



4 Week Period Reporting Pack 09/10

Project Title:
Edinburgh Tram Project

Reporting Period:
Period 04 2009/10

Transport Scotland Project Manager:
John Ramsay

Progress Meeting Date:

Report authorised by: **Steven Bell**

Signature: [Redacted]

Date: 24 July 09

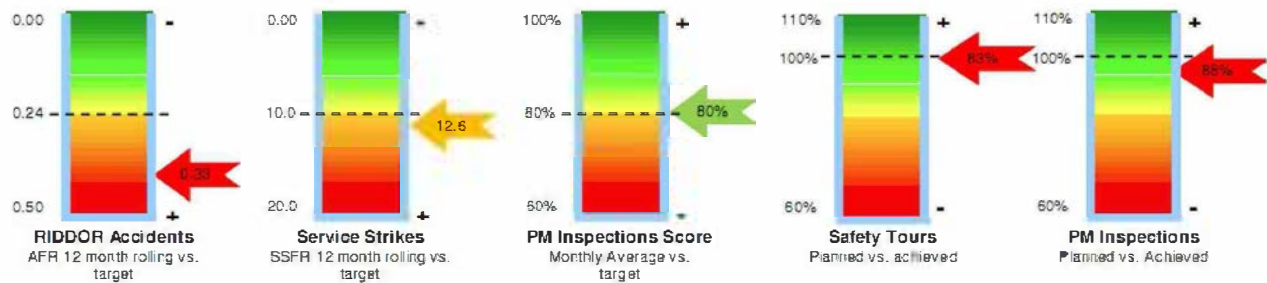
For and on behalf of **tie Limited**

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1 Executive Summary

HSQE

HS&E ACCIDENTS and INCIDENTS SUMMARY											
Project Running Totals	Total Hours	>3 day	Major	Injury	NM/Unsafe Condition	Service Damage	ENV	RTA	MOP	AFR	SFR
Period	133,001	0	1	2	8	15	0	1	5	0.75	11.28
Year to Date	547,380	0	1	12	62	49	0	4	19	0.18	8.95
13 period rolling	1,536,764	1	4	36	206	194	3	17	90	0.33	12.62



An accident occurred outside a Carillion site during period 4. An 82 year old woman fell after catching her heel on a temporary ramp on a pavement. This has been classed as a reportable accident by Carillion but was not directly as a result of the construction activities. Taking this into account, the Accident Frequency Rate rises to 0.33, however, if this accident is “ruled out” as it was not as a result of construction works, the AFR remains at 0.26. A joint investigation is underway by Carillion and **tie** with a focus on the temporary pedestrian ramps and where they should be used.

Service strikes have decreased slightly over-all during Period 4, however, they have increased for BSC. **tie** are reviewing the last 4 service damages for trends and will report any findings. Project Manager Inspections for MUDFA have been 100% of those planned, however, the joint inspection process for Infracore between **tie** and BSC has proved more difficult to achieve the 100%, with 7 out of 8 inspections completed.

tie have reviewed the past 12 months MOP incidents and have identified particular risk areas that will be given specific focus with our contractors prior to the Edinburgh Festival. The main areas to be targeted will be adequate reinstatements and boundary fencing.

Progress

From 29 June and 6 July intensive mediation was held between **tie** and the BSC Consortium to try and resolve key differences which have been stalled within the Project Management Panel.

Potential solutions were thoroughly explored (and remain under discussion), however it is very disappointing to note that no acceptable overall agreement was reached on the substantive issues.

Transport Scotland and CEC were briefed in detail on the outcome of the mediation and the subsequent 8 July Tram Project Board review and agreed actions.

A further update will be provided to Transport Scotland in early August following the 29 July Tram Project Board and informed by the preparations for the City of Edinburgh Council meeting on 20 August.

The cost, programme and risk information in this period 4 report continues to be based unapproved forecast on the information reported in May 2009. This will be updated once the above actions are progressed.

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

- Finalisation of the agreement of change delaying the commencement of work;
- Incomplete utility diversions in the On-Street sections caused in part by traffic management constraints ;
- Slow mobilisation of INFRACO, including lack of formal sub-contracts being in place;
- Failure of INFRACO to submit preparatory paperwork in a timely manner i.e. Work Package Plans, Method Statements etc;
- Requirement for re-design of temporary works;
- Design slippage since novation of design to INFRACO (now recorded in v46 of the design programme);
- Design changes as a result of the Prior and Technical Approvals process; and
- Consortium integrated design programme and validation

The **tie** live programme currently predicts an Open for Revenue Service date of September 2012. This has slipped slightly since last period and is mainly due to the lack of progress being achieved by INFRACO across the route compounded by delays caused by utility diversions at Haymarket and Newhaven.

Agreement of a revised programme is one of the key priorities for the PMP and this was one of the key discussion topics at mediation. Discussions on programme revision and potential extension of time awards to BSC are continuing during Period 5. It is one of the remaining significant differences between the parties.

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

Progress – Design

No new submissions have been lodged in the period, but 2 technical approvals have been granted in Period 2. A summary of Prior and Technical Approval progress is presented below:

Phase 1a only	Number required		Number	
	v31	v46	Submitted	Granted
Prior Approvals	49	54	51 (94%)	50 (93%)
Technical Approvals	71	83*	77 (93%)	71 (86%)

*3 additional TAA added in V46

Although there is evidence of better management of SDS by BSC, this has not yet resulted in improved design performance. The approvals task force has been supplemented by a Design Progress and Design Issues meeting to provide additional management focus on design resolution. V47 includes a number of design integration activities and the impact of these will be analysed over the coming period – it should be noted that this is a consortium issue to manage and **tie** will provide support in this respect. **tie** has implemented an extensive programme of site based monitoring to validate & verify the installation of works in line with an integrated design assured construction. See section 6.3 for amplification.

Progress – MUDFA

Progress on MUDFA works during Period 4 is presented below:

Rev.08 Figures	Period		Delta	Cumulative		Delta
	Plan	Actual		Plan	Actual	
MUDFA PERIOD 08 PROGRESS						
Section 1a Newhaven to Foot of the Walk	10.0%	1.3%	-8.7%	52.9%	43.0%	-9.9%
Section 1b Foot of the Walk to McDonald Road	0.1%	0.0%	-0.1%	100.0%	99.9%	-0.1%
Section 1c McDonald Road to Princes Street West	2.0%	4.0%	2.0%	94.9%	84.8%	-10.1%
Section 1d Princes Street West to Haymarket	2.3%	1.9%	-0.4%	99.6%	94.7%	-4.9%
Combined Sections 1A-1B-1C-1D (On-Street) Newhaven Road to Haymarket	4.3%	1.8%	-2.5%	82.8%	76.1%	-6.7%
Section 2 Haymarket to Roseburn Junction	0.0%	0.0%	0.0%	100.0%	100.0%	0.0%
Section 5a Roseburn Junction to Balgreen Road	0.0%	0.0%	0.0%	100.0%	100.0%	0.0%
Section 5b Balgreen Road to Edinburgh Park Central	0.0%	0.0%	0.0%	100.0%	100.0%	0.0%
Section 5c Edinburgh Park Central to Gogarburn	0.0%	0.0%	0.0%	100.0%	100.0%	0.0%
Section 6 Gogar Depot	0.0%	0.0%	0.0%	100.0%	100.0%	0.0%
Section 7a Gogarburn to IPR	0.0%	0.0%	0.0%	100.0%	100.0%	0.0%
Section 7b IPR – Edinburgh Airport	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Combined Sections 2A-5A-5B-5C-6A-7A (Off-Street) Haymarket to Edinburgh Airport	0.0%	0.0%	0.0%	100.0%	100.0%	0.0%
FULL ROUTE PHASE 1A NEWHAVEN ROAD TO EDINBURGH AIRPORT	3.5%	1.5%	-2.0%	85.8%	80.1%	-5.7%

Key points to note are:

- Progress in the period has been slower than planned in those sections that MUDFA are working. These poor productivity and performance levels can be attributed in part to underground obstructions and technical issues.
- Good progress was made with the gas diversion at The Mound. Gas that remained in the 120yr old main after the diversion was burned off in a controlled manner;
- Utilities diversion works for Sections 7 have been awarded to Farrans and Section 1A are now out to tender. These works are not being carried out by Carillion;
- Section 1B: tie ins, cabling and abandonments are scheduled for completion during July and August 2009, and
- All utilities works are complete in Sections 2, 5a, 5b, 5c and 6 are now complete.

Progress – INFRACO

The project continues to experience problems with slow progress for INFRACO works and, in particular, the appointment of direct BSC resource and the final appointment of the main package contractors. The BSC sub-contractors continue to operate with Limited Letters of Intent whilst awaiting conclusion of the full sub-contracts. Finalisation of the agreement of change- Base Date Design Information (BDDI) and IFC is delaying the commencement of work at Haymarket viaduct, Russell road bridge, Carricknowe bridge, Depot building and Tower place bridge.

The work has continued on a number of worksites including:

- Princes Street Track form, Track welding and OLE bases are progressing in both the east and west parts of the site. Track has been laid virtually throughout the length of Princes Street from South Charlotte St to Frederick St although the majority has yet to be levelled and welded;
- Earthworks between Balgreen Road and Carricknowe bridge;
- Trial holes at guided bus way section;
- A8 underpass combined phase 1 & 2 programme has now been adopted. The Temporary Traffic Diversion completed. BSC are progressing with the site clearance;
- Edinburgh Park Station Bridge: BSC continued to work on diaphragm wall construction and deck slab reinforcement;

- At Gogarburn Bridge poor concrete quality has led to replacement piers being constructed at this location, and
- Depot - Earthworks have not recommenced since 23 June. Further excavation will commence on BDDI to IFC Change agreement. The agreed total to date is **107607** cubic metres out of a total expected **141000** cubic metres (**76%**).

Progress is being monitored against the Revision 1 programme, and the summary milestones against the agreed INFRACO Contract are shown below:

Milestones	Period 04		Cumulative (Short-Term)		Contract Planned to P04
	Planned	Actual	Planned	Actual	
Prelims	2	2	48	48	48
Construction	4	2	37	35	544

Progress – TRAMCO

Good progress continues to be made with the progress of deliverables against the schedule. The production line has commenced during Q1 2009 with the delivery of the first tram still on schedule for April 2010. 7 trams are currently in the fabrication stage.

Progress – Testing & Commissioning

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

- Design Assurance. This process being undertaken by BSC(SDS)/**tie**
- Quality Checking: 10 of the 37 BSC inspections and test plans are in progress
- Systems Safety: Safety verification plans are in place and this process of verification is underway with INFRACO, the ICP, TEL and Transdev all involved in the process.

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

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

Progress – Interface with 3rd Party Projects

tie and CEC identify other projects ongoing within the City that may impact on the tram project. This is reviewed on an ongoing basis both internally and with TS, to identify any conflicts and mitigations. The key projects to note in this regards are:

- The Gogar Surface Station promoted by Transport Scotland. Design changes have been instructed and are underway and **tie** and TS are developing an integrated programme for these works.
- The redevelopment of the St James Centre, which has been downgraded from red to amber in the period as commencement for this project is expected to take place towards the completion of the tramworks.
- CEC/**tie** and NR are currently in discussion over agreeing a process to accommodate traffic management arrangements for the construction of the Waverley Steps following withdrawal of the objection to the TAWs order.

Progress – Other

- A TRO programme is in place to ensure that the first order TRO 1, which will allow for operation of the tram system, is made by October 2010. The informal consultation process for this has been completed and BSC have been instructed to incorporate minor design revisions into the final design. Delivery of a set of TRO drawings is scheduled for August 2009 which will enable the statutory consultation process to commence.
- Traffic management planning ongoing for Princes St Phase 3, Haymarket and Picardy Place.

Network Rail

- INFRACO has now delivered its EMC Management Plan and EMC Strategy for NR infrastructure assets and established the scope for the immunisation works. A programme for these works is being developed with INFRACO, and
- INFRACO are developing the full assurance case for NR acceptance. The preliminary assurance case to enable traction power testing and commissioning will be completed by August 2009. Further assurance will be provided up to, and including, bringing into service.

Third party interfaces

- NR – the Bridge Agreements are not yet concluded. There is an outstanding issue on indemnities to close out. CEC are taking this matter up directly with TS. An Operating Agreement draft has been returned to NR on 26/06/09;
- Forth Ports – expecting imminent execution of agreement, awaiting FP final drafting comments prior to closure, and
- Haymarket car park compensation – **tie** have agreed compensation with NR and will settle this in Q1 09/10. **tie** continue to discuss with TS the additional compensation payable to First ScotRail, as a result of the extension of the FSR franchise from Nov 2011 to Nov 2014, as it is believed to be a TS cost.

Fast link modifications (Front Line) – complete.

Ancient Monuments/Statues (Land Engineering)

- Robert Burns Monument - planning for removal underway, and
- The Sherlock Holmes Statue at Picardy Place was removed.

Burnside Road (BAA) – contract awarded to Raynesway Construction. Work commences 10th August 2009.

Archaeological works at Constitution Street (Frontline) – number of remains found is between 220 and 240.

CostCurrent Financial Year

- The budget for Phase 1a in 2009/10 is £150.1m which has been produced linking the **tie** re-baselined programme to INFRACO construction milestones. **tie** are currently in the process of agreeing an updated programme with the INFRACO contractor.
- In addition to phase 1a (£150.1m) 2009/10 costs, the budget also includes potential additional costs of £3.2m which relate to the postponement of Phase 1b INFRACO construction contract;
- Funding available from TS for the project in 2009/10 is £149m. The TS share of this year's budget (£153.3m) is £140.6m, giving available headroom of £8.4m.
- We have identified sensitivities to the outturn forecast for 2009/10 of £5.6m (see section 3 of the main report).

