requirements of the CoCP. Further meeting set up to address this as **tie** are still awaiting issue of updated Invasive Species Plan from BSC which is currently at Level B, to include TCM guarantee information, further request for formal issue sent Week 4; Period 4. Further letter to be sent Week 2 Period 5 if no response received during Week 1 Period 5.

2 environmental incidents reported during Period 4; Lindsay Road - Readymix truck leaving site spilled concrete on to the road. Site cleared surplus away and called out road sweeper to clean; oil leak at Tower Place Bridge, dealt with in accordance with procedures.

Updated change to be developed for the remaining archaeological works during Period 4 in order that Post Excavation works can commence.

**Deliver a Safe Tram**

Section	Activity	Data Checked				
		IDC	ITP's	Design Variation/Change	As Built	Asset Register
Carrick Knowe Bridge	ITP Status	0.5	1	1	0.5	N/A
Lindsay Road	Retaining Wall - Concrete; E&B	0.5	1	1	0.5	N/A
Depot	Access Bridge Piling	0.5	1	1	0.5	N/A
Murrayfield Wanderers	Sign off/Completion	0.5	0.5	1	1	N/A
<b>PD</b>	<b>Total (y)</b>	2	3.5	4	2.5	N/A
	<b>Max Possible Total (y)</b>	4	4	4	4	N/A
<b>Total</b>	<b>Percentage P3</b>	42%	91%	81%	77%	50%
	<b>Percentage P4</b>	43%	91%	83%	76%	50%

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

4 inspections carried out during the period – Carrick Knowe Bridge; Lindsay Road, Depot and Murrayfield Wanderers. The scores for Period 4 have remained consistent with no noticeable variations.

The **tie** process (The Template) for organising information that will help to provide evidence of interim assurance has been agreed. A test of this process is being carried out on Princes Street. Thus far it is proving difficult to obtain information from BSC. To date, using this process, **tie** have not witnessed adequate information to allow comfort that the design and construction can be assured. Further correspondence has been sent to BSC requesting access to information. Further meetings have been arranged to request sight of information.

Princes Street defects – A **tie** report has been compiled detailing the action taken during and after construction regarding defective BSC works. After further joint inspection with CEC, a list of hazards and appropriate timescales to correct hazards has been agreed with CEC. Some areas of remedial works have been carried out however; more work is required during P5.

Audit TQA-BSC-04-2010 Guided Busway ITP's, carried out 8<sup>th</sup> July 2010. Findings agreed and formally issued to BSC. 4 minor and 2 observations. – Siemens were found to be co-operative throughout and could demonstrate that records are being collated.

5 Site Supervisors Quality Inspections carried out during Period 4. Trend analysis to be carried out during Period 5 to establish whether the inspections are providing positive feedback. Results will be detailed in DaST report for Period 5. – To date, early indications are positive with site operative competency and site supervision achieving good observational results.

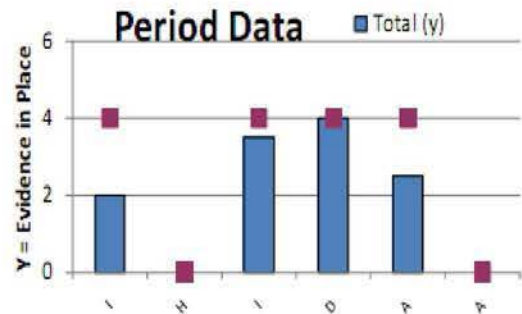
Section 5 Handover of documents for Clancy Docwra Works on Edinburgh Park Utilities, completed and formally issued to **tie**. As Built information formally issued to BSC via **tie** Document Control.

Proposed audits for Period 5

- Audit TQA CEC-BSC- 01-2010 Haymarket Viaduct, Informatives and Approvals, date and scope to be confirmed. This audit will be on the approval process/transfer of documentation between CEC and SDS (BSC), as a result of concerns being highlighted by CEC regarding design approvals, or lack thereof.
- Princes Street documentation to be audited by CEC 20<sup>th</sup> July 2010.
- TSA/10/01 SVS Audit carried out on Operator on 4<sup>th</sup> June 2010. All findings now formally closed.

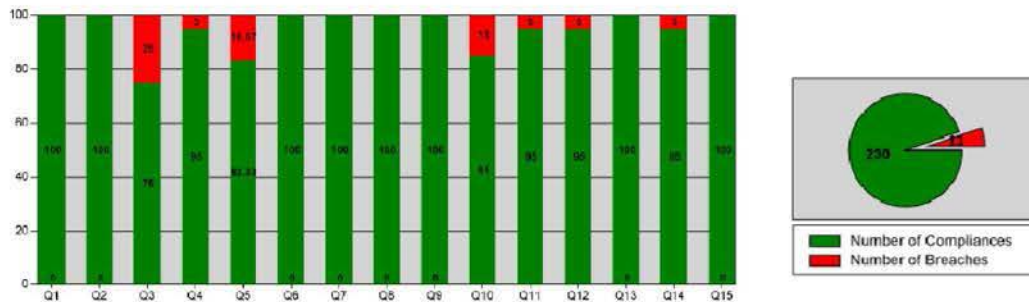
**Action to Be Taken**

- Receive BSC's Design Assurance submission, allocate resources and review through **tie** SVS process.
- Site Supervisors Check sheet now being utilised and found to be a useful Project Management tool.
- Technical Audit of CEC approval process to take place during period 6.
- Ongoing review and close out of action outstanding from DaST inspections. Information regarding actions currently being provided by BSC.
- Continues to populate 'The Template' and assess the availability and validity of the information.– detail findings in period 3 report (week 4; period 3)



## COCP Compliance

### Period 3



### Movement in Period

Compliance has risen from 94% to 95% from Period 3 to Period 4

There has been an improvement in compliance with the following areas:

