



4 Week Period Reporting Pack 09/10

Project Title:

Edinburgh Tram Project

Reporting Period:

Period 09 2009/10

Transport Scotland Project Manager:

John Ramsay

Progress Meeting Date:

Report authorised by: **Steven Bell**

Signature: [Redacted]

Date: 11/12/09

For and on behalf of **tie Limited**

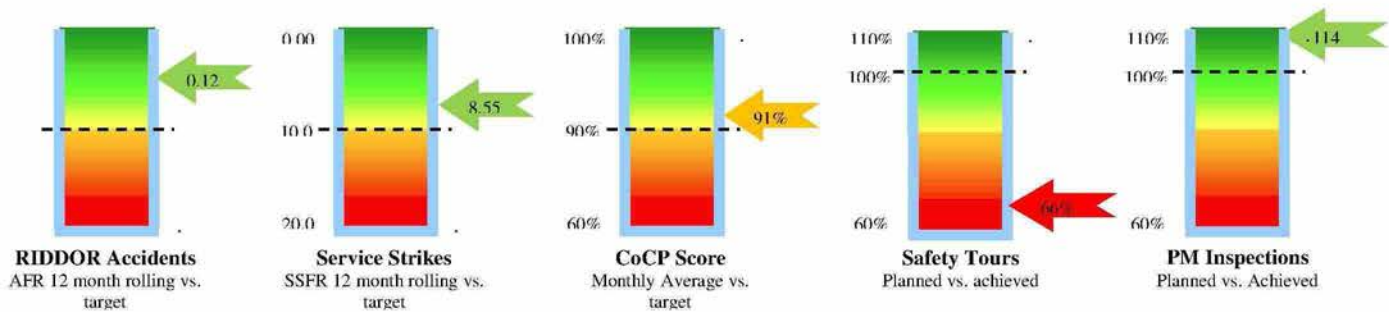
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1 Executive Summary

HSQE – Period 9

1.1

HS&E ACCIDENTS and INCIDENTS SUMMARY												
Total	Total Hours	>3 day	Major	Injury	NM/Unsafe Condition	Service Damage	EN V	R T A	MOP	AFR	SFR	
Period	153,150	0	0	3	20	9	2	0	5	0.00	5.88	
13 period rolling	1,717,639	1	1	31	258	146	13	8	51	0.12	8.50	



- There have been no reportable accidents during Period 9 bringing the 13 period Accident Frequency Rate to 0.12 which is ahead of the target for 09/10. Period 9 figures also show that the service damage frequency rate continues to fall, with no service strikes reported by MUDFA.
- BSC service strikes have risen in the period with a significant near miss and service strike recorded. However, the 13 period rolling frequency continues to fall significantly.
- There have been 10 near misses reported during Period 9 the majority of which were reported by the contractor - this is an improvement from last period.
- Targeted support was given to the Princes Street team, which assisted in a successful hand back of a safe and suitable Princes St to the City with an emphasis on safety and quality. Lessons learned from the hand over process will be reviewed and where necessary taken on board for future handovers. There was a significant reduction in the number of MOP incidents during period 9.
- Planned safety tour completion against target were not achieved in the period. This will be rectified in subsequent reporting cycles.

Section	Activity	Data Checked					
		Interdisciplinary Design Check	Hazards	Inspection and Test Plan System	Design Variation/Change	As Built	Asset Register
Section 1D Princes Street	OLE Bases/Structural Concrete	0.5	NA	1	NA	NA	NA
Section 2A Haymarket Viaduct	Re start on site 23/11/09	0.5	0.5	1	1	0	NA
PD	Total (y)	1	0.5	2	1	0	0
	Max Possible Total (y)	2	1	2	1	1	0
Total	Percentage P8	19%	69%	89%	50%	74%	21%
	Percentage P9	21%	73%	90%	53%	73%	50%