Actual YTD P4 & forecast P5-P13 FY09/10

£m	YTD P 4	Forecast P5 - P13,09/10	Total FY09/10
Infrastructure and vehicles	19.9	104.6	124.5
Utilities diversions	5.6	2.2	7.8
Design	0.9	0.4	1.3
Land and compensation	0.6	1.0	1.6
Resources and insurance	4.0	9.7	13.7
Base costs	31.0	117.9	148.9
Risk allowance	0.0	1.2	1.2
Total Phase 1a	31.0	119.1	150.1

- COWD to Period 4 is £31.0m (Period 3 £23.5m) against budget £28.2m. The main drivers for the £2.8m variance are: the timing of INFRACO and Tramco costs forecast in 2009/10 (£0.8m); Offset by a fall in PM costs (-£0.5m) and MUDFA costs variance (£2.6m).

Total Project Anticipated Forecast Cost

Re-baselined Phase 1a AFC and profiling

£m	Cum FY07/08	Actual 08/09	FY 09/10	FY 10/11	FY 11/12	AFC
Infrastructure and vehicles	30.7	45.4	124.5	108.6	2.4	311.6
Utilities diversions	18.4	33.4	7.8	0.0	0.0	59.6
Design	21.4	4.7	1.3	0.0	0.0	27.5
Land and compensation	16.8	1.7	1.6	0.2	0.0	20.3
Resources and insurance	42.7	15.8	13.7	7.8	2.9	82.9
Base costs	130.0	101.0	148.9	116.5	5.3	501.7
Risk Allowance	0.0	0.0	1.2	18.4	5.8	25.4
Total Phase 1a	130.0	101.0	150.1	134.9	11.1	527.1
Phase 1b postponement	3.0	0.0	3.2	0.0	0.0	6.2
Total Phase 1a and Phase 1b	133.1	101.0	153.3	134.9	11.1	533.3

- The table above reflects the base costs and risks aligned to the re-baselined programme and re-alignment of the INFRACO milestones schedule. The AFC for Phase 1a above includes an unapproved increase of £15.1m to the project risk allowance. The approved cost estimate for delivery of Phase1a of the project remains at £512m. The phasing of the £527.1m plan remains in-line with period 3 and will be updated when there is an updated agreed programme with the INFRACO contractor.
- The latest forecast view includes £3.2m of costs relating to Phase 1b which may crystallise as contractually payable to BSC due to the postponement of Phase 1b (this will require to be covered by current funding). Coupled with the re-baselined forecast, there is £11.7m of funding headroom within the £545m total funding available.

Risk & Opportunity

There were six risk reviews held in the period. One item was close on the Infraco concerns register. There were two risk draw downs approved in the period totaling £2,410,908. These were for the works below the earthworks outline which were carried out under the Princes Street Supplemental Agreement and the additional cost of full depth road reconstruction at Princes Street plus the additional CEC staff costs associated with the delay in design approvals. This leaves a risk and contingency balance of £17,011,775 (based upon the approved Project Risk Allowance at Financial Close).

All existing risks, as well as those recently added, are being reviewed to ensure the QRA output is as accurate as is reasonably possible. It is accepted that the additional risks and increase in QRA output are currently unapproved. These are within the unapproved range in

costs provided to TS on 26th May. **tie** will continue to report on the risk allocation at Financial Close until a new budget (with an updated QRA) is approved.

Communications/Customer Service

Media Features

- Richard Jeffrey – The Times, Scotsman
- Tram Veterans – Evening News
- Edinburgh Park Viaduct – Evening News
- Tram Mock-up was also covered in the media recently for passing the 100,000 visitor mark since it was put on display in late February. Interest was also generated from a gas burn off which took place at the Princes Street work site
- Tram TV set up – have a look at www.tramsforedinburgh.com!

Customer Service

The total correspondence for Period 4 numbered 448 - a reduction from period 3. Information Requests remain the bulk of all correspondence each period with 426 contacts being recorded for Period 3. A revised organisational structure has been implemented to align customer Service Account Managers with known hotspots and Project Manager areas of geographic responsibility.

Public Information Planning

During Period 4 a total of 6 notifications were distributed to businesses and residences. The tram website recorded 9,252 in the period.

Logistics

Over the past 4 weeks logistics teams helped with 318 inbound deliveries to businesses in all three areas of Haymarket, City Centre and Leith Walk. The teams were also called on to help with 58 outbound deliveries.

Partner and Stakeholder Communications

tie's Primary School initiative conducted presentations to five school assemblies during the final two weeks of term before the summer holidays. Recruitment for the new Tramformers Scheme will begin during first term back at school.

Freedom of Information Requests – FOI

During Period 4 a total of 7 requests have been responded to with a further 10 requests in the process of being formulated or signed off for sending. 2 requests are currently being reviewed, with one further response being reviewed by the Information Commissioner.

2 Progress

2.1 Overall

From 29 June and 6 July intensive mediation was held between **tie** and the BSC Consortium to try and resolve key differences which have been stalled within the Project Management Panel.

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Agreement of a revised programme is one of the key priorities for the PMP and this was one of the key discussion topics at mediation. Discussions on programme revision and potential extension of time awards to BSC are continuing during Period 5. It is one of the remaining significant differences between the parties.

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

As per the previous period reporting **tie** retain an unapproved recalibrated baseline programme which reflects an Open for Revenue Service date of 23 Feb 2012. This is still a **tie** only view as, to date a recalibrated programme although now submitted by INFRACO has not been agreed with BSC. **tie** has commented on submissions received from INFRACO and detailed discussions have continued with both teams to resolve the causes and effects of delay.

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

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

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

Importantly, the re-baseline programme does not take account of any opportunities regarding:

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

2.2 Design

IFC Design

Approvals and Consents V46 are progressing as follows:

- IFCs – Phase 1a 78 issued out of 117 (a number of new IFCs included in V45 & V46 programmes);
- Prior Approvals are progressing well with 94% granted, three left to be submitted (including the RBS Gogarburn tramstop, and Murrayfield Accommodation Works which has been added as a PA application) and four left to be granted;
- Technical approvals also progress well with 86% granted (from an increased no. of TAA), six remaining to be submitted and 12 (4 from v31) left to be granted;
- Structures approvals are progressing well – one structure from v31 remains to be approved (Balgreen Road NR access bridge);
- Roads approvals - Two areas remain outstanding for Technical Approval in Phase 1a (1A3 & 1C2);
- Scottish Water have sent formal acceptances to BSC for all sections excepting 1A3, 1C2 & 1C1. BSC have responded to these acceptances; however a permit for construction for section 6 is still to be issued.
- Sections 1B, 1D, 1C3 & 5B close reports have been signed off by CEC, subject to BSC concluding any concessions included in the reports during construction. CEC are reviewing all other sections based on the prioritisation list provided by BSC.

Phase 1a only	Number required		Number	
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Prior Approvals	49	54	51 (94%)	50 (93%)
Technical Approvals	71	83*	77 (93%)	71 (86%)

*3 additional TAA added in V46

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

Although there is evidence of better management of SDS by BSC, this has not yet resulted in improved design performance. The approvals task force has been supplemented by a Design Progress and Design Issues meeting to provide additional management focus on design resolution. V47 includes a number of design integration activities and the impact of these will be analysed over the coming period – it should be noted that this is a consortium issue to manage and **tie** will provide support in this respect. **tie** has implemented an extensive programme of site based monitoring to validate & verify the installation of works in line with an integrated design assured construction. See section 6.3 for amplification.

2.3 Utility works (MUDFA)

Progress on MUDFA works during Period 4 is presented below:

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- All utilities works are complete in Sections 2, 5a, 5b, 5c and 6 are now complete.

Section	Commentary
Section 1a Newhaven to Foot of the Walk	<p>Section 1A Plates 11-12 (The Bridges) Temp Telecoms work completed. Telecom Re-Cabling at the Bridges:</p> <ol style="list-style-type: none"> 1) Virgin Media cabling complete. Transfer programmed for 22nd July 2009 2) BT – Cabling complete. Transfer date to be confirmed 3) Cable & Wireless – Cabling and transfer programmed for 29th July 2009 (Agreed with Scottish Government Building) <p>Queen Charlotte Street junction –re-opening delayed until end of July due to SW network issues. Gas Service Transfers works continue in Constitution Street between Duke Street and Baltic Street.</p>
Section 1b Foot of the Walk to McDonald Road	<p>Side entry manhole work completed at Balfour Street. Gas main abandonment works commenced on Monday 6th July – 8 week programme. BT manhole at 113 Leith Walk completed. Water connection works at McDonald Road and Brunswick Road junctions with Leith Walk completed</p>
Section 1c McDonald Road to Princes Street West	<p>Annandale Street – Playhouse work site reduced in size. Traffic Management switched from East side to West side of Picardy Place. Traffic Management / Work site installed at junction of Leith Walk and Annandale Street following completion of McDonald Road water main connections. Uncovered an uncharted sewer – Impact of uncharted sewer on programme , available space and traffic management arrangements for utility diversions being assessed. Likely impact is a need to re-locate and re-design a number of utility diversions. Existing 24" / 30" medium pressure gas main abandonment at The Mound / Princes Street / Hanover Street Junction. Carillion work scope at The Mound / Princes Street / Hanover Street planned for completion on Friday 14th August, followed by 10 weeks programme of telecoms recabling and transfers.</p>
Section 1d Princes Street West to Haymarket	<p>Lothian Road junction progressing in line with the latest CUS programme, showing completion 1st August 2009. This includes current known scope of BT remedial works to ducts. CUS forecast on Thursday 8th July 2009 shows completion 8th November for Haymarket to Manor Place. BT require a demolish and rebuild of an existing manhole in the junction at Palmerstone Place due to its existing condition. This work is included in the above date for CUS completion and will be completed by BT. Discussion ongoing with SGN over SGN carrying out the required lift and lay at Clifton Terrace to minimise CUS work and allow for access to carry out planned works. Discussion ongoing with SGN over abandonment of 15" main at Shandwick Place to allow for access for BSC . Additional cross connections required to facilitate abandonment. Survey of underground structure at Grosvenor Street has been completed and issued to SDS and INFRACO. Awaiting solution from SDS. Additional phase of TM may be required to gain access to complete crossings through the structure.</p>
Section 2 Haymarket to Roseburn Junction	<p>As- Built drawings being progressed by SDS BT, Thus and C&W cabling to be complete.</p>
Section 5a Roseburn Junction to Balgreen Road	<p>MUDFA Diversions COMPLETE. Utilities transferred to Infracore remain in ScotRail Depot</p>

Section 5b Balgreen Road to Edinburgh Park Central	Sewer diversion at South Gyle Access bridge transferred to InfracoTelecoms proximity to South Gyle Access bridge West abutment & Bankhead Drive RW
Section 5c Edinburgh Park Central to Gogarburn	Utility diversion works complete. Telecoms re-cabling works underway.
Section 6 Gogar Depot	COMPLETE
Section 7a Gogarburn to IPR	COMPLETE
Section 7b IPR to Edinburgh Airport	Keir have completed and tested all utility diversion associated with the BAA Walkway project. Remainder of scope underway with Farrans.

2.4 Tramworks (INFRACO)

The project continues to experience problems with slow progress for INFRACO works and, in particular, the appointment of direct BSC resource and the final appointment of the main package contractors. The BSC sub-contractors continue to operate with Limited Letters of Intent whilst awaiting conclusion of the full sub-contracts. Finalisation of the agreement of change- Base Date Design Information (BDDI) and IFC is delaying the commencement of work at Haymarket via duct, Russell road bridge, Carricknowe bridge, Depot building and Tower place bridge.

The work has continued on a number of worksites including:

- Princes Street Track form, Track welding and OLE bases are progressing in both the east and west parts of the site. Track has been laid virtually throughout the length of Princes Street from South Charlotte St to Frederick St although the majority has yet to be levelled and welded;
- Earthworks between Balgreen Road and Carricknowe bridge;
- Trial holes at guided bus way section;
- A8 underpass combined phase 1 & 2 programme has now been adopted. The Temporary Traffic Diversion completed. BSC are progressing with the site clearance;
- Edinburgh Park Station Bridge: BSC continued to work on diaphragm wall construction and deck slab reinforcement;
- At Gogarburn Bridge poor concrete quality has led to replacement piers being constructed at this location, and
- Depot - Earthworks have not recommenced since 23 June. Further excavation will commence on BDDI to IFC Change agreement. The agreed total to date is **107607** cubic metres out of a total expected **141000** cubic metres (**76%**).

Progress is now being monitored against the Revision 1 programme. The summary milestones against the agreed INFRACO contract and the short term Rev 1 programme milestones are shown in the table below.

Milestones	Period 04		Cumulative (Short-Term)		Contract Planned to P04
	Planned	Actual	Planned	Actual	
Prelims	2	2	48	48	48
Construction	4	2	37	35	544

The Revision 1 programme incorporates the agreed 38 business days (seven weeks plus three days) EOT variation to the contract programme as in the table below. As had been the

case in the contract programme progress, the common denominator in the Revision 1 programme remains that every activity in the programmes has a work content generated against it which translates into a weighting, allowing accurate reporting of progress.