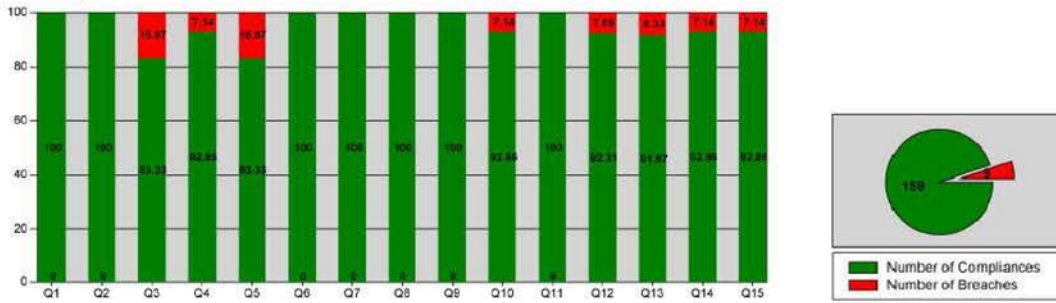
- Notices
- Fencing and hoarding
- Parking
- Litter and Housekeeping

There has been a decreased/same level of non-compliance in the following areas:

- Noise – same level of non-compliance
- Dust-1 recorded incident
- Smoking -1 recorded incident
- Passage of Pedestrians – same level of non-compliance
- PPE - 1 recorded incident

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

### Period 4



### tie Action Plan

HSQE and Construction Director will discuss issues with Project Mangers and disseminate information to sites. They will also highlight where additional measures are required. This month's targets will focus on:

- Noise and Pedestrian Walkways – the 2 reported noise complaints this period are being investigated this will be discussed with BSC and other Tram contractors
- Dust, Smoking and PPE - discuss with contractors to increase vigilance on compliance
- General compliance with CoCP with additional visitors expected in run up to festival

## Stakeholder and Communications

### Media / Press Activity

Press coverage during the last four week Period has been relatively low, following Period 3 which included the publishing of the Tram Council Report on the 18<sup>th</sup> June and the Full Council Meeting on the 24<sup>th</sup> June.

A BBC Radio documentary discussing procurement on Scottish public infrastructure projects was organised in conjunction with our media team and aired on Monday 19<sup>th</sup> July. The documentary included commentary from several industry experts and politicians such as John Swinney, Shirley Anne-Somerville and Roger Jones from the Greater Manchester tram project Metrolink. Filming with the BBC was arranged as part of radio documentary for a follow up piece on Reporting Scotland.

An interview was conducted with Chief Executive, Richard Jeffrey, as part of the documentary in which he commented that political courage was needed to follow through with public projects. These comments generated subsequent press coverage following the radio documentary.

Coverage in the Evening News was limited throughout Period 4 and included one misleading story regarding BT Cabling work on Broughton Street and York Place which was clarified with both the journalist and the public via Facebook.

Twitter generated a number of enquiries to the media team when claims were made that an announcement would be released stating that the Edinburgh Tram project had been scrapped. This was however completely untrue and a message was posted on both our Facebook and Twitter pages to counter this claim.

Meetings with journalists are in the process of being conducted to strengthen relationships and also to discuss effective ways in which information can be distributed to each publication.

### Public Information Planning

Branding and Signage projects continue to be progressed across the tram route during Period 4.

The Tram Mock-up, which is currently sited at Edinburgh Airport, is due to be wrapped in vinyl designs to promote the upcoming Festival period in the city centre on 23<sup>rd</sup> July. Signage displaying tram messages will also be installed alongside the Airport Tram Stop and will feature the joint branding of Edinburgh Trams and Inspiring Capital. The same key message signage will be placed on the Broomhouse Road viaduct and will contain short positive wording about the trams benefits.

Beginning the 26<sup>th</sup> July Princes Street will undergo the installation of banners on the Overhead Line poles currently vacant in the centre of the road. Two banners will be placed on each pole and will be double sided to display the variety of Festival events on offer throughout August. The Branding team has been working very closely with each of the Festivals, such as City of Literature, Mela, The Fringe and also the City of Edinburgh Council's Super September events.

Planned signage for the Gogar Depot and Haymarket House are currently on hold as sponsorship options are looked at. Further opportunities for branding and signage have also been identified at the Ingliston Park and Ride and along the tram route at Saughton to the west of the city.

**Partner and Stakeholder Communications**

During Period 4 a series of work notifications were delivered to local business and residents for works in the north and west of the city:

- Russell Road - Ground Investigation work – 500
- Princes Street – Extension of The Mound Closure - 610
- Broughton Street – BT Cabling work – 310
- Haymarket Yards – Notification of Weekend working – 150
- Carrick Knowe – Network Rail possessions and Bridgework - 150

The last meeting of the Tram Operating Group during Period 4 was postponed however a planned tour of the projects works sites has been arranged for the 2<sup>nd</sup> August. The tour will take place immediately prior to the next meeting on the same day and will involve the Tram Operating Group as well as some addition stakeholders.

A meeting with stakeholders in the Haymarket Yard area was arranged by our customer relations manager with a view to informing them of the upcoming traffic diversion around Rosebury House while tram works are carried out along the Haymarket Yards road. Stakeholders present at the meeting included Tesco Bank, HM Revenue and Customs, the Institute of Chartered Accountants and Surveyors, Youthlink and Network Rail.

Monthly integration meetings have been taking place between members of the Edinburgh Trams and Lothian Buses communications and customer service teams in preparation for an operational service. At the most recent meeting the topics of joint branding opportunities were discussed, along with an outline of our ongoing School Programme, Tramformers, and FOI structure.

Communication continues on a regular basis between businesses and residents to keep them informed of the progress being made on the project and of any works due to commence in their area. The following stakeholder group meetings were attended by a member of the Communications and Customer Service team:

- Baird Drive Residents Association
- Dublin Street Residents Association
- Elm Row Traders
- Ocean Terminal
- Edinburgh Park Management team
- Haymarket Yards stakeholders

Meetings or presentations were given to the following groups during the previous four week period:

- Baird Drive Residents Association
- Murrayfield Residents Association
- Presentation to Auburn University and site visit

**Website / Internet Communications**

The Edinburgh Trams website, Facebook and Twitter pages are important channels for informing the public of announcements, notifications and initiatives.