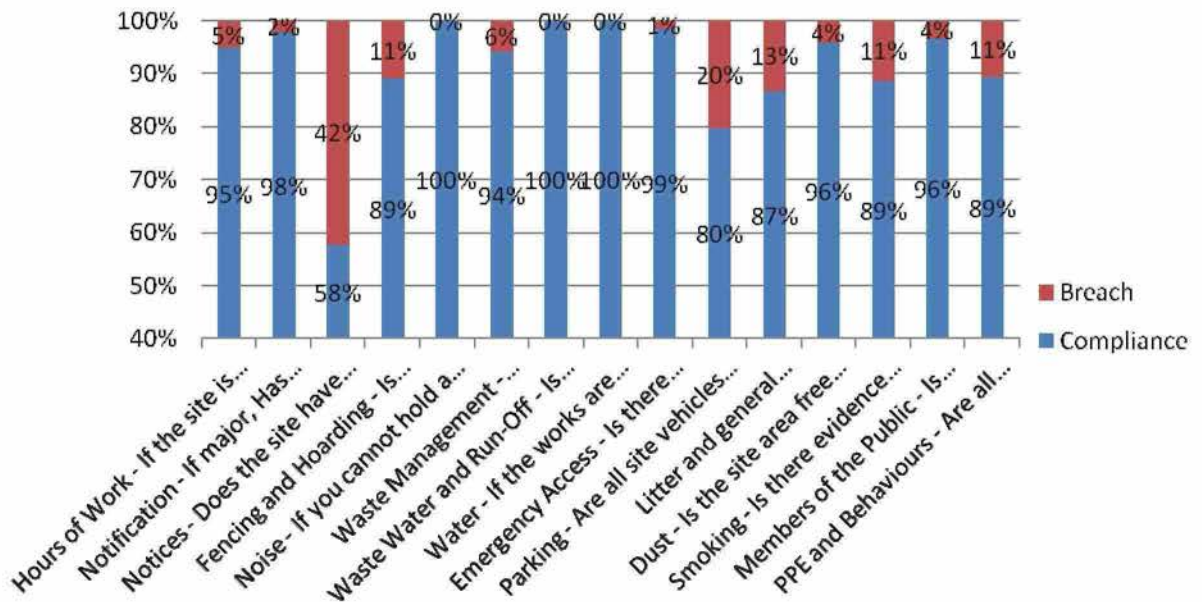
Key - Y = Evidence exists (1) N = No evidence exists (0) NA = Not applicable (-) P = Part evidence in place (0.5)

Due to the handover of Princes Street 3 / 4 Period 9 "Deliver a Safe tram" inspection metrics were held, at Princes Street to ensure records were fully in place. This has been noted as 1 inspection in order that there is no duplication.

A number of actions with regard to improving Deliver a Safe Tram Metrics have been identified and are ongoing:

- Contact now established for all aspects of the Deliver a Safe Tram strategy, with the additional support from BSC helping to provide more meaningful outcomes from the weekly inspections.
- Areas previously inspected are being re-inspected to close out actions.
- Weekly meetings now being held with tie Quality and BSC quality departments.

Code of Construction Practice Period 9



CoCP compliance continues to be monitored by tie with a number of increases in non compliances being noted during period 9, specifically the increase in non compliance of no smoking within the site. However slight improvements were noted in the compliance of notices/signs and parking on site. The CoCP relaxation process was improved during period 9 and will be rolled out to all relevant staff in the New Year - this should lead to improvements in compliance.

Progress

Progress in the Period for INFRACO works reflects a total cumulative completion of 12.5%, an increase of 1.7% against a plan of 3.0%. Works on Princes Street in the period indicate progress of 11.3% against a planned 4.9%, reflecting the efforts to complete these works to the planned opening date.

The cost, programme and risk information in this Period 9 report continues to be based upon an unapproved forecast on the information reported in May 2009.

Dispute Resolution (Infraco)

At the end of Period 9 only one item remained in dispute with BSC. This relates to Russell Road and a decision is due on 18/12/09.

tie has instructed works under a Clause 80.15 instruction for 2 of the structures identified in the DRP and work has subsequently started at Carrick Knowe Bridge and Russell Road in the period. As a result of Senior intervention discussions with Bilfinger Berger Principals in relation to agreement on EOT1 and programme, work will also commenced at the following locations in Period 9:

- Haymarket Viaduct – Excavation work started on 30/11/2009
- Haymarket Yards to Russell Road – removal of vegetation starting 07/12/2009
- Edinburgh Park Bridge Ramps – works started 23/11/2009
- Edinburgh Park Bridge to Guided Busway – due to start work w/c 07/12/2009 (soil strip / drainage)
- A8 Underpass - BT works finished. Piling platform works to follow on with a view to piling rig commencing work w/c 04/01/2010
- Depot Drainage - works continue, Estimate to be discussed after re-submission incorporating latest issued drawing

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

Commercial Update (MUDFA)

Discussions have continued with Carillion in relation to the Changes, re-measurement and disruption claim as reported in Period 8. More detail can be found in the body of this report. A strategy to conclude Carillion's works on the project has been implemented and Clancy Docwra has been engaged to complete the remaining utilities diversion works.