	Period		Delta	Cumulative		Delta
	Plan	Actual		Plan	Actual	
INFRACO PERIOD 04 PROGRESS (Contract Rev.01 Programme)						
Section 1a Newhaven to Foot of the Walk	3.4%	0.0%	-3.4%	22.6%	0.0%	-22.6%
Section 1b Foot of the Walk to McDonald Road	2.1%	0.0%	-2.1%	42.1%	1.5%	-40.6%
Section 1c McDonald Road to Princes Street West	1.2%	0.0%	-1.2%	10.9%	0.0%	-10.9%
Section 1d Princes Street West to Haymarket	4.9%	1.9%	-3.0%	53.9%	8.8%	-45.1%
Combined Sections 1A-1B-1C-1D (On-Street) Newhaven Road to Haymarket	2.6%	0.4%	-2.2%	29.7%	2.2%	-27.6%
Section 2 Haymarket to Roseburn Junction	2.0%	0.0%	-2.0%	72.5%	12.6%	-59.9%
Section 5a Roseburn Junction to Balgreen Road	4.2%	0.0%	-4.2%	66.1%	3.5%	-62.6%
Section 5b Balgreen Road to Edinburgh Park Central	1.0%	1.9%	1.0%	83.0%	11.4%	-71.7%
Section 5c Edinburgh Park Central to Gogarburn	5.8%	0.0%	-5.8%	58.9%	2.8%	-56.1%
Section 6 Gogar Depot	4.2%	0.2%	-3.9%	81.5%	5.4%	-76.1%
Section 7a Gogarburn to Edinburgh Airport	1.3%	1.7%	0.4%	47.0%	13.3%	-33.8%
Combined Sections 2A-5A-5B-5C-6A-7A (Off-Street) Haymarket to Edinburgh Airport	2.8%	0.9%	-2.0%	71.5%	8.0%	-63.5%
FULL ROUTE PHASE 1A NEWHAVEN ROAD TO EDINBURGH AIRPORT	2.9%	0.7%	-2.2%	55.0%	5.7%	-49.3%

Section	Commentary
Section 1a Newhaven to Foot of the Walk	Section 1A4 Lindsay Road under review. Design awaited to allow Utility diversions to be carried out for W1 Lindsay Rd RW which releases Infraco works in this section.
Section 1b Foot of the Walk to McDonald Road	Roadworks due to commence post Leith embargo delayed to Sep-09 awaiting MUDFA completion.
Section 1c McDonald Road to Princes Street West	Roadworks due to commence post Leith embargo delayed to Sep-09 awaiting MUDFA completion. Section of Princes St east of the Mound junction to west side of South St David Street continued during period 4.
Section 1d Princes Street West to Haymarket	Princes Street works re-started 23Mar09 and continue between South Charlotte Street and the Mound. Tram Works in Haymarket are dependent on MUDFA completion that has slipped from end of July completion but planning underway to commence in Shandwick Place during September 2009.

Section 2 Haymarket to Roseburn Junction	Haymarket Viaduct temporary works design resolved although contractor has not yet mobilised following Christmas 2008 break. Verity House access rd complete 23rd May. All required consents in place for track installation. Commercial issues holding-up commencement of works.
Section 5a Roseburn Junction to Balgreen Road	Temporary & permanent works re-design along with commercial resolution delaying various structures. All required consents in place for track installation.
Section 5b Balgreen Road to Edinburgh Park Central	Temporary & permanent works re-design along with commercial resolution delaying various structures. Only progress in period is against S27 Edinburgh Park viaduct. All required consents in place for track installation.
Section 5c Edinburgh Park Central to Gogarburn	A8 Underpass recommenced during P13 but has since been on hold due to discovery of obstructions & refusal of piles. Design solution to combine Phases 1 & 2 now in place. Traffic diversion completed to enable to start combined phase 1& 2
Section 6 Gogar Depot	Depot handed over from MUDFA to INFRACO 9Feb09 Earthworks have not progressed much this period due to the BDDI-IFC change agreement.
Section 7a Gogarburn to Edinburgh Airport	Remedial works at S29 Gogarburn underbridge.

2.5 Tram construction (Tramco)

Good progress continues to be made with the progress of deliverables against the schedule. The production line has commenced during Q1 2009 with the delivery of the first tram still on schedule for April 2010.

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

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

The fabrication programme maintains approximately two months ahead of schedule and it is expected that the first tram will be ready for factory acceptance tests by August.

2.6 Testing and commissioning

The process for acceptance of the Edinburgh Tram Project is designed to ensure that it is delivered in an acceptably safe, compliant and efficient manner. The objectives of the process are to ensure that the system performance, integrity, reliability, availability and safety are rigorously tested and that throughout all stages of the delivery process the many sub-systems and the overall system are validated and verified against the requirements and applicable standards. The detailed sequence and scope of testing and commissioning prior to systems Acceptance testing is to be programmed out and proposed by BSC in further detail in the next year.

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

What	Who	Status
Design assurance	BSC (SDS) / tie	Underway.
Quality	INFRACO	10 of the 37 BSC Inspections and Test Plans have been revised by BSC incorporating tie comments. tie are awaiting formal issue from BSC. tie have requested an update of the status of the remaining ITP's.
Systems Safety	INFRACO / Independent Competent Person(ICP) / TEL / Transdev	Started - Safety verification plan in place and process of verification already underway. The ICP has been appointed and has started his verification process.
Performance*	INFRACO / Transdev / TEL	Requirements set out in the employer's requirements and will be tested following completion of each section of the network.

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

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

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

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

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

	Performance Test	day period in Passenger Service to establish that the ETN can reliably operate.	twelve months of the Service Commencement Date.
T5	Network Reliability Test	Reliability Testing of key sub-systems in Passenger Service.	To be completed within twelve months of the Service Commencement Date.

This whole process can be described by the following flowchart.

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

2.7 Interface with other projects

The following table identifies the other projects ongoing within the city which may impact on the Tram project. This is reviewed on an ongoing basis both internally and in conjunction with TS to identify conflicts and mitigations. The most significant interface of concern is the Gogar interchange. **tie** has instructed the design change and this is underway. The St James centre re-development remains as amber as commencement of this project is now indicated towards the completion of the Tramworks and therefore interfaces should diminish.

External Projects	Promoter	Project Description	Potential Conflict					Comments
				Tram Contract Dates		Project Dates		
				Start	Finish	Start	Finish	
Gogar Surface Station	Transport Scotland	New station to east of Gogar Depot	Approvals and Consents	Aug-08	Jul-11	Oct-09	Mar-11	All works with the exception of track installation between Gyle Centre and Depot stop and E&M installations will be complete by Sep 2010. tie and TS developing an integrated programme.
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	Oct-11	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.
St.Andrew Square Development	CEC	Demolition of existing buildings bordering South Side St.Andrew Square, South St David Street and Meuse Lane	Infraco Programme	Jan-10	Mar-10	TBA	TBA	Traffic Management changeover completed 6th/7th June09. Infraco activities will not commence until Jan 2010
Princes Street Hotel	Deramore Property Group	Redevelopment of existing buildings at 121 - 123 Princes Street to 80,000 square feet 3 floor of retail and 100 bedroom hotel	Direct clash with Infraco programmed works in Princes Street during blockade	Mar-09	Nov-09	Early 2009	Jun-11	Currently in planning stage. CEC is managing the developer within the tram constraints. Contractors programme being sought.
Princes Street Property	asediqbal consulting	Site clearance and redevelopment at 125a Princes Street on all 3 floors to convert to an EasyHotel	Access through BSC worksite. Internal strip-down ongoing and access required for debris removal.	Feb-09	Nov-09	TBA	TBA	Requirement to access BSC worksite to allow removal of debris has been addressed and achieved.
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

Baxter Place Development	Fitzpatrick Hotel Group	Conversion of existing building adjacent Greenside Lane and with frontage onto Leith Street	Proposal to divert existing utilities through basement of building. Also potential TM interface issues with Picardy Place construction.	Now	Jul-11	TBA	Dec-10	
National Portrait Gallery		Major building construction and re-furbishment. The renovation of the external facades including the renovation of the external masonry, the overhauling of the existing windows, the renewal of the existing rooflights and roof covering, the renovation of the existing rainwater pipes and the moving some of the existing window bars to the inside. Additionally, it is proposed that an external ramp is formed to the front main entrance to allow disabled access.	Interface with Infraco works on St Andrew Street / York Place	Jan-10	Mar-10	Apr-09	Nov-11	Decant complete June 09 No issues expected.
St.Andrew Square Development	CEC	Demolition of existing buildings bordering South Side St.Andrew Square, South St David Street and Meuse Lane	Utilities programme	Now	Apr-09	TBA	TBA	Utility Diversions in South and Mid St Andrew Square complete mid May. Main demolition to be advised as contractor not ready to commence. Traffic Management changeover completed 6th/7th June09. Telecoms works will continue on the east side.
Waverley Steps	Transport Scotland	Refurbishment of existing Waverley Steps with inclusion of new escalators and elavators	PRINCES STREET Traffic management issues when Infraco in Princes Street should this project require deliveries, craneage or Traffic management in same time period	Feb-09	Nov-09	Jun-10	May-12	Under the revised Waverley Steps programme received 7/5/9 Tramworks will be complete in this area prior to Waverley Steps works progressing. Downgraded from Amber to green May09.
Waverley Steps	Transport Scotland	Refurbishment of existing Waverley Steps with inclusion of new escalators and elavators	ST.ANDREW STREET Traffic management issues when Infraco in Princes Street should this project require deliveries, craneage or Traffic management in same time period	Jan-10	Mar-10	Jun-10	May-12	Under the revised Waverley Steps programme received 7/5/9 Tramworks will be complete in this area prior to Waverley Steps works progressing. Downgraded from Amber to green May09.

Waverley Station Re-roofing	Transport Scotland	New roof and general upgrade to station interior	May be Traffic Management issues	Feb-09	Mar-10	Apr-10	Apr-14	Although the tram main construction works will be complete by end Mar-10 this area will be re-visited in Q4 2010 for OHL installation.
New Hotel in Haymarket	Tiger Developments	New build hotel	Utility diversions continue until Jul.2009 Potential Interface with Infraco works at Haymarket junction commencing Jul.2009	Jan-09	Apr-10	TBA	2012	Haymarket junction re-construction is 6 phases due to complete Nov-09 although Shandwick Place will still be under construction to January 2010 with Torphichen to follow. Meeting held with Tiger Developments, Capita Simmons (Project Managers), Dunne Construction (enabling contractor) and CEC on Friday 22nd August 08. Outcome is that risk is greatly diminished.
Haymarket Interchange	First Scotrail	Capacity Increase Project - Installation of new lifts and walkways from Haymarket Terrace	Utility diversions continue until late June 2009 Potential Interface with Infraco works at Haymarket junction commencing July 2009	Now	Apr-10	Dec-11	Dec-12	NR/Edinburgh Tram Project Delivery Group Meeting 11 Buchanan House, Edinburgh 08 April 2009 ScotRail are required under their franchise to install lifts due to the uncertainty over the integrated scheme at Haymarket. ScotRail will progress but it will be at the end of their Franchise 2011/12.
Haymarket Station Re-furbishment	Network Rail/Scotrail	Main Building refurbishment works	Any external works could conflict with TM for either or both MUDFA and Infraco and could conflict with Infraco construction works. Bridge to be installed from Haymarket terrace to Platform 0 to comply with DDA	Now	Apr-10	N/A	N/A	NR/Edinburgh Tram Project Delivery Group Meeting 11 Buchanan House, Edinburgh 08 April 2009 ScotRail are required under their franchise to install lifts due to the uncertainty over the integrated scheme at Haymarket. ScotRail will progress but it will be at the end of their Franchise 2011/12.
Haymarket Station	First Scotrail	Installation of new lifts and walkways from Haymarket Terrace	Construction of Haymarket viaduct	Now	Apr-10	Jan-10	TBA	
Haymarket Terrace	DTZ Surveyors	Common Repairs to buildings at 2-4-6-8-68 & 74 Haymarket Terrace	Scaffolding and external repairs	Now	Apr-10	May-09	ASAP	Scaffold erected and building repairs underway between Infraco TM phases.
Haymarket Yards	TESCO	New Finance Centre	Dependent on fit-out may interface with Infraco works	Now	Apr-10	Complete	Complete	Fit out complete. Will be populated from mid May 2009
Pollution Prevention Works	Network Rail/Scotrail	Re-location of existing diesel tanks at Haymarket Sprinter Depot	Interface with S21A Roseburn Street viaduct and associated track	Mar-10	Mar-11	Complete	Complete	Diesel tanks demolished & site cleared-up VE design on Roseburn viaduct has seen this structure re-programmed.
RBS Tramstop - Gogarburn	RBS	Design by RBS - Build by Infraco	Design and consents not in place in a timely manner to allow Infraco to build to programme	Sep-10	Feb-11	TBA	TBA	Design and approvals progressing to programme.

New Hotel adjacent Ocean Terminal	Ocean Points Development Limited	New build hotel	Potential conflict with Infraco dependent on timescales. To be monitored.	Sep-09	Apr-12	TBA	TBA	To be monitored.
Former Bus & Tram Depot nr Shrub Place	Fraser & Neave	Transformation of former Tram and Bus Depot into 121 room serviced apartments.	None identified. Dependent on timescales.	Now		TBA	TBA	
Shrubhill House	Unite	Transformation of former council social work headquarters into 200 bed hotel	None identified. Dependent on timescales.	Now		TBA	TBA	Awaits planning consent.
NATO Conference		date of the conference is Friday 13th November 2009 to Tuesday 17th November 2009 (inclusive) and it will be held at the EICC, Morrison Street, Edinburgh. 600+ delegates expected	Potential Interface with Infraco works at Haymarket junction	Jan-09	Nov-09	13-Nov-09	17-Nov-09	Haymarket junction re-construction is 6 phases due to complete Nov-09 although Shandwick Place will still be under construction to January 2010

Colour code

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

This has been sent to TS for their input for projects they are sponsoring and will continue to be reviewed by tie to identify any potential impacts on the Tram programme as early as possible in order to manage them. A review of the TS projects was carried early June 2009 with TS. A further session has still to be arranged for Period 5 09/10.