Visitors to the website [www.edinburghtrams.com](http://www.edinburghtrams.com) remained at 13,211 with the most popular areas being Local Updates, Route Map and Podcasts. Facebook logged 742 fans overall despite the fact that activity has been down on the site, while Twitter follows have increased to 809 followers. Twitter especially has experiences increased user interaction during Period 4, in particular the re-tweeting of our posts by followers to their own list of friends. This will undoubtedly result in information on the project reaching a larger audience of online users.

Social media activity remains an important tool for drawing users to the site. While social media links are a popular entry point for [www.edinburghtrams.com](http://www.edinburghtrams.com) there is a high incidence

of users subsequently browsing information thereafter, typically checking local updates before leaving. These components are an essential part of the user journey into more detailed information on the project and have the greatest overall impact on site traffic. "Local Updates" on construction work, traffic management and the route alignment remain in first place for RSS alerts this period.

**Freedom of Information Requests**

Five new Freedom of Information requests are in the process of being collated during Period 4, while 2 requests are with the Scottish Information Commissioner.

**Customer Service Activity**

The total number of Customer Service enquiries has increased by 18 during Period 4 to 291. The majority of correspondence continues to be via Email (127) or Phone (123), while enquiries logged through Meetings with stakeholders and residents have risen by 10 since Period 3 to 27. Thirteen Letters were also received regarding various queries including the works taking place along Ocean Drive and Tower Place. One Fax was also received during Period 4, the first since May.

Information Requests made up 88% of these enquiries totalling 255, an increase of 30 during the last 4 weeks. No major topics were identified for the incoming requests for information however generally concerned our worksites at Haymarket Yards, York Place and Traffic Management at the West End. The remaining 36 enquires were distributed between Complaints (10), Employment (10), COCP Complaints (9) and Insurance Claims (5). One Positive Comment and an enquiry regarding Land and Property were also received.

No change in the trend of enquiries has been noted during Period 4 from previous reports.

**Customer Service Figures**

**a) Transport Scotland - Monthly Customer Service Report 21/06/2010 - 16/07/2010**

Item	Volume Month	Volume (Cumulative from 21/11/08)	Performance (Month)	Performance (Cumulative)	Target Performance
Telephone response	139	4729	94	96	90% in 30 seconds
Telephone Same day resolution	126	4543	90	96	Info only
Email acknowledgement	108	2849	100	99	100% acknowledged within 24 hours
Email response			100		90% resolution in 7 days
Email same day resolution	102	2605	95	91	Info only
Letter acknowledgement	10	198	100	96	100% acknowledgement within 24 hours
Letter response			100		100% resolution in 7 days
Total Enquiry Volumes	257	7776			
Website update	92	1581	100	100	Weekly

**b) Out of Standard/Work in Progress statement at month end 16 Jul 2010**

		Volume of WIP @ m/end	Oldest date	Oldest Issue	Handled By
M/e 16 Jul 2010	Email	1	14/07/10	Balbirnie Place Works	Tom Cotter/Tom Wynn
	Letters	0	N/A	N/A	N/A
	Calls	1	09/07/2010	Mess of basement following tram works outside premises	Michael/Blake/Tom Wynn

**c) Monthly Notifications Performance 21/06/2010 to 16/07/2010 and Cumulative from 21 November 2008**

0 Major notifications  
7 Minor notification – 6 in standard and 1 out of standard  
0 Emergency notifications

Notification Type	Work Site		Notifications	% in Standard
	Month	Notifications		
Major works	Month	Notifications	0	
		In Standard	N/A	N/A
	Cumulative	Notifications	15	
		In Standard	6	67
Minor Works	Month	Notifications	7	
		In Standard	6	85
	Cumulative	Notifications	198	
		In Standard	163	82
Emergency	Month	Notifications	0	
		In Standard	N/A	N/A
	Cumulative	Notifications	14	
		In Standard	14	100



Section	Activity	Data Checked				
		IDC	ITP's	Design Variation/Change	As Built's	Asset Register
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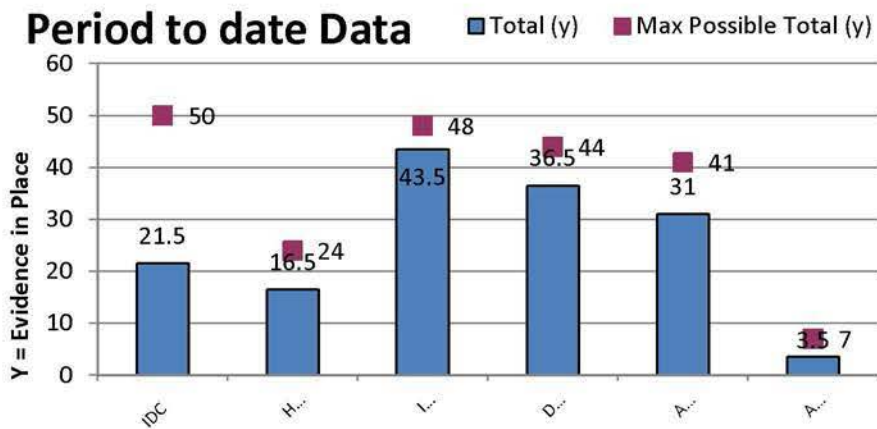
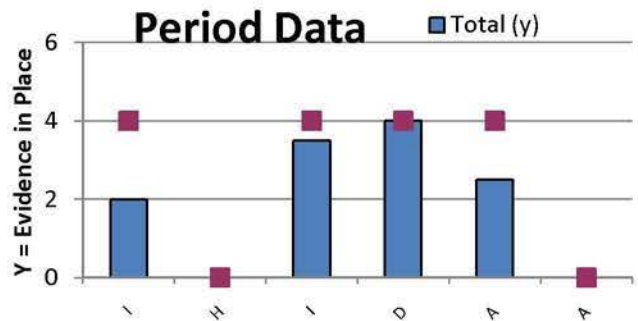
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### 1.0 Deliver a Safe Tram Key Metrics