2.8 Other

Temporary traffic regulation orders (TTROs)

- Weekly visual summary being produced of all tram traffic management throughout city.
- Successful switch of traffic from South St David's – South St Andrews St.

Traffic regulation orders (TROs)

- A TRO programme is in place to ensure that the first order TRO 1, which will allow for operation of the tram system, is made by October 2010. The informal consultation process for this has been completed and BSC are incorporate minor design revisions into the final design. **tie** are currently awaiting a set of TRO drawings to enable the statutory consultation process to commence (anticipated Aug 14th 2009).
- Traffic management planning ongoing for Princes St Phase 3, Haymarket and Picardy Place.

Network Rail

- INFRACO has now delivered its EMC Management Plan and EMC Strategy for NR infrastructure assets and established the scope for the immunisation works. A programme for these works is being developed with INFRACO;
- INFRACO will be developing the full assurance case for NR acceptance. Preliminary assurance case to enable traction power testing and commissioning will be completed by August 2009. Further assurance will be provided up to, and including, bringing into service;
- The Relocation of the Diesel tanks has been completed;
- A local agreement with First ScotRail has been reached to accommodate any potential overlap between completion of the pollution prevention activities and commencement of the INFRACO works, and
- The contractor has submitted for ROTR possessions according to the look-ahead programme.

Third party interfaces

- NR – the Bridge Agreements are not yet concluded. There is an outstanding issue on indemnities to close out. CEC are taking this matter up directly with TS. An Operating Agreement with NR is currently with **tie**/TEL;
- Forth Ports – expecting imminent execution of agreement, awaiting FP final drafting comments prior to closure;
- Haymarket carpark compensation – **tie** have agreed compensation with NR and will settle this in Q1 09/10. **tie** continue to discuss with TS the additional compensation payable to First ScotRail, as a result of the extension of the FSR franchise from Nov 2011 to Nov 2014, as it is believed to be a TS cost;
- Building fixings – deemed consent has been obtained from 306 owners as well as 66 consents with the owners' agreement. There are twelve fixings where matters remain unresolved and CEC have committed to pursue these through Sheriff Court action. Dates for hearings are to be established. The building fixing construction programme will commence in Spring 2010;
- Interfaces are being managed to ensure that the SRU accommodation works and events are cohesive. **tie** have now agreed approach to the design and construction of the works with SRU, and
- Waverley Steps TAWS – NR, CEC/**tie** and Lothian Buses are engaged in discussions on programme and traffic management arrangements in advance of the TAWS inquiry scheduled for 22 July.

Fast link modifications (Front Line)

- Work is now complete with snagging now taking place.

Murrayfield Pitches (Souters)

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

Ancient Monuments (Land Engineering).Robert Burns Monument

- MUDFA currently awaiting IFC drawings for the works at Baltic Street junction. No MUDFA TM details available at present for the junction – LE to submit draft TM to facilitate removal of the monument.

BAA - Burnside Road (BAA)

- BRR Option 4B layout has now been commented on by BAA Stakeholder. Final design has been issued.
- BRR - Design – Design is virtually complete.
- BRR Tenders: Contract has been awarded to Raynesway construction on 17/07/2009. Site start date on 10th Aug 09.

Section 7 Utilities

- Utility works – Site commenced 06/07/2009 and progressing as per programme.

Hilton Car Park & Phase 1

- INFRACO – No works have commenced. Reviewable Tram Works Design (RTWD) Issued. BAA response received. Two objections raised.

Gogar Interchange

- Design kick off meeting held between **tie**, Transport Scotland & Network Rail. A design workshop being arranged to include all parties.

Section 1A Utilities

- PQQ's sent out to 14 companies. 7 have been returned to date.

Archaeological works at Constitution Street (Frontline):

- The archaeological works in Constitution Street and road reinstatement are now complete on the wall side of the road for the full length of 106 metres. No further remains were found in the section from CH 95 to 106, and
- Funding provided by CEC to deal with an unstable cemetery wall in Constitution Street.

3 Headline cost report

3.1 Current financial year

	FY 09/10 COWD Period			FY 09/10 COWD Year To Date			FY 09/10 COWD Full Year Forecast			COWD To Date Actual	Costs To Go Forecast	Total AFC Forecast
	Actual	Budget	Variance	Actual	Budget	Variance	Forecast	Budget	Variance			
Total Project COWD	7.560	7.157	0.404	31.022	28.180	2.842	150.084	150.072	0.013	262.041	265.058	527.099
Other Funding	0.624	0.591	0.033	2.561	2.327	0.235	12.656	12.391	0.265	21.636	22.150	43.786
Demand on TS	6.936	6.566	0.370	28.460	25.853	2.608	137.428	137.680	-0.253	240.405	242.908	483.313

- The budget for Phase 1a in 2009/10 is £150.1m which has been produced linking the **tie** re-baselined programme to INFRACO construction milestones. **tie** are currently in the process of agreeing an updated programme with the INFRACO contractor.
- In addition to phase 1a (£150.1m) 2009/10 costs, the budget also includes potential additional costs of £3.2m which relate to the postponement of Phase 1b INFRACO construction contract;
- Funding available from TS for the project in 2009/10 is £149m. The TS share of this year's budget (£153.3m) is £140.6m, giving available headroom of £8.4m.

Actual YTD P4 & forecast P5-P13 FY09/10

£m	YTD P 4	Forecast P5- P13,09/10	Total FY09/10
Infrastructure and vehicles	19.9	104.6	124.5
Utilities diversions	5.6	2.2	7.8
Design	0.9	0.4	1.3
Land and compensation	0.6	1.0	1.6
Resources and insurance	4.0	9.7	13.7
Base costs	31.0	117.9	148.9
Risk allowance	0.0	1.2	1.2
Total Phase 1a	31.0	119.1	150.1

- COWD to Period 4 is £31.0m (Period 3 £23.5m) against budget £28.2m. The main drivers for the £2.8m variance are: the timing of INFRACO and Tramco costs forecast in 2009/10 (£0.8m); Offset by a fall in PM costs (-£0.5m) and MUDFA costs variance (£2.6m).
- Tramco production activity is running ahead of schedule; this is reflected in the Tramco construction works forecast profile. It should be noted that the Tramco forecast has been amended with the release of the advanced payment now being smoothed periodically rather than quarterly to avoid 'spikes' in the cash application.
- As previously reported and agreed with CEC and TS, initial milestones under the INFRACO and Tramco contracts in the aggregate amount of £24.2m, in respect of advance material purchases, have been classified as prepayments. These will be reclassified as expenditure against funding in the periods when the related materials are delivered to site and incorporated in the works. The release will occur on the achievement of trackwork and structures milestones in 2009/10 and future years.

3.2 Current financial year profile

Profile for FY09/10 - Phase 1a only

£m	Q1 (p1-3)	Q2 (p4-6)	Q3 (p7-10)	Q4 (p11-13)	Total FY09/10
Infrastructure and vehicles	16.0	18.1	60.9	29.5	124.5
Utilities diversions	3.2	4.6	0.0	0.0	7.8
Design	0.7	0.6	0.0	0.0	1.3
Land and compensation	0.6	0.8	0.1	0.1	1.6
Resources and insurance	2.9	3.3	4.3	3.3	13.7
Base costs	23.5	27.3	65.3	32.8	148.9
Risk allowance	0.0	0.0	0.0	1.2	1.2
Total Phase 1a	23.5	27.3	65.3	34.0	150.1

- A full reforecast of the cost profile was produced which links the re-baselined programme to INFRACO constructions milestones. The realigned base costs and risk have then been linked against this programme; and
- The latest forecast for 2009/10 shows base cost of £148.9m and risk £1.2m, giving a total phase 1a cost of £150.1m. There is no movement in outturn forecast in the period. This will be re-assessed on agreement of an updated programme with the INFRACO contractor.
- Key sensitivities to the outturn forecast towards the end of 2009/10 are: Balgreen Road bridge £0.5m, Russell Road retaining wall £0.5m, Section 1A Utilities £2.5m, Depot works (and access bridge) £0.9m and Trackwork £1.2m.
- The cost profile above shows a ramp-up in activity throughout 2009, with base costs increasing from £23.5m in Q1 to a peak of £65.3m in Q3. This reflects the anticipated shift in INFRACO milestone activity from Q1 to Q3.

3.3 Total project anticipated forecast cost

Re-baselined Phase 1a AFC and profiling

£m	Cum FY07/08	Actual 08/09	FY 09/10	FY 10/11	FY 11/12	AFC
Infrastructure and vehicles	30.7	45.4	124.5	108.6	2.4	311.6
Utilities diversions	18.4	33.4	7.8	0.0	0.0	59.6
Design	21.4	4.7	1.3	0.0	0.0	27.5
Land and compensation	16.8	1.7	1.6	0.2	0.0	20.3
Resources and insurance	42.7	15.8	13.7	7.8	2.9	82.9
Base costs	130.0	101.0	148.9	116.5	5.3	501.7
Risk Allowance	0.0	0.0	1.2	18.4	5.8	25.4
Total Phase 1a	130.0	101.0	150.1	134.9	11.1	527.1
Phase 1b postponement	3.0	0.0	3.2	0.0	0.0	6.2
Total Phase 1a and Phase 1b	133.1	101.0	153.3	134.9	11.1	533.3

- The table above reflects the base costs and risks aligned to the re-baselined programme and re-alignment of the INFRACO milestones schedule. The AFC for Phase 1a above includes an unapproved increase of £15.1m to the project risk allowance. The approved cost estimate for delivery of Phase 1a of the project remains at £512m. The phasing of the £527.1m plan remains in-line with period 3 and will be updated when there is an updated agreed programme with the INFRACO contractor.
- The latest forecast view includes £3.2m of costs relating to Phase 1b which may crystallise as contractually payable to BSC due to the postponement of Phase 1b (this will require to be covered by current funding). Coupled with the re-baselined forecast, there is £11.7m of funding headroom within the £545m total funding available; and the Project Management Panel (PMP) is

up and running and being used by **tie** and INFRACO senior management to flag key issues and ensure proactive engagement to resolve issues and progress Tram construction works.

4 Time schedule report

4.1 Report against key milestones

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

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

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

Commission Section 5 (Roseburn junction to Gogar)	09-Nov-10	Mar-12
Driver training commences (excludes depot)	Nov 2010	Apr-12
Driver training commences (depot only)	Dec-10	Jan-11
System testing complete off street	09-Dec-10	Apr-12
Final tram delivered	17-Jan-11	17-Jan-11
Construction Line 1a complete	17-Jan-11	Mar-12
System testing complete on street	16-Feb-11	Apr-12
Commission Section 1 (Newhaven to Haymarket)	11-Mar-11	Mar-12
Letter of "no objection" from Independent Competent Person to commence tram running	17-Apr-11	Jun-12
Shadow running starts	18-Apr-11	Jun-12
Shadow running complete	July 2011	Sep-12
Letter of "no objection" from Independent Competent Person to commence revenue service	July 2011	Sep-12
Open for revenue service	July 2011	Sep-12

Guidance for Completion:

Legend for colouring of Actual / forecast date text

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

4.2 Key issues affecting schedule

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

4.3 12-week look-ahead

Milestones	Actual / current forecast date
5C Trackworks Depot Stop to Gogarburn	11-May-09A
1C Complete SGN diversion & BT Installation works at Mound junction **	12-Jun-09A
Depot Access Roads – Track & Stabling	20-Jul-09
5B Trackworks Balgreen Rd Saughton Road North	27-Jul-09
5B Trackworks Bankhead to Edinburgh Park Stn	27-Jul-09
1B Complete Utility diversions Foot of the Walk to Balfour Street	07-Aug-09
1B Complete Utility diversions Balfour Street to McDonald Road	07-Aug-09
6 – Depot Building Foundations	21-Aug-09
1A Complete Victoria bridge temporary utility diversions	24-Aug-09
1A Complete Tower bridge temporary utility diversions	24-Aug-09
2A S19 Haymarket viaduct re-commences	24-Aug-09
5B Trackworks Saughton Rd to Bankhead	25-Aug-09
1C Commence Utility diversions at Broughton St junction	31-Aug-09
2A Track works Haymarket to Roseburn Junction	07-Sep-09
W3/W4 Russell Road retaining walls	08-Sep-09
1D Complete Utility diversions works Lothian Rd junction	14-Sep-09
1B Leith Walk Road Works can re-commence	14-Sep-09
S20 Russell Road bridge	28-Sep-09
6 – Depot Sub-Station	05-Oct-09

1C Complete Utility diversions works St Andrews Square to Princes Street West	19-Oct-09
5A Demolition of Wanderers Clubhouse	20-Oct-09
1A Complete Utility Diversions between Port of Leith and Bernard Street	21-Oct-09
1C Complete Utility diversions works MacDonald Road to Picardy Place	22-Oct-09
1D Roadworks Haymarket junction	23-Oct-09
1A Complete Utility Diversions between Newhaven and Ocean Terminal	06-Nov-09
1A Complete Utility Diversions between Bernard Street and Foot of the Walk	16-Nov-09
1D Roadworks/ Trackworks Shandwick ch850-440	24-Nov-09
1C Complete track installation on Princes Street*	25-Nov-09

*Works recommenced 23rd March 09.

** Princes Street footprint handed-over to Infracore with Utility works continuing in Hanover Street until 14-Aug-09.

5 Risk and opportunity

5.1 Review of risk register

Summary

There were six risk reviews held in the period. One item was close on the Infraco concerns register. There were two risk draw downs approved in the period totaling £2,410,908. These were for the works below the earthworks outline which were carried out under the Princes Street Supplemental Agreement and the additional cost of full depth road reconstruction at Princes Street plus the additional CEC staff costs associated with the delay in design approvals. This leaves a risk and contingency balance of £17,011,775 (based upon the approved Project Risk Allowance at Financial Close).

Risk and Opportunity Reviews

The following reviews took place in the period:

Date	Format of review	Attendees	Comments
30/6/09	Change and Risk Review	Project Risk Manager Infraco QS Cost Control Manager	Review of current and proposed changes against risk allowance
13/7/09	Roads and Drainage Risk Review	Project Risk Manager Project Manager	All Risks and Treatment Plans Reviewed
13/7/09	Princes Street Risk Review	Project Risk Manager Project Manager	All Risks and Treatment Plans Reviewed
14/7/09	Structures Risk Review	Project Risk Manager Project Manager	All Risks and Treatment Plans Reviewed
14/7/09	Signalling, Communication and Control (SCC) Risk Review	Project Risk Manager SCC Project Risk Manager	Risks identified and treatment plans created
15/7/09	High-level Infraco Risk Review	Project Risk Manager Infraco Director	Risks and Treatment Plans Reviewed

Risk Register

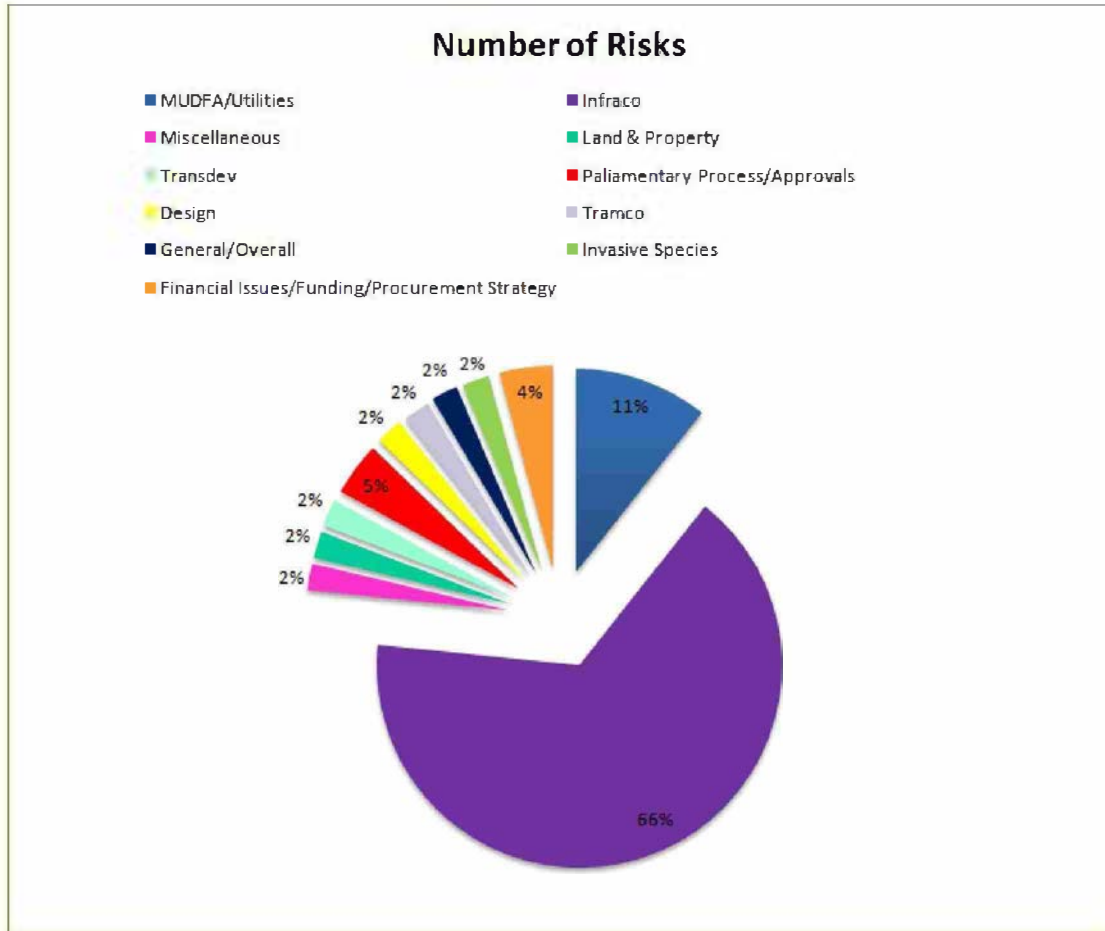
The Primary Risk Register is attached at Appendix D. The Primary Risk Register contains those high impact risks which are impacting (or have the potential to impact) the project at this moment in time. In addition, the potential risks identified in regard to programme slippage are being reviewed periodically and will form part of the updated QRA. There are 47 risks in the risk register. The top five project risks are listed on the following pages.

Top 5 Risks - Period 04 2009/10

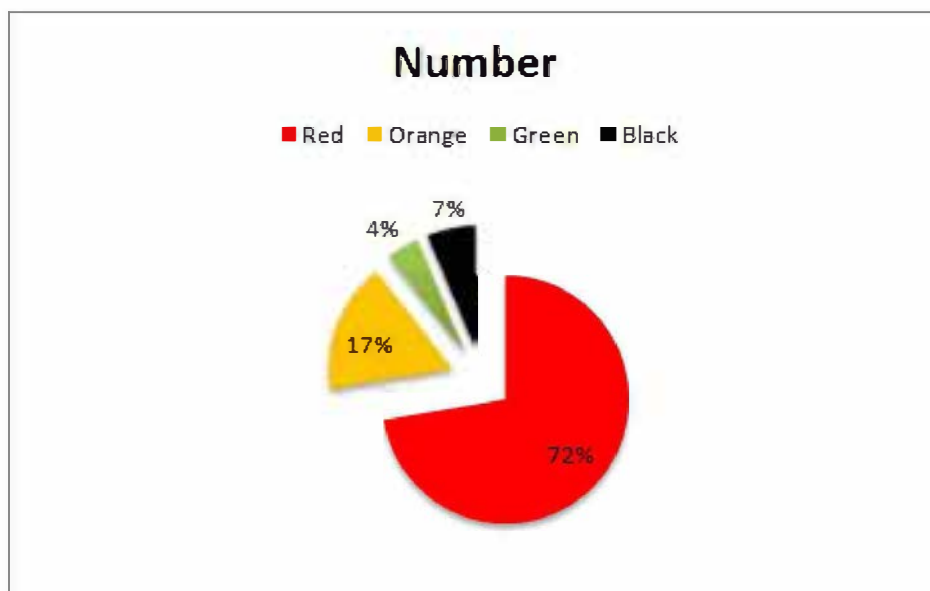
ARM Risk ID	Cause	Risk Description Event	Effect	Risk Owner	Significance	Black Flag	Treatment Strategy	Previous Status	Current Status	Due Date	Action Owner
343	General delay to programme with various causes e.g. failure to obtain approvals on time; parliamentary processes, contractor issues.	Delay to completion of project	Increased out-turn cost due to delay plus revenue loss	S Bell			Programme management paid.	On Programme	On programme	30-Dec-09	F McFadden
							Weekly tie/BSC	On Programme	On Programme	30-Dec-11	D Murray
							Liaison between tie/BSC programme managers	On Programme	On Programme	30-Dec-11	T Hickman
1077	Base Date Design Information Issued For Constructions (BDDI-IFC). Lack of visibility of design changes between November 2007 and May 2008	Tramworks price based on a design which may have been altered. Unclear who authorised design change	Additional cost and programme delay	R Bell			Establish a process which will act as a control mechanism for design changes. (If one exists already then ensure process is complied with)	On Programme	Complete	30-Jun-09	T Glazebrook
							Intensive Mediation Marathon 29/6/09 to 6/7/09 to try and resolve issues.	N/A	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)	N/A	On Programme	14-Aug-09	S Bell

1091		Excavation of soft, unsuitable material below Earthworks outline	Additional cost	F McFadden	[REDACTED]	Extent of soft ground being investigated. External specialist advice deployed.	N/A	On Programme	31-Dec-09	M Paterson
1101	Unreasonable behaviour of BSC commercial management	Unrealistic estimates being submitted for potential changes	Programme delay while disputes regarding estimates are resolved	F McFadden	[REDACTED]	All estimates to be scrutinised by tie commercial team and, where appropriate, challenge made to BSC. Additional resource (T&T) being used to check estimates to reduce delay.	On Programme	On Programme	30-Dec-10	M Paterson
1094		Roads throughout works require full depth reconstruction	Programme impact plus additional costs. £1.5m cap applies to only 4 areas. Total exposure estimated at £3m	F McFadden	[REDACTED]	Carry out surveys to confirm extent of roads requiring full depth reconstruction	N/A	Complete	30-Jun-09	C Neil
						Suite of options from surveys to be reviewed and agreement reached	N/A	On Programme	31-Oct-09	M Paterson

The risks within the Project Risk Register are categorised below.



The ratings of the risks are illustrated below.



New risks and concerns

The Project Risk Manager, in conjunction with the relevant director, agrees which concerns are escalated to risks and are added to the Project Risk Register. New risks are discussed in section 5.3. There were no items added to the Infracore Concerns Register or the Project Risk Register in the period. The following concern was closed on the Infracore Concerns Register as the telecoms diversions are now complete in this area.

Discipline	Risk description			
	Risk Number	Cause	Risk Event	Impact
Structures	32	Utilities delay in diversion works of BT services	South Gyle Tram Stop Retaining Wall. BT and Easynet diversion work not completed till end Feb 09 - work was due to start Sept 08	Delay and disruption to programme.

5.2 Risk action plan for next three periods

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

Action Owner	Risk ID	Action ID	Action Name	Due	Active	Complete	Late	Next 3 periods
A Hill	164	42	In conjunction with MUDFA, undertake trial excavations to confirm locations of utilities and inform designer. All complete but section 1A1 and York Place to Picardy Place outstanding.	30/07/2009	Yes	No	No	Period 5
A Hill	931	605	MUDFA trial holes to verify GPR surveys	30/07/2009	Yes	No	No	Period 5
A Hill	139	42	In conjunction with MUDFA, undertake trial excavations to confirm locations of utilities and inform designer. All complete but section 1A1 and York Place to Picardy Place outstanding.	30/07/2009	Yes	No	No	Period 5
F McFadden	1090	666	Tender docs issued based on scheme design information. Pre-tender estimate produced and final design ongoing. Delivery of tenders final outcome can be predicted.	30/07/2009	Yes	No	No	Period 5
F McFadden	336	662	SDS to review and identify high risk areas. Additional control measures to be added by tie.	31/07/2009	Yes	No	No	Period 5
G Barclay	164	664	Solution to be developed to manage the issue of the underground structures at Picardy Place and Lothian Rd and the cellar in York Place.	31/07/2009	Yes	No	No	Period 5
G Barclay	1084	654	Assess TM implications to minimise enabling works and additional cost	31/08/2009	Yes	No	No	Period 6
G Barclay	1085	655	Where applicable pursue third party funding	31/08/2009	Yes	No	No	Period 6
G Barclay	139	664	Solution to be developed to manage the issue of the underground structures at Picardy Place and Lothian Rd and the cellar in York Place.	31/07/2009	Yes	No	No	Period 5
I Clark	914	573	SDS to obtain consent for design in accordance with programme requirements - SGN and Scottish Power. Complete with the exception of plate 15 and the redesign of the affected utilities at Palmerston Place	30/08/2009	Yes	No	No	Period 6
M Blake	911	628	Liase with Scottish Power to agree and approve method of crossing tunnel	30/07/2009	Yes	No	No	Period 5
M Blake	914	557	SDS to obtain consent for design in accordance with programme requirements - SGN and Scottish Power. Complete with the exception of plate 15 and the redesign of the affected utilities at Palmerston Place	31/08/2009	Yes	No	No	Period 6
R Bell	1076	645	Tramworks PMs attendance at Traffic Management meetings. Weekly meetings between tie Tramworks and Utilities PMs. 4-weekly tie Tramworks/Utilities management meetings. Identification of programme clashes between Tramworks and Utilities works tracked.	31/07/2009	Yes	No	No	Period 5

5.3 Cost Quantative Risk Analysis

The Project Risk Allocation has reduced by £2,731,806 in the period. All draw-downs are shown in the table below. The current Project Risk Allocation (based on the approved budget) is £17,011,775.