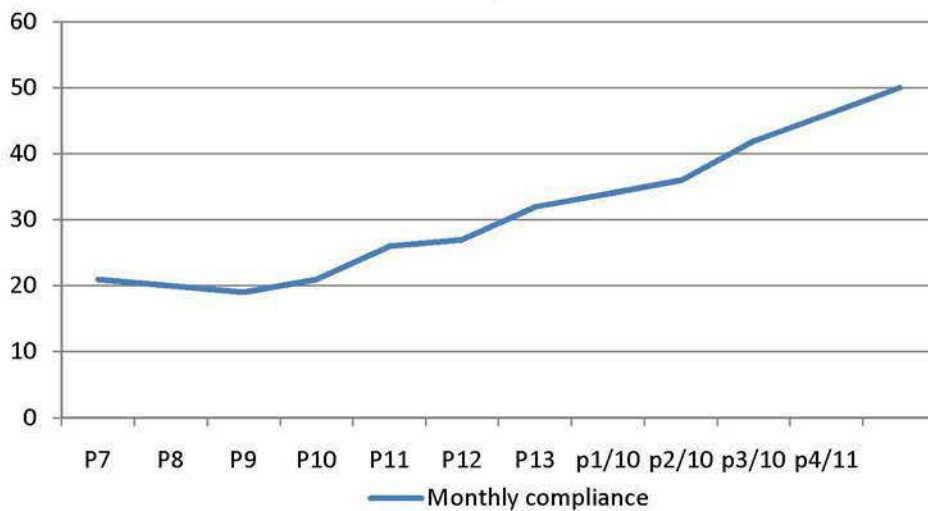
- 4 inspections carried out during period – Carrick Knowe Bridge; Lindsay Road, Depot and Murrayfield Wanderers. The scores for Period 4 have remained consistent with no noticeable variations.
- The **tie** process (The Template) for organising information that will help to provide evidence of interim assurance has been agreed. A test of this process is being carried out on Princes Street. Thus far it is proving difficult to obtain information from BSC. To date, using this process, **tie** have not witnessed adequate information to allow comfort that the design and construction can be assured. Further correspondence has been sent to BSC requesting access to information. Further meetings have been arranged to request sight of information. Evidence of an Assured Design has been requested as part of Project Carlisle, this should be with **tie** from BSC by July 16<sup>th</sup>. This will be reviewed through the **tie** SVS process once received.
- Princes Street defects – A **tie** report has been compiled detailing the action taken during and after construction regarding defective BSC works. After further joint inspection with CEC, a list of hazards and appropriate timescales to correct hazards has been agreed with Ian Woodcock of CEC. Some areas of remedial works have been carried out however, more work is required during P5.
- **tie** site release inspections must be recorded for areas where temp/permanent kerb and visi-rail have been installed to record that the area was safe and acceptable at the time of installation. Maintenance and inspection arrangements must be agreed.
- A review of the **tie** PM's milestone payment approval requirements to establish if it is possible to include evidence of and submission of the records of construction as part of the criterion for payment.
- Audit TQA-BSC-04-2010 Guided Busway ITP's, carried out 8<sup>th</sup> July 2010. Findings agreed and formally issued to BSC. 4 minor and 2 observations. – Siemens were found to be co-operative throughout and could demonstrate that records are being collated.
- 5 Site Supervisors Quality Inspections carried out during Period 4. Trend analysis to be carried out during Period 5 to establish whether the inspections are providing positive feedback. Results will be detailed in DaST report for Period 5. – To date, early indications are positive with site operative competency and site supervision achieving good observational results.
- Section 5 Handover of documents for Clancy Docwra Works on Edinburgh Park Utilities, completed and formally issued to **tie**. As Built information formally issued to BSC via **tie** Document Control.
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  2. Princes Street documentation to be audited by Marshall Poulton 20<sup>th</sup> July 2010.
- TSA/10/01 SVS Audit carried out on Operator on 4<sup>th</sup> June 2010. All findings now formally closed.
- Period meeting to review outstanding metrics inspections currently on hold as BSC are providing information on a weekly basis. These meeting will resume as and when required.

### 1.1 Deliver a Safe Tram – Required Action

- Receive BSC's Design Assurance submission, allocate resources and review through the SVS process.
- Site Supervisors Check sheet now being utilised and found to be a useful Project Management tool.
- Technical Audit of CEC approval process to take place during period 6.
- Ongoing review and close out of action outstanding from DaST inspections. Information regarding actions currently being provided by BSC.
- Continues to populate 'The Template' and assess the availability and validity of the information.

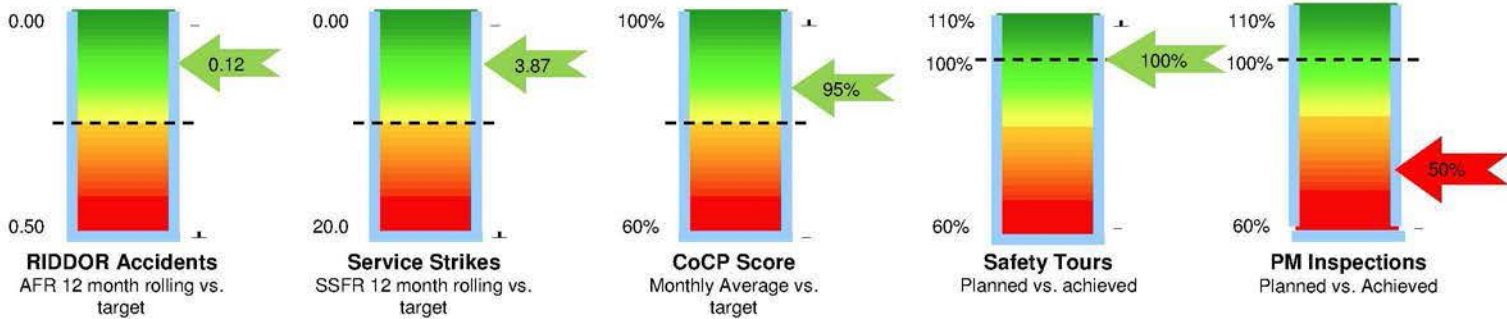


### IDC Compliance



### HS&E ACCIDENTS and INCIDENTS SUMMARY

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13 period rolling	1,602,027	1	1	22	216	62	25	7	75	0.12	3.87
<b>BSC</b>											
Period	78,610	0	0	1	6	0	0	0	4	0.00	0.00
13 period rolling	1,007,183	0	1	13	83	20	12	2	39	0.10	1.99
<b>Other Tram including MUD2</b>											
Period	8,746	0	0	2	5	0	1	1	1	0.00	0.00
13 period rolling	173,822	1	0	3	88	22	11	4	13	0.58	12.66
<b>Carillion</b>											
Period	868	0	0	0	0	0	0	0	1	0.00	0.00
13 period rolling	176,854	0	0	6	45	20	2	1	21	0.00	11.31