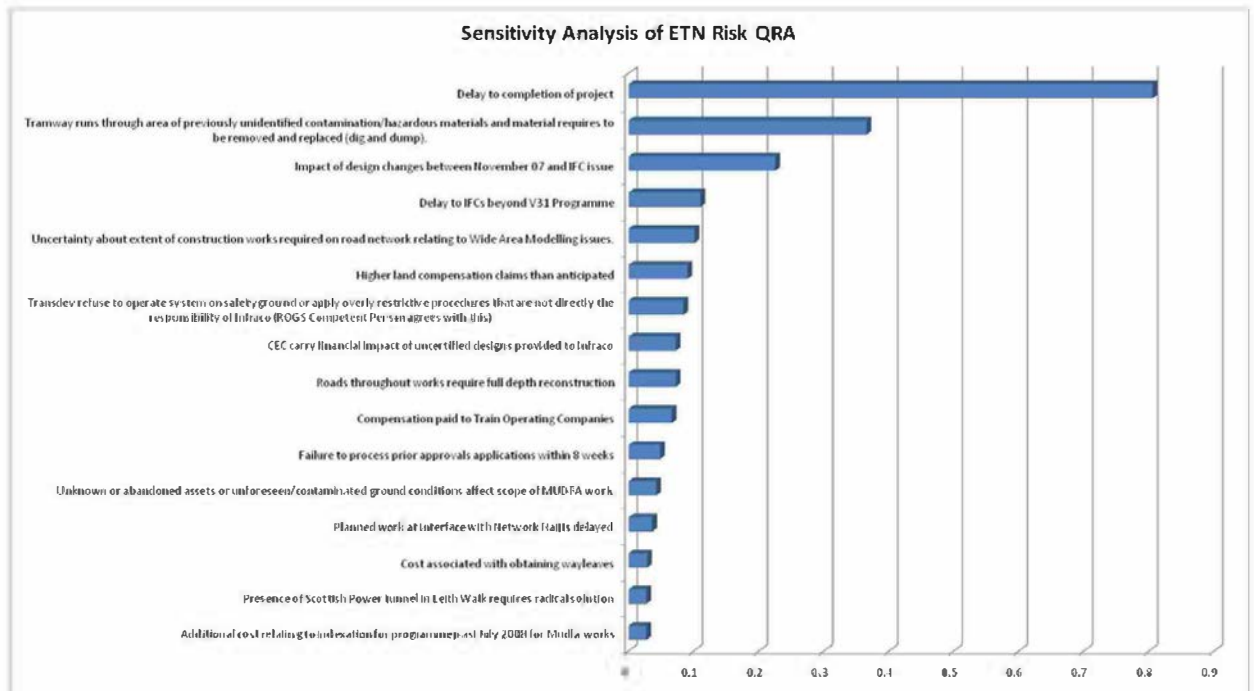
All existing risks, as well as those recently added, are being reviewed to ensure the QRA output is as accurate as is reasonably possible. It is accepted that the additional risks and increase in QRA output are currently unapproved. These are within the unapproved range in costs provided to TS on 26th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

Risk drawdown

The following table includes the approved drawdown applications on the project risk allocation in Period 4.

Description	Owner	Value (£)
CEC costs - staff recharges	A Coyle	400,000
Risk drawdown 1091+35 Princes Street Supplemental Agreement	M Paterson	2,010,908
Abortive estimates	M Paterson	6,498
Dressing of City During Festival - tie contribution	M Haeburn-Little	50,000
Tram inspector	A Richards	264,400
Total		£2,731,806

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.

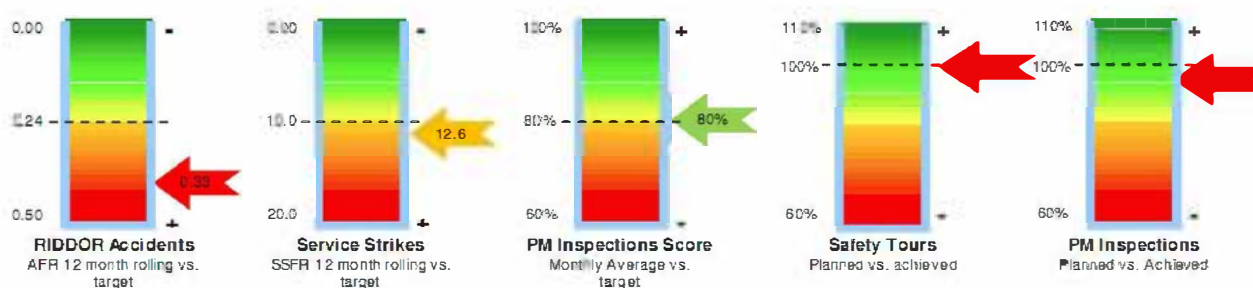
5.4 Schedule QRA

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

6 Health, safety, quality and environment

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

HS&E ACCIDENTS and INCIDENTS SUMMARY											
Project Running Totals	Total Hours	>3 day	Major	Injury	NM/Unsafe Condition	Service Damage	ENV	RTA	MOP	AFR	SFR
Period	133,001	0	1	2	8	15	0	1	5	0.75	11.28
Year to Date	547,380	0	1	12	62	49	0	4	19	0.18	8.95
13 period rolling	1,536,764	1	4	36	206	194	3	17	90	0.33 (0.26)	12.62



An accident occurred outside a Carillion site during period 4. An 82 year old woman fell after catching her heel on a temporary ramp on a pavement. This has been classed as a reportable accident by Carillion but was not directly as a result of the construction activities. Taking this into account, the Accident Frequency Rate rises to 0.33, however, if this accident is “ruled out” as it was not as a result of construction works, the AFR remains at 0.26. A joint investigation is underway by Carillion and tie with a focus on the temporary pedestrian ramps and where they should be used.

Service strikes have decreased slightly over-all during Period 4, however, they have increased for BSC. tie are reviewing the last 4 service damages for trends and will report any findings. tie will be introducing a specific report format for service damages to be completed by the contractor, this will help identify common themes and trends more easily.

Project Manager Inspections for MUDFA have been 100% of those planned, however, the joint inspection process for Infracore between tie and BSC has proved more difficult to achieve the 100%, with 7 out of 8 inspections completed. Scores are yet to be confirmed. This has also been the case for safety tours with 4 out of the 6 planned taking place.

A major operation to connect the new gas main at The Mound and abandon the old one went well. Gas that remained within the 120yr old main after diversion was burned off in a controlled manner.

tie have reviewed the past 12 months MOP incidents and have identified particular risk areas that will be given specific focus with our contractors prior to the Edinburgh Festival. The main areas to be targeted will be adequate reinstatements and boundary fencing

6.2 Environment

Noise complaints received for Carillion works in Constitution Street during the night. Investigation carried out and action taken to prevent recurrence. IEMA, (Institute of Environmental Management and Assessment) have asked if they can visit the project in Period 5 with a group of environmentalists, the Communications Team have been informed. BSC will be providing the updated Environmental Management Plan to tie on 17th July, this will be reviewed as per the employer's requirements.

6.3 Quality

During Period 3 the second tranche of inspections were carried out under "Deliver a Safe Tram" metrics. Edinburgh Park and Section 7 works were chosen.

Section	Activity	Data Checked					
		Interdisciplinary Design Check	Hazards	Inspection and Test Plan System	Design Variation/Change	As built	Asset Register
Edinburgh Park (5B)	Structural Concrete/Reinf	N	Y	Y	P	Y	N/A
A8 (5C)	Piling (permanent works)	P	Y	Y	P	Y	N/A
7A Gogar	Structural Concrete	N	Y	Y	P	Y	N/A
7A Gogar	Reinforced Earth Works	N	Y	Y	P	P	N/A
Period 4	Total (y)	0.5	4	4	2	3.5	0
	Max Possible Total (y)	4	4	4	4	4	0
Period 3 & 4	Average Compliance to date	6%	92%	75%	50%	69%	N/A

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

Action taken from last report/Period 3 – the report has been formally sent to BSC with a covering letter requesting confirmation that risks are being mitigated despite not having full IDC in place, this point was further raised in the BSC/tie Period Progress meeting. A tracker has been set up to monitor the close out of areas identified as deficient. Thus far, no finding has been closed. Reply due from BSC 24th July.

Of the 4 activities checked, none have shown evidence of having gone through BSC's Inter-Disciplinary Check process, however, there was evidence that the Piling Works at the A8 had had input from Siemens through a recorded Confirmation of Verbal Instruction (CVI) regarding earthing and bonding requirements. It should also be noted that for the structures, i.e. Gogarburn Bridge, SDS had provided a design certificate proving that the design calculations have been checked and verified.

The inspections showed that Hazards identified in the hazard log had been mitigated before construction had commenced, for example, Risk of Bridge collapse – ensure detailed design complete for structure, evidence witnessed was the design certificate from SDS.

Inspection and test plans - the contractors process for quality control during construction appeared to be to a good and acceptable standard. Contrary to last period, the correct revision of ITP for reinforced concrete pour was being used. Full evidence was in place in all locations

Changes to design on site were backed up by technical queries from BSC site to SDS, however, there was no evidence to show if the change had been assessed for the need to go through the IDC process.

7 Stakeholder and Communications

7.1 Media / Press Activity

With the recent restructuring of the Communications Team on the Trams Project we are now in the process of implementing a new and refreshed approach to press and media management within the organisation with a focus on proactively working with partners, stakeholders and the wider community to establish more positive coverage within the media generally and to find creative ways of ensuring key messages are delivered effectively and creatively.

This direction, whilst still in its very early stage, is already reaping some rewards, with extensive positive coverage in the Edinburgh Evening News, Scotsman and a number of local publications as well as on radio and television. We are also proactively engaging with key journalists, editors and stakeholders regularly to ensure that they are kept fully up to date with the latest and most accurate of information.

Some of the positive coverage which we've secured during this period includes:

- Richard Jeffrey profile piece – The Times
- The removal of the Sherlock Holmes Statue from Picardy Place which was covered by the Evening News and BBC Scotland
- Tram Veterans – we launched an 'appeal' through the Evening Times for any former tram workers to get in touch. We received 17 contacts from individuals who worked on various parts of the old tram network. The Evening News then published a double page spread highlighting some of the positive stories from six of the veterans who got in touch.
- Tram Mock-up was also covered in the media recently for passing the 100,000 visitor mark since it was put on display in late February. Interest was also generated from a gas burn off which took place at the Princes Street work site.
- Full page profile piece in the Falkirk Herald about Susan Clark, Deputy Project Director.
- Edinburgh Park Viaduct construction feature – Evening News
- Gas Burn-off from 120 year old redundant gas main – Evening News
- Badgers re-housed – An environmental piece around the Edinburgh Tram's development of new badger sets as part of its commitment to minimising the environmental impact of the project.
- Scotsman Construction feature including an interview with Richard Jeffery.

7.2 Customer Service Activity

The total correspondence for Period 4 numbered 448 - a reduction from period 3. Regarding the Format of correspondence, contact by phone and through face to face meetings constitutes 314 of the total 448 for the period. Face to face meetings have overtaken the number of email contacts made to the customer service team from Period 3. This trend has

been developing throughout Period 4 and has proved to be an emerging trend over the past few periods.

The subject of correspondence has shown that Information Requests remain the most popular topic for incoming enquires. Info Requests maintain an overwhelming majority with 354 contacts being made during the 4 week period. Period 3's distribution of contacts was very similar with 333 requests for information being made. Important to note is the number of complaints for Period 4 has dropped by 5 to 37 from last period where weekly complaints were consistently high during weeks 2, 3 and 4.

Complaints from this period consisted of a variety of different issues including road closures, noise complaints and blocked access routes by fencing. COCP complaints were also up to 22 for Period 4 compared to Period 3's 14 recorded complaints. Insurance claims over the past 4 weeks have also rose to 10 over the 8 logged last period. The claims were made due to alleged damage caused to a buildings, profits lost due to water shut offs and damage sustained to a member of the public's car. The remaining 25 contacts were related to various other issues.

7.3 Public Information Planning

Notifications for Period 4 consisted of 3 updates for Leith Walk as well as 3 for Constitution Street dealing with the ongoing routine utility diversion works in the area. One extra notification was also issued for Constitution Street regarding the archaeological work which is due to begin on the southbound carriageway outside South Leith Parish Church. Hopetoun Crescent and Carrick Knowe also received notifications on works in their area.

Recorded visitors traffic to the Edinburgh Trams website has dropped to 9252 from Period 3's total of 11,145. However an increase in direct update subscribers indicates that more people are choosing to have information pushed to them by edinburghtrams.com. New social networking initiatives will begin next period to expand and re-invigorate our online presence.

The most frequently visited web pages continue to be "Route Map" and "Story So Far". New video content from Tram TV was posted at the beginning of Period 4 which we anticipate could create a spike in media downloads during Period 5. The introduction of podcasting during next period should also assist in the anticipated spike in downloadable content.

7.4 Logistics

Over the past 4 weeks logistics teams helped with 318 inbound deliveries to businesses in all three areas of Haymarket, City Centre and Leith Walk. The teams were also called on to help with 58 outbound deliveries. Many more outbound deliveries remain unrecorded due to the fact that they would occur as part of many inbound deliveries.

Logistics also continued to assist venues along the tram route with various events including the Assembly Rooms on George Street.

7.5 Partner and Stakeholder Communications

tie's Primary School initiative conducted presentations to five school assemblies during the final two weeks of term before the summer holidays. Recruitment for the new Tramformers Scheme will begin during first term back at school. This will see Primary 6 pupils gaining valuable information from work site visits and tram work events in order to report back to their school on the projects progress. A handbook to accompany the scheme is currently being developed, which will outline the role of the Tramformer and their duties.

Regular meetings are held with local traders associations such as the Leith Business Assembly, Haymarket Traders Association and TOG. Attendance at the traders and business associations takes place monthly with ad hoc meetings throughout Period 3. This is to ensure

that they are kept up to date with construction works that may affect them and for them to raise any concerns they may have.

A presentation was also given to Braids Rotary Club by a member of the communications team regarding the project, from which there was positive feedback from the audience.

7.6 Freedom of Information Requests – FOI

During Period 4 a total of 7 requests have been responded to with a further 10 requests in the process of being formulated or signed off for sending. 2 requests are currently being reviewed, with one further response being reviewed by the Information Commissioner.

7.7 Process Team Review

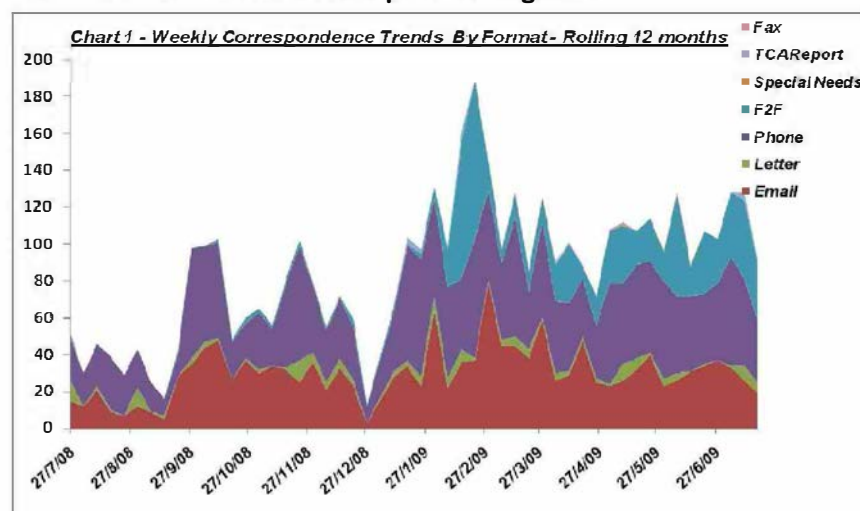
Following a review of the Customer Services and Communications team, a new team structure has been set in place which will ensure that nine areas of the City become designated Customer Response Areas. Under this new structure each area will have a designated Account Manager who has responsibility for ensuring that local communications are delivered efficiently and effectively – this may include a range of options from utilising the tram Bus, the placement of the Tram Mock up, posters, directional signage and graphic signage highlighting and promoting the shops and traders in that area.

Customer information letters are also being redesigned and signage is also at approval stage for large banners and billboard signs which will be used along the Tram route – this will include the Airport and Murrayfield. Plans are also underway with Chris Smith of the communities team at Edinburgh Council and the Economic Development team to review what usage can be made of empty shop window facades in the nine areas as well as in the City Centre.

7.8 Festival

Trams are cooperating with a range of organisations as part of a pan Edinburgh approach to managing and supporting the arrangements for the Festivals. There are a number of joint initiatives underway including the use of information advisers in the City Centre streets, revised Festivals signage, City Centre maps, welcome and directional signing along the Festival route, graphics in St Andrews Square windows and customer information available through social networking sites including facebook and twitter.

7.9 Customer Service Graphs and Figures



a) Monthly Customer Service Report 22/06/2009 - 17/07/09

Item	Volume Month	Volume (Cumulative from 21/11/08)	Performance (Month)	Performance (Cumulative)	Target Performance
Telephone response	267	2189	95	98	90% in 30 seconds
Telephone Same day resolution	260	2117	98	97	Info only
Email acknowledgement	116	1168	100		100% acknowledged within 24 hours
Email response			100	99	90% resolution in 7 days
Email same day resolution	114	1048	96	89	Info only
Letter acknowledgement	11	79	100		100% acknowledgement within 24 hours
Letter response			100	94	100% resolution in 7 days
Total Enquiry Volumes	394	3436			
Website update	126	675	100	100	Weekly

b) Out of Standard/Work in Progress statement at month end 17 July 2009

		Volume of WIP @ m/end	Oldest date	Oldest Issue	Handled By
M/e 17 July 2009	Email	0	N/A	N/A	N/A
	Letters	1	25/11/08 (Out of standard)	TRO Process	Alasdair Sim
	Calls	0	N/A	N/A	N/A

c) Monthly Notifications Performance 22/06/09 to 17/07/2009 and Cumulative from 21 November 2008

0 Major notifications –

10 Minor notification – 7 for utility (all in standard) – 3 for tram works, (1 in standard)

0 Emergency notifications

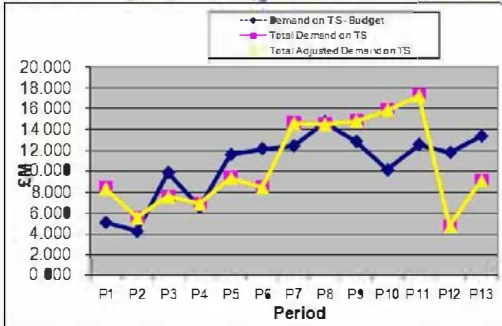
Notification Type	Work Site		Utilities	Tram works	Total	% in Standard
	Month	Notifications				
Major works		Notifications	0	0	0	
		In Standard	N/A	N/A	N/A	N/A
	Cumulative	Notifications	6	4	10	

		In Standard	0	1	1	10
Minor Works	Month	Notifications	7	3	10	
		In Standard	7	1	8	80
	Cumulative	Notifications	39	23	62	
		In Standard	32	14	46	73
Emergency	Month	Notifications	0	0	0	
		In Standard	N/A	N/A	N/A	N/A
	Cumulative	Notifications	14	0	14	
		In Standard	14	0	14	100

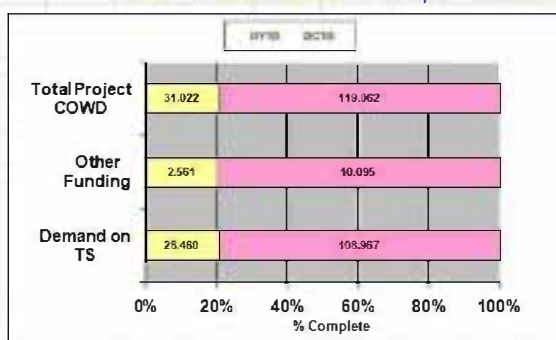
Appendix 'A' Detailed cost report

Detailed Financial Information		Edinburgh Trams													FY 09/10	Period Nr:	4
£m																	
6: Current Year 09/10 - Baseline Budget																	
1 Total Project COWD - Budget	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	Total			
	5.576	4.633	10.814	7.157	12.698	13.280	13.581	16.036	14.032	11.068	13.714	12.897	14.585	150.072			
2 Other Funding - Budget	0.460	0.383	0.893	0.591	1.048	1.097	1.121	1.324	1.159	0.914	1.132	1.065	1.204	12.391			
3 Demand on TS - Budget	5.115	4.251	9.921	6.566	11.649	12.184	12.459	14.712	12.873	10.154	12.582	11.832	13.381	137.680			
7: Current Year 09/10 - Actuals (Updated 4 weekly)																	
4 Total Project COWD + Revised Forecast	9.127	6.057	8.278	7.560	10.242	9.526	15.943	15.824	16.197	17.324	16.852	5.180	9.975	150.084			
7 Other Funding + Revised Forecast	0.754	0.500	0.683	0.624	0.846	1.051	1.316	1.307	1.337	1.430	1.557	0.428	0.824	12.656			
10 Total Demand on TS	8.373	5.557	7.594	6.936	9.397	8.476	14.626	14.517	14.859	15.894	17.295	4.752	9.151	137.428			
8: Variance tracker																	
12 Variance Line 1 to Line 4 - Project Actual vs Budget	3.551	1.424	-2.537	0.404	-2.455	-3.754	2.362	-0.212	2.165	6.256	5.137	-7.718	-4.610	0.013			
13 Variance Line 2 to Line 7 - Other Funding Actual vs Budget	0.293	0.118	-0.209	0.033	-0.203	-0.046	0.195	-0.018	0.179	0.517	0.424	-0.637	-0.381	0.285			
14 Variance Line 3 to Line 10 - Demand on TS vs Budget	3.258	1.307	-2.327	0.370	-2.253	-3.708	2.167	-0.195	1.986	5.739	4.713	-7.080	-4.229	-0.253			
9: Next Year 10/11 - Forecast (Updated 4 weekly)																	
18 Total Project COWD	Q1	Q2	Q3	Q4	Total	Financial Commentary - FY 10/11 Onwards											
	43.757	39.567	24.634	26.912	134.871	All costs are for Phase 1a only and includes an unapproved increase of £15M to the Project Risk allowance. This excludes £6.2M of potential Phase 1b costs and is consistent with the update sent on 26th March 2009. See section 3 of the TS report for further commentary.											
21 Other Funding	3.093	2.801	1.798	2.122	9.814												
24 Total Demand on TS	40.664	36.767	22.837	24.790	125.057												
10: All Years (Escalated) (Updated 4 weekly)																	
26 Total Project COWD	FY 03/04	FY 04/05	FY 05/06	FY 06/07	FY 07/08	FY 08/09	FY 09/10	FY 10/11	FY 11/12	FY 12/13	FY 13/14	FY 14/15	FUTURE	TOTAL			
	0.000	3.093	10.664	30.431	85.852	100.979	150.084	134.871	11.121	0.004	0.000			527.099			
29 Other Funding	0.000	0.000	1.000	0.019	10.287	7.769	12.656	9.814	2.241	0.000	0.000			43.786			
32 Total Demand on TS	0.000	3.093	9.664	30.412	75.565	93.210	137.428	125.057	8.880	0.004	0.000	0.000	0.000	483.313			

GRAPH 3 - Demand on TS: Actual/Budget Run Rate - Current Year FY 09/10



GRAPH 4 - Year To Date/ Costs To Go - % Complete - Current Year FY 09/10



11: Other Funding																
Budget (Current Year 09/10)																
RAB Funding (If Applicable)																
Other Funding Stream	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	Total		
	0.460	0.383	0.893	0.591	1.048	1.097	1.121	1.324	1.159	0.914	1.132	1.065	1.204	12.391		
Other Funding Stream														0.000		
Other Funding Stream														0.000		
Other Funding Stream														0.000		
Other Funding Stream														0.000		
Total Budget Other Funding	0.460	0.383	0.893	0.591	1.048	1.097	1.121	1.324	1.159	0.914	1.132	1.065	1.204	12.391		
Actual (Current Year 09/10)																
RAB Funding (If Applicable)																
Other Funding Stream	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	Total		
	0.754	0.500	0.683	0.624	0.846	1.051	1.316	1.307	1.337	1.430	1.557	0.428	0.824	12.656		
Other Funding Stream														0.000		
Other Funding Stream														0.000		
Other Funding Stream														0.000		
Total Actual Other Funding	0.754	0.500	0.683	0.624	0.846	1.051	1.316	1.307	1.337	1.430	1.557	0.428	0.824	12.656		

12: Promoter Full Year Forecast Run Rate (Total Project Costs)																
Period Trend of Full Year Forecast (Current Year 09/10)																
Full Year Forecast																
	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13			
	150.084	150.084	150.084	150.084												

13: Promoter AFC Run Rate (Total Project Costs)																
Period Trend of AFC																
Anticipated Final Cost																
	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13			
	527.099	527.099	527.099	527.099												

Headline Financial Information	Edinburgh Trams	FY 09/10	Period Nr: 4
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FY 09/10: Demand on TS 137.428

1: HEADLINE FINANCIAL COMMENTARY

PERIOD (PD) RESULTS:
Period is for Phase 1a only. See Section 3 of the TS report for further commentary.

YEAR TO DATE (YTD) RESULTS:
YTD is for Phase 1a only. See Section 3 of the TS report for further commentary.

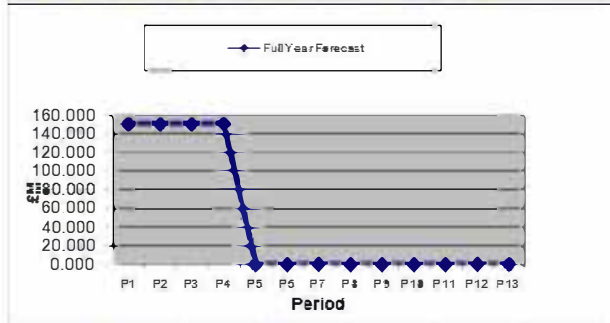
FULL YEAR FORECAST (FYF):
FY0910 is for Phase 1a only. See Section 3 of the TS report for further commentary.

ANTICIPATED FINAL COST (AFC):
AFC is for Phase 1a only and includes an unapproved increase of £15M to the Project Risk allowance. This excludes £6.2M of potential Phase 1b costs and is consistent with the update sent on 26th March 2009. See Section 3 of the TS report for further commentary.

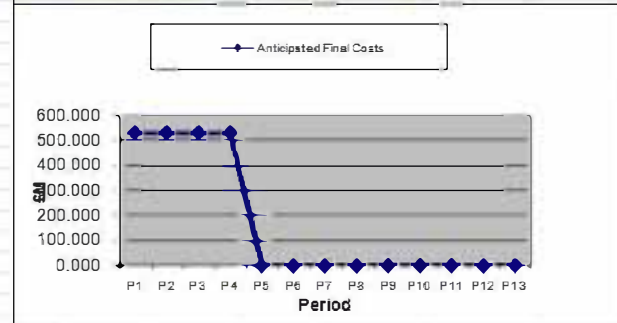
2: SUMMARY

	FY 09/10 COWD Period			FY 09/10 COWD Year To Date			FY 09/10 COWD Full Year Forecast			COWD To Date Actual	Costs To Go Forecast	Total AFC Forecast
	Actual	Budget	Variance	Actual	Budget	Variance	Forecast	Budget	Variance			
Total Project COWD	7.560	7.157	0.404	31.022	28.180	2.842	150.084	150.072	0.013	262.041	265.068	527.099
Other Funding	0.624	0.591	0.033	2.561	2.327	0.235	12.656	12.391	0.265	21.636	22.150	43.786
Demand on TS	6.936	6.566	0.370	28.460	25.853	2.608	137.428	137.680	-0.253	240.405	242.908	483.313

GRAPH 1 - Period Trend of Full Year Forecast (FY 09/10) - Total Project Costs



GRAPH 2 - Period Trend of AFC - Total Project Costs



3: RISK AND OPPORTUNITIES TO FULL YEAR FORECAST:
See Section 3 of the TS report for further commentary.