### EXECUTIVE SUMMARY

- There have been no reportable accidents during Period 4. The rolling 13 period AFR is being maintained at 0.12, well below the target of 0.24 for the project. *Post report note – a Reportable accident occurred at the Depot on 20.07.10. further details available upon request and included in the P5 report.*
- A **tie**/BSC senior management discussion is still required to close out the Guided Busway RIDDOR incident. Letter sent to BSC, response not received to date.
- Formal correspondence sent to BSC regarding the possibility of exposing **tie** and the project to risk of prosecution under the CAR regulations due to lack of Site Drainage Plans and controls. Response received and further information obtained; information appears satisfactory but checks will be made on its usability the understanding on site.
- The frequency of service strikes for the project has improved overall from the previous period, all contractors have focused heavily on the safe digging practices- *see best practice section* for BSC information. To date in Period 4 there have been no service strikes.
- There has been an increase in reported Member of Public incidents. 3 cyclist accidents in Princes St, 2 excessive noise complaints, 2 ripped clothing. *See MOP section for further details.*
- COCP compliance has increased slightly from 94% to 95% this period - *See Appendix B for details*
- There have only been 5 PM inspections recorded so far in Period 4. 100% of safety tours have been completed.
- Incident which involved Network Rail being closed for a time on the 08.07.10 has been investigated by BSC and an interim report issued – *See appendix A for more detail*

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

Project Running Totals	HS&E Tours	HS&E PM Inspection
Number planned	5	10
Number achieved	5	5

### HSQ&E KEY ACHIEVEMENTS

- Site Supervisors check sheet being used and proving a good monitoring tool.
- Successful set up of SRU accommodation works contract by Crummock.
- Good progress on Section 7 by BSC with no major H&S incidents.
- Good scores recorded on safety check and possession check during NWR inspection – no issues found.

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

- The Near Miss which occurred with the BAM RRV on the Guided Busway has been investigated and a report produced by BSC. **tie** have commented on the initial information received and carried out a final review. BSC have closed out all issues raised by the near miss and are now more robust in the exact utilisation of lift plans and implementation of lifting regulations. BSC H&S have increased audits on lifting events to ensure BSC compliance.
- After the incident with the overturning dumper in Period 2 which resulted in the driver's positive drug test, BSC have introduced a project specific Drug and Alcohol Policy on the contract which covers random testing for all parties carrying PTS cards and "for cause" testing following any incident/accident. There has been no information regarding the monitoring of Drug taking at Grahams site – Letter to be sent to BSC acknowledging D&A policy and requesting further information.
- BSC are issuing **tie** with a 3 month look ahead programme at each period review meeting with BSC. At each weekly progress meeting, **tie** and BSC review the following 4 week programme and each item of work is discussed. Part of this discussion includes **tie** identifying which MS's they wish to review under the contract categorisation of works. The process of identification and the **tie** review and acceptance of A3 method statements as detailed in schedule 3 of the Infraco contract is required to be clarified in order to ensure that any risk to **tie** and **tie**'s PM's from identifying and accepting MS's is duly mitigated. Discussion required with **tie** Senior Management, Project Management and DLA.
- Interim handover pack delivered by Clancy Docwra for Section 1C, 1D and 5. Documentation is being reviewed and populated in accordance with the new **tie** handover procedure. This procedure has been and will be briefed to all other Principal Contractors working on the project.
- Briefing by HSQE given to Crummock operatives and staff on the SRU accommodation works contract including CoCP, Handover Procedure and **tie** Incident Procedure. CDM compliance for inspection of welfare has been carried out and deemed to meet regulations.
- A joint visit to the 2012 Olympic site took place with BSC and **tie** Health and Safety teams – BSC have put together a proposal to carry out an induction at Edinburgh Park for all personnel on the project. This has been priced by BSC and discussed with both **tie** and BSC HSQE teams. It is suggested that Senior Management discuss this further.
- The incident that took place on 08.07.10 on NWR assets will increase supervision from NWR on project interface. NWR will comment on BSC report and the project will have to ensure that all agreements made are fully complied with.
- BSC have received a bronze award in the Healthy Working Lives Award programme run by NHS. They are now applying for a Mental Health and Wellbeing award in the coming months

### SIGNIFICANT RISKS FOR THE NEXT PERIOD

RISK	ACTION
<ul style="list-style-type: none"> <li>• Piling operations close to a vulnerable cast iron Gas Main in Russell Road.</li> <li>• Completion of works in Crawley Tunnel</li> <li>• Completion of Utility Works at York Place</li> <li>• NR possessions by Siemens will continue in Periods 4 &amp; 5.</li> <li>• Continued ramping up of resources &amp; contractors in depot area.</li> <li>• Commencement of new contract for diversion of sewer at South Gyle Access</li> <li>• Rail installation at Depot and Edinburgh Park Bridge</li> <li>• Immunisation works ongoing at railway corridor continuing asbestos surveys on NWR assets</li> <li>• Piling and Excavation next to A8</li> </ul>	<ul style="list-style-type: none"> <li>• Safe Systems in place by contractors. <b>tie</b> HSQE monitoring execution of works periodically.</li> <li>• Method statements in place - fencing checked daily</li> <li>• TMRP approval in place</li> <li>• <b>tie</b> 3<sup>rd</sup> party rep and NR interface/possession meetings continuing</li> <li>• Section plan trial ongoing as well as BSC interface meetings.</li> <li>• Pre-start meeting following <b>tie</b> CDM procedures. HSQE will review all pre-contract start submissions by the successful contractor</li> <li>• Discussion with BSC to establish safe system of work is established and BSC are in control of all access arrangements for different areas of site</li> <li>• All WPP continue to be signed off by <b>tie</b> and interfaces with NWR equipment to be monitored. NWR have indicated that they will increase vigilance in the immunisation works</li> <li>• Contractor MS in place and reviewed</li> </ul>

### QUALITY SUMMARY

List any significant quality events, initiatives, breaches etc

- TSA/01/01 SVS Audit carried out on Operator on 4<sup>th</sup> June 2010. 3 findings, 2 minor observations and 1 minor finding. Refer to DaST report for further details.
- TQA/BSC/04/10 Audit on final ITP documentation at the Guided Busway carried out 8<sup>th</sup> July 2010. Formal report to be issued to BSC.
- TQA/BSC/05/10 Audit on final ITP documentation at Carrick Knowe to be carried out 22<sup>nd</sup> July 2010.
- TQA/BSC/CEC/01/10 Audit Planning / Technical approval at Haymarket viaduct scheduled for period 05/10 2010. Refer to DaST report for further details.
- 5 Site Supervisors Checksheet completed during Period 4. Trend analysis to be carried out, during period 5 to establish whether initial findings are positive. Findings will be reported in the DaST report (Period 5).
- ITP for track Ballast submitted to **tie** has been reviewed by **tie**/Siemens with comments – Metrics inspection to focus on Ballast installation at the Depot.
- Ongoing review and completion of MUDFA documentation; completion packs and as-built drawings.
- Details of drawings to be reviewed/amended for MUDFA works and passed to SDS during Period 4 (as a result of amendments received from CUS).
- CEC have arranged to audit the BSC records that are in place for the works carried out at Princes Street (20<sup>th</sup> July 2010), checklist to be developed and issued to BSC Week 1; Period 5.

### ENVIRONMENTAL SUMMARY

List any significant environmental events, initiatives, breaches etc

- Formal request sent to BSC regarding the provision of the monthly audit reports relating to the Project Site Waste Management Plans, currently no response received. Further letter to be sent Week 1 Period 5.
- Regrowth of Japanese Knotweed observed at Russell Road and Roseburn, this is covered by the TCM guarantee. TCM to visit site 13<sup>th</sup> July 2010 and advise course of action.
- 2 environmental incidents reported during Period 4; Lindsay Road - Readymix truck leaving site spilled concrete on to the road. Site cleared surplus away and called out road sweeper to clean; oil leak at Tower Place Bridge, dealt with in accordance with procedures.
- BSC currently not carrying out treatment on Invasive Species in line with the requirements of the CoCP.
- Still awaiting issue of updated Invasive Species Plan from BSC which is currently at Level B, to include TCM guarantee information, further request for formal issue sent Week 4; Period 4. Further letter to be sent Week 2 Period 5 if no response received during Week 1 Period 5.
- There has been no formal response from BSC regarding the **tie** Environmental Audit that was carried out during Period 12.
- Updated change to be developed for the remaining archaeological works during Period 4 in order that Post Excavation works can commence.
- Professional development session held 2<sup>nd</sup> July 2010 covering Waste. Issues regarding contaminated waste/land and invasive species were addressed

### BEST PRACTICE

List any significant quality events, initiatives, breaches etc

- Good improvement of cleanliness at Carrick Knowe bridge (see picture)
- Excellent use of remote control demolition by BSC (McKean's) at Tower Place.
- BSC have trained another 38 personnel on the bespoke one day Cat & Genny and Cable Avoidance training for personnel over the whole Consortium (including 2 **tie** supervisors). This takes the total to 78 across the project. This, along with additional instruction on the BSC safe digging procedure, should reduce cable strike incidents.
- Good co-operation within BSC at Russell Road to re-evaluate work methods to agree to a safer solution to an area of works in Russell Road – (see CDM section below)
- Meeting held with Frontline and Land Engineering to discuss hand-over and site release; Documentation will be delivered in line with **tie** procedures.
- Re-introduction of BSC / **tie** bi-weekly Quality meetings. These will be minuted and Chaired by BSC Quality manager.
- BSC have commenced a good practice exchange on their intranet system (all BSC contractors have access to the system). **tie** will pass these on to other principal contractors on the project. Copy of good practice sheet for refueling small plant enclosed.

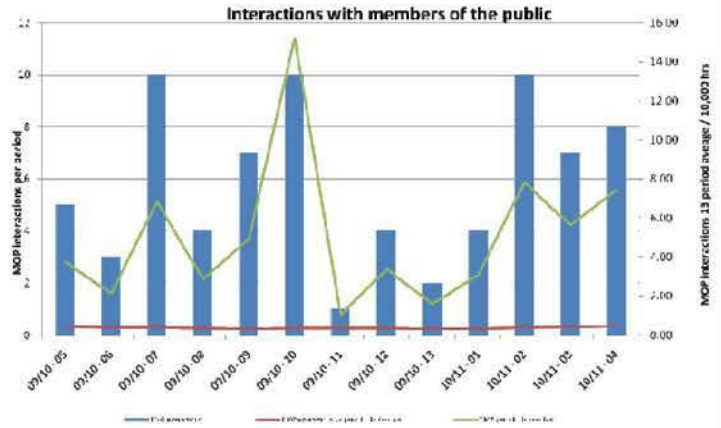


### MEMBER OF PUBLIC INTERACTION SUMMARY

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

There has been an increase in the number of MOP incidents recorded and claimed for during Period 4

- 3 reports of cyclist accidents in Princes St, 2 involved the Tram tracks.
- 2 reports of excessive noise during out of hours works.
- 2 reports of ripped clothing on heras fencing  
2 claims
- MoP tripped and fell on pavement outside 228 Leith Walk. Heavily banged head and face, broken spectacles.
- A business on Grosvenor St has suffered property damage due to on-going works outside the property. This seems to have caused tiles on the front of the building to crack and fall off due to the vibration of the works.