ANTICIPATED FINAL COST:
AFC is for Phase 1a only and includes an unapproved increase of £15M to the Project Risk allowance. This excludes £6.2M of potential Phase 1b costs and is consistent with the update sent on 26th March 2009. See Section 3 of the TS report for further commentary.

4: ACCRUALS COMMENTARY

5: TOTAL PROJECT ELEMENT SPEND BREAKDOWN (Total Project Costs)

PLANNED/EMERGING/FORECAST
Allocated in accordance with standard WBS. Values relevant to business case or other agreed baseline date to be known as original estimate.

Relevant Baseline date : **FBC 20/12/2007**

	Estimated Cost Total Project Costs			Actual Cost/Forecast Total Project Costs			Variance AFC v ELE
	Original Estimate	Escalated Original Estimate	Escalated Latest Estimate	Cost of Work Done (COWD)	Forecast to Completion	Anticipated Final Costs (AFC)	
General Overall	28.233	28.233	28.717	24.955	3.762	28.717	0.000
Procurement Consultant	68.126	68.126	71.502	54.035	17.467	71.502	0.000
Design	23.683	23.683	27.477	27.071	0.406	27.477	0.000
Financial Issues/Funding/Procurement Strategy	2.258	2.258	2.611	2.392	0.219	2.611	0.000
Parliamentary Process/Approvals	0.329	0.329	0.319	0.319	0.000	0.319	0.000
Procurement Construction Works	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Construction Works	273.102	273.102	312.958	129.120	183.839	312.958	0.000
Testing & Commissioning	1.984	1.984	0.000	0.000	0.000	0.000	0.000
Handing Over & Service Operations	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NOP/Rail Projects Interface (Promoters View)	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Interfacing Developments	0.000	0.000	0.000	0.000	0.000	0.000	0.000
TRAMS, Vehicles (Edinburgh TRAMS Use Only)	51.370	51.370	58.152	24.150	34.002	58.152	0.000
Risk	48.974	48.974	25.363	0.000	25.363	25.363	0.000
Opportunity (Negative Value)	0.000	0.000	0.000	0.000	0.000	0.000	0.000
OB/Contingency	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total	498.060	498.060	527.099	262.041	265.058	527.099	0.000

Appendix 'B' Change control register

(Register and other information as volunteered or requested from delivery organisation / promoter – There are none to report on at this point)

Appendix 'C' Programme information

To be sent separately to TS by CD:

- **Milestone Schedule Summary (progress against baseline)**
- **Full Detailed Time Schedule (progress against baseline)**
- **Critical Path**
- **12 Week Look Ahead Extract from Schedule**

Appendix 'D' Primary risk register

Risk Description											
ARM Risk ID	Cause	Event	Effect	Risk Owner	Significance	Black Flag	Treatment Strategy	Previous Status	Current Status	Due Date	Action Owner
1077	Base Date Design Information to Issued For Constructions (BDDI-IFC). Lack of visibility of design changes between November 2007 and May 2008	Tramworks price based on a design which may have been altered. Unclear who authorised design change.	Additional cost and programme delay	R Bell			Establish a process which will act as a control mechanism for design changes. (If one exists already then ensure process is complied with)	On Programme	Complete	30-Jun-09	T Glazebrook
							Intensive Mediation Marathon 29/6/09 to 6/7/09 to try and resolve issues.	N/A	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)	N/A	On Programme	14-Aug-09	S Bell

Risk Description											
ARM Risk ID	Cause	Event	Effect	Risk Owner	Significance	Black Flag	Treatment Strategy	Previous Status	Current Status	Due Date	Action Owner
1090	Initial costs for Burnside Road works higher than anticipated	Cost of works at Burnside Road exceed that allowed in project budget.	Additional Cost	F McFadden	[Redacted]		Costs being reviewed and tender documents sent out April 09.	N/A	Complete	30-Jun-09	F McFadden
							Tender docs issued based on scheme design information. Pre-tender estimate produced and final design ongoing. Delivery of tenders final outcome can be predicted.	N/A	Complete	30-Jul-09	F McFadden
1091		Excavation of soft, unsuitable material below Earthworks outline	Additional cost	F McFadden	[Redacted]		Extent of soft ground being investigated. External specialist advice deployed.	N/A	On Programme	31-Dec-09	M Paterson
1092		Costs associated with additional works requested by CEC planners	Additional cost	F McFadden	High - 25.00		Infraco commercial team reviewing	N/A	On Programme	30-Jun-09	M Paterson
1101	Unreasonable behaviour of BSC commercial management	Unrealistic estimates being submitted for potential changes	Programme delay while disputes regarding estimates are resolved	F McFadden	[Redacted]		All estimates to be scrutinised by tie commercial team and, where appropriate, challenge made to BSC. Additional resource (T&T) being used to check estimates to reduce delay.	On Programme	On Programme	30-Dec-10	M Paterson

Risk Description											
ARM Risk ID	Cause	Event	Effect	Risk Owner	Significance	Black Flag	Treatment Strategy	Previous Status	Current Status	Due Date	Action Owner
1094		Roads throughout works require full depth reconstruction	Programme impact plus additional costs. £1.5m cap applies to only 4 areas. Total exposure estimated at £3m	F McFadden	High - 23.00		Carry out surveys to confirm extent of roads requiring full depth reconstruction	N/A	Complete	30-Jun-09	C Neil
							Suite of options from surveys to be reviewed and agreement reached	N/A	On Programme	31-Oct-09	M Paterson
44	SDS contractor does not deliver the required prior and technical approval consents in line with SDS V31	Delay to IFC drawings beyond V31 Programme	Delay to programme with additional resource costs and delay to infraco. Impact upon risk balance.	D Sharp	High - 23.00		Evaluation of prior approval programme	Complete	Complete	31-Oct-08	D Sharp
							Hold fortnightly Roads Design Group	Complete	Complete	31-Dec-07	T Glazebrook
							Informal consultation prior to statutory consultation	Complete	Complete	31-Mar-09	T Glazebrook
							Integrate CEC into tie organisation/accomodation (office move)	Complete	Complete	4-Jun-07	T Glazebrook
						Weekly Meetings of Approvals Task Force	On Programme	On Programme	30-Oct-09	D Sharp	
173	Uncertainty over extent of contaminated land on route	Tramway runs through area of previously unidentified contamination/unforeseen ground conditions.	Increase in costs to remove material to special and other tip.	R Bell	High - 23.00		Issue containment and gi report to Infraco bidders	Complete	Complete	2-Mar-07	B Dawson
							tie to obtain ground investigation and contamination reports from SDS	Complete	Complete	30-Mar-07	A McGregor

Risk Description											
ARM Risk ID	Cause	Event	Effect	Risk Owner	Significance	Black Flag	Treatment Strategy	Previous Status	Current Status	Due Date	Action Owner
279		Third party consents including Network Rail consent are denied or delayed	Delay to programme; Risk transfer response by bidders is to return risk to tie; Increased out-turn cost if transferred and also as a result of any delay due to inflation.	D Sharp	High		Additional EMC modelling to give better info to NR	Complete	Complete	31-Dec-07	C Kerr
							CEC Planning - mock application by S&S	Complete	Complete	31-Dec-07	T Glazebrook
							Draft depot and station change proposals to NR	Complete	Complete	31-Jan-08	A Sim
							Identify fallback options	Complete	Complete	31-Aug-07	T Glazebrook
							Monitoring and tracking through the 3rd party rep	On Programme	Complete	30-Jun-09	D Sharp
							Monitoring of BBS - 12 week look ahead	On Programme	On Programme	14-Jul-11	R Bell
							Obtain critical consents prior to financial close	Complete	Complete	31-Jul-08	T Glazebrook
							Weekly meetings of Approvals Task Force	On Programme	On Programme	30-Oct-09	D Sharp
343	General delay to programme with various causes e.g. failure to obtain approvals on time; parliamentary processes, contractor issues.	Delay to completion of project	Increased out-turn cost due to delay plus revenue loss	S Bell	High		Liason between tie/BSC programme managers	N/A	On Programme	30-Dec-11	T Hickman
							Programme management paid.	N/A	On Programme	30-Dec-11	F McFadden
							Weekly tie/BSC commercial meetings	N/A	On Programme	30-Dec-11	M Paterson

Risk Description											
ARM Risk ID	Cause	Event	Effect	Risk Owner	Significance	Black Flag	Treatment Strategy	Previous Status	Current Status	Due Date	Action Owner
928	Major single safety incident (including a dangerous occurrence) during construction	Safety incident during	Delay (potentially critical) due to HSE investigation and rework. PR risk to tie and stakeholders.	F McFadden			All Site Staff to get CSCS or equivalent	On Programme	On Programme	30-Jan-11	C McLauchlan
							Develop and Implement Incident Management Processes	Complete	Complete	27-Apr-07	T Condie
							HSQE Audits, site inspections and Management Safety Tours to be carried out	On Programme	On Programme	31-Dec-10	B Cummins
							Safety Induction to be carried out for all site staff	On Programme	On Programme	31-Dec-10	B Cummins
							Site Supervisors to be appointed by tie	Complete	Complete	28-Feb-07	S Clark
931	Utilities assets uncovered during construction that were not previously accounted for; unidentified abandoned utilities assets; known redundant utilities; unknown live utilities; unknown redundant utilities.	Unknown or abandoned assets impacts scope of Infraco work	Re-design and delay as investigation takes place and solution implemented; Increase in Capex cost as a result of additional works.	C Neil			GPR surveys in areas where there are likely to be services	Complete	Complete	1-Apr-07	T Glazebrook
							Infraco trial holes where applicable.	On Programme	On Programme	31-Jan-10	P Dobbin
							MUDFA trial holes to verify GPR surveys	On Programme	On Programme	30-Jul-09	A Hill
977	Legal challenge. Extension of statutory consultation process. Large number of objections. TRO process is subject to a public hearing process.	Delay in achievement of TRO(s) due to a large number of public objections and/or a legal challenge to using a TRO to construct Infraco.	Requirement to start construction using TTROs	D Fraser			Use of TTROs to undertake construction of permanent works in advance of permanent TROs being approved.	On Programme	On Programme	30-Jan-11	A Sim

Risk Description											
ARM Risk ID	Cause	Event	Effect	Risk Owner	Significance	Black Flag	Treatment Strategy	Previous Status	Current Status	Due Date	Action Owner
105	Encountering archaeological finds/burials/munitio ns during construction	Exhumation of archaeological finds/burials	Delay in construction programme	C Neil	High		Agree protocol	Complete	Complete	20-Apr-07	T Condie
							AMIS to re-programme works accounting for hot-spots	Complete	Complete	30-Apr-07	S Clark
							Assess Infraco programme to determine if float contained within the high risk areas	Complete	Complete	28-Aug-07	T Hickman
							Carry out advanced archaeological works in advance of Infraco	Complete	Complete	31-Mar-08	P Douglas
							Check to ensure that AMIS programme has adequate float	Complete	Complete	14-May-07	J McAloon
							Identify hotspots	Complete	Complete	28-Feb-07	S Clark
							Meet Archaeologist	Complete	Complete	28-Feb-07	S Clark
Review Infraco programme regarding archaeological hotspots and ensure adequate programme float	Complete	Complete	31-Jul-07	T Hickman							

Risk Description											
ARM Risk ID	Cause	Event	Effect	Risk Owner	Significance	Black Flag	Treatment Strategy	Previous Status	Current Status	Due Date	Action Owner
139	Utilities diversion outline specification only from plans	Uncertainty of Utilities location and consequently required diversion work/ unforeseen utility services within LoD	Increase in MUDFA costs or delays as a result of carrying out more diversions than estimated	G Barclay	High		Carry out GPR Adien survey	Complete	Complete	31-Oct-07	J Casserly
							Identify increase in services diversions. MUDFA to resource/re-programme to meet required timescales.	Complete	Complete	23-Nov-07	J McAloon
							In conjunction with MUDFA, undertake trial excavations to confirm locations of Utilities and inform designer. All complete but section 1A1, York Place to Picardy Place and Palmerston Place IFC design incompatible with congested utilities.	On Programme	On Programme	30-Jul-09	A Hill
							Solution to be developed to manage the issue of the underground structures at Picard Place and Lothian Rd and the cellar in York Place	On Programme	On Programme	31-Jul-09	G Barclay

Risk Description											
ARM Risk ID	Cause	Event	Effect	Risk Owner	Significance	Black Flag	Treatment Strategy	Previous Status	Current Status	Due Date	Action Owner
271	Inadequate quality of submission of approval. Partial submission of package. Programme compression. Lack of CEC resources. CEC does not follow agreed procedures	Failure to process prior approvals within 8 weeks	Delay and disruption to Infraco	D Sharp	High	No	Agree approvals submission arrangements with CEC to align with SDS design programme and procurement programme	Complete	Complete	31-Mar-08	T Glazebrook
							Assure the quality and timing of submissions	On Programme	On Programme	31-Oct-09	D Sharp
							Final agreement to be approved by Roads Authority, CEC Promoter, CEC in-house legal and tie	Complete	Complete	28-Feb-07	T Craggs
							Finalise alignments and gain agreement from CEC	Complete	Complete	29-Dec-06	T Craggs
							Weekly meetings of Approvals Task Force	On Programme	On Programme	31-Oct-09	D Sharp
							Where appropriate increase case officer resource to cope with programme compression	Complete	Complete	31-Oct-08	D Fraser