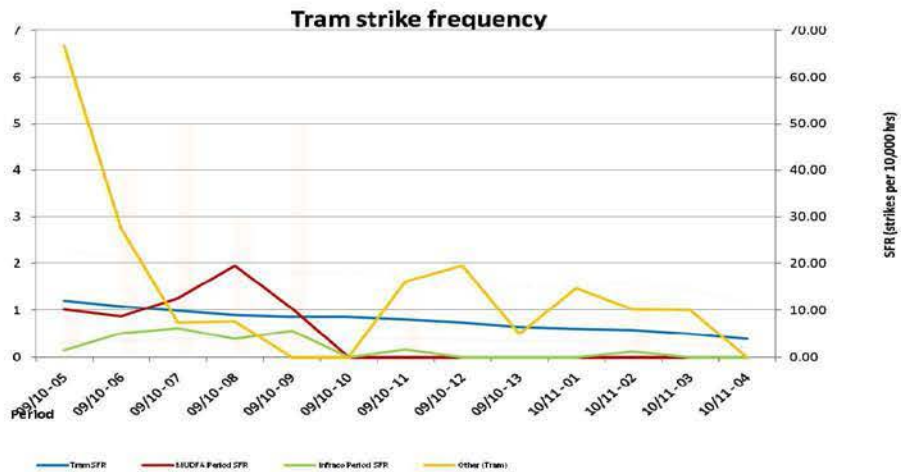
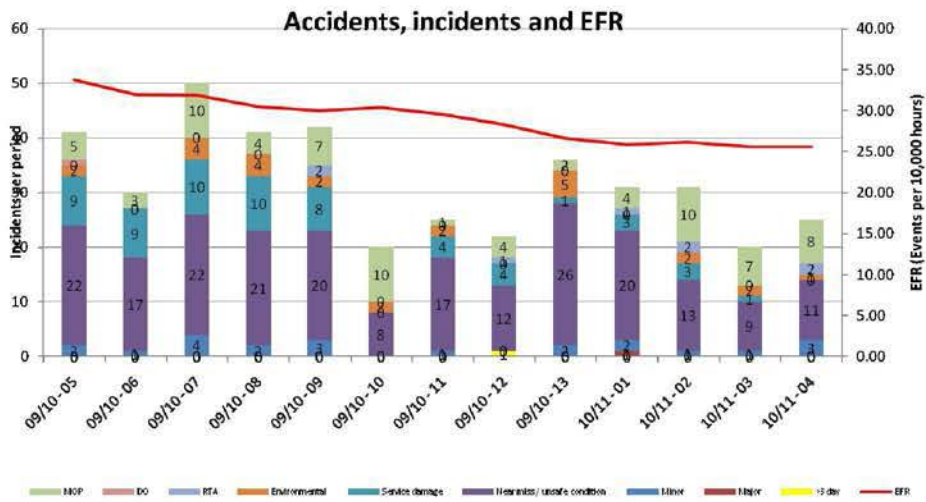
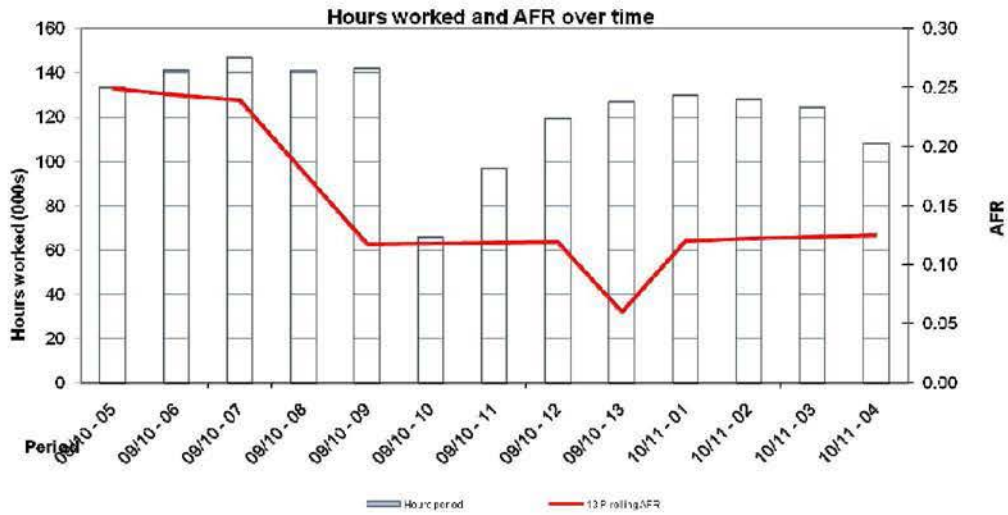


### CDM Compliance

List any significant quality events, initiatives, breaches etc

- Approved Contractor List – no additions to **tie** approved list since last report
- Pre-construction info packs have been prepared and issued for tenders:
  - Baltic Street service diversion
- Road 7 & 8 will be complete when the Section 1A MUD works (Farrans) as-built drawing are reviewed and accepted.
- South Gyle Access sewer diversion – Barhale will be instructed of **tie** CDM requirements prior to commencing on site
- Murryfield Accommodation works – successful CDM inspection took place to ensure that Crummock and **tie** had complied with respective duties under CDM for contract start
- A tracker of actions observed through the inspections is being monitored. This will help to demonstrate monitoring and continued improvement of the discharge of CDM. A number of CDM audits on the **tie** system will be carried out in Periods 5 and 6.
- Russell Road retaining wall. After discussion with the Designer and Principal Contractor, **tie** facilitated the reduced risks for HAVS, potential injuries (i.e. slipping when operating disk cutting machinery at chest level) and access issues for the opeative carrying out the work. They agreed to the cutting off of a large number of in-situ rebar ends by flame technique in lieu of hand held disk cutting.
- Pre-start meeting to take place with Barhale, the successful contractor for the South Gyle Access sewer diversion, to ensure a safe start on site in line with **tie** HSQE procedures.

### GRAPHS





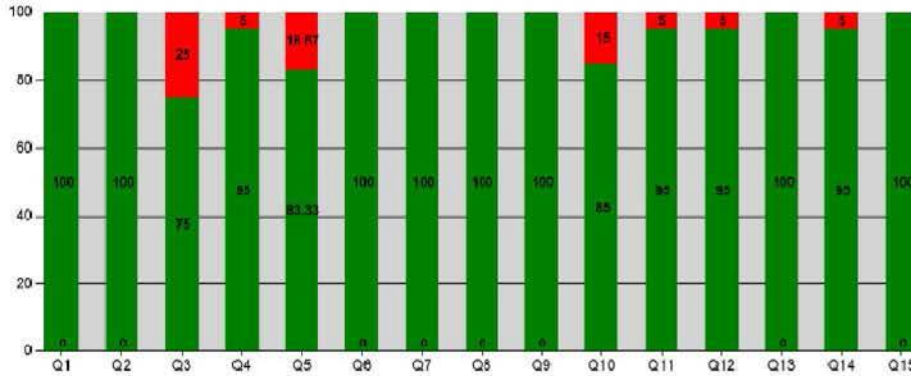
### APPENDIX A SIGNIFICANT ACCIDENT / INCIDENT

<b>AIIR Ref:</b>	AIIR01290	<b>Serious/Significant</b>	<b>Yes</b>	<b>Action taken by tie (if required):</b>
<b>Contr Ref:</b>		<b>Description:</b>		
<b>Project</b>	MWFC Accommodation Works	SRU phoned stating that the SRU personnel had reported a smell in the canteen & it appeared to come from the boiler area & that there appeared to be a problem with the flue.		tie to review incident report. tie have received a copy report that confirms that other contractors working for BSC dislodged flue. Flue secured and re-tested by gas registered approved installer. BSC to review flue position to ensure that event not likely to re-occur when carrying out future maintenance
<b>Location:</b>	Murrayfield Stadium			
<b>Date &amp; Time</b>	02-07-10 08.50hrs approx			
<b>A/I type:</b>	Near Miss/Unsafe Condition	<b>Action taken by Contractor:</b>		
<b>tie PM:</b>	Tom Cotter	BSC contacted subcontractor who brought out a Gas Safe approved contractor to inspect the system. Contractor repaired the flue and carried out inspection of flue system. Incident report and copy of appropriate certification to be issued to tie.		
<b>Contractor:</b>	BSC			
<b>Sub Contr:</b>	BMR			

<b>AIIR Ref:</b>	AIIR01296	<b>Serious/Significant</b>	<b>Yes</b>	<b>Action taken by tie (if required):</b>
<b>Contr Ref:</b>		<b>Description:</b>		
<b>Project</b>	Infraco	BSC whilst undertaking the Immunisation works on NWR assets two incidents occurred, one on the E&G line and one on the Fife lines which caused Track Circuits (TC) to drop at the following Location Cases (Loc) Loc 435 Edinburgh Park 650V fuse dislodged causing T/C 644 & 642 to drop from 14.05 to 14.30 defect rectified by NWR signalling maintenance team Loc F31 Haymarket West 650v Fuse blown causing T/Cs 625 & 627 to fail from 14.59 to 15.20 rectified by Volker Rails installation team who were working in the Loc at the time of failure, the team were contacted by the Signaller direct Delay Minutes at 09.30 on 08/07 149 and 4 trains cancelled		tie instructed all Immunisation & Survey works to stop at 15.30 after faults had been rectified. tie required a site meeting between BSC/Volker Rail/Scientifics/NWR & tie to review failures at 16.00 in Haymarket West Relay Room tie instructed no works to start until a full review of cause of failure has been undertaken by BSC
<b>Location:</b>	Edinburgh to Glasgow Line & Fife Lines			
<b>Date &amp; Time</b>	07/07/10 14.45			
<b>A/I type:</b>	Near Miss/Unsafe Condition	<b>Action taken by Contractor:</b>		
<b>tie PM:</b>	Colin Kerr	All works stopped, both Volker Rail & Scientifics attended incident review meeting with NWR local Signal Maintenance Engineer to discuss failure cause and review Method Statements, WPPs & safety certification of staff involved Reports requested from both Scientifics & Volker Rail with a review meeting and outline reported to be presented to Tie & Network Rail by 12.00 on the 08/07/10		
<b>Contractor:</b>	BSC			
<b>Sub Contr:</b>	Volker Rail & Scientifics			

## APPENDIX B – INSPECTIONS

### Period 3



### Movement in Period

Compliance has risen from 94% to 95% from Period 3 to Period 4

There has been an improvement in compliance with the following areas:

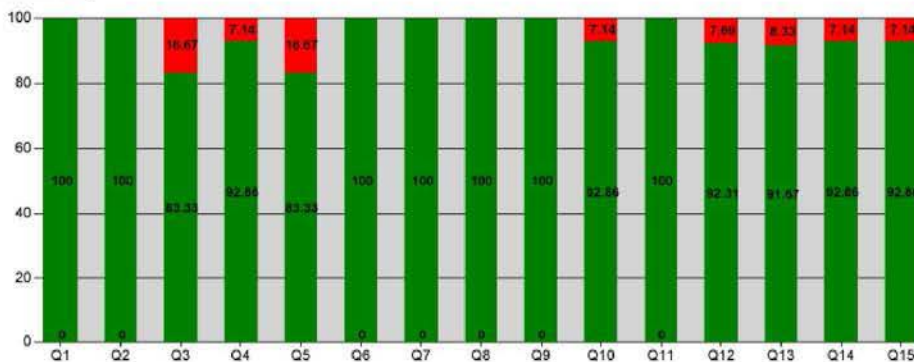
- Notices
- Fencing and hoarding
- Parking
- Litter and Housekeeping

There has been a decreased/same level of non-compliance in the following areas:

- Noise – same level of non-compliance
- Dust-1 recorded incident
- Smoking -1 recorded incident
- Passage of Pedestrians – same level of non-compliance
- PPE - 1 recorded incident

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

### Period 4



### tie Action

HSQE and Construction Director will discuss issues with Project Managers and disseminate information to sites. They will also highlight where additional measures are required. This month's targets will focus on:

- Noise and Pedestrian Walkways – the 2 reported noise complaints this period are being investigated this will be discussed with BSC and other Tram contractors
- Dust, Smoking and PPE - discuss with contractors to increase vigilance on compliance
- General compliance with CoCP with additional visitors expected in run up to festival