Design

Design approvals status in Period 9 is summarised below:

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

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

There is little evidence of better management of SDS by BSC, and the lack of support in supplying the Design programme only helps to strengthen this opinion coupled with the poor design performance. The approvals task force has been supplemented by a Design Progress and Design Issues meeting to provide additional management focus on design resolution. The withdrawn V51 includes further design integration activities and redesign activities, the impact of these will be analysed on receipt of the official SDS programme. **tie** has implemented an extensive programme of site based monitoring to validate & verify the installation of works in line with integrated design assured construction.

Utility works (MUDFA)

Progress on MUDFA works during Period 9 is as follows:

- Progress at the end of period 9 is 97.01% which is up from the 96.1% complete reported at the end of period 08.
- All of the progress achieved in the period are now concentrated around the Haymarket and the York Place to Picardy sections of the route and
- Carillion works between Constitution Street and Newhaven are complete, and Farrans have been awarded the remainder of the Section 1A utilities diversions which commenced early Period 9.
- Clancy Docwra have taken over the remaining utility work scope in the City Centre. This will be to complete the remaining works Post-Embargo – Haymarket, Shandwick Place, St Andrews Square, York Place, Leith Walk and Constitution St.

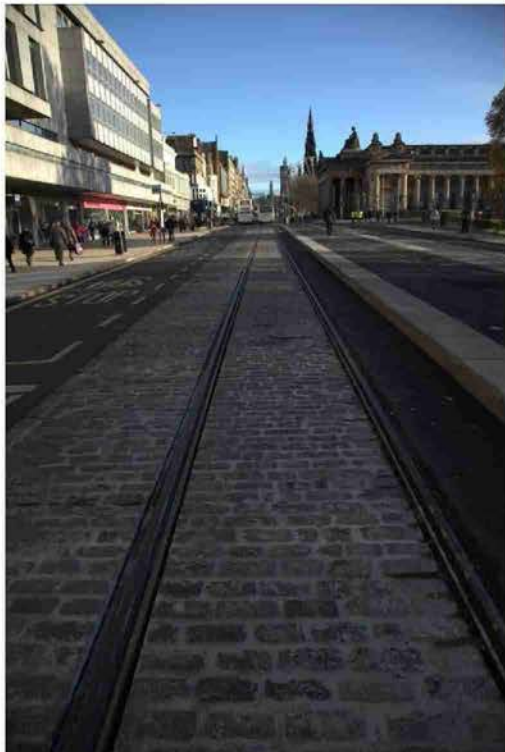


- Farrans started works on Utilities in the Forth Ports area, and Clancy Docwra are undertaking diversion works at Lindsay road.
- MUD works at Airport are 98% complete, and due to a BAA requirement a return visit will be required January/February 2010.

Tram works (INFRACO)

The project team were pleased with the notable and newsworthy success in regard to the opening of Princes Street and the return of buses and taxis which proceeded as planned on 29th November 2009.





That said, the project generally continues to experience problems with slow progress on INFRACO works and in particular, the appointment of direct BSC resource and the final appointment of the main package contractors. Some evidence of a remobilisation has however, been demonstrated with BSC re-commenced works at Haymarket Viaduct & Edinburgh Park approach ramps. Other successes in Period 9 are:

- 90% of Track installed on outbound route with approx. 50% of the welding work completed on the Guided Busway section.
- Enabling and piling works on Russell Road Retaining Wall (W4) continued in Period 9, and will restart in Jan 2010 – awaiting new piling rig on site.
- Carrick Knowe Bridge construction recommenced and on revised programme.
- Depot building construction ongoing and on programme.
- Depot site drainage continues
- Haymarket Viaduct works recommenced in Period 9.
- Hilton Car park works were completed during Period 9.
- Murrayfield accommodation works planning approval was granted.
- An agreed way forward for Constitution Street wall with CEC and the funding arrangements for this are still to be concluded.

Cost

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

A detailed review of costs was undertaken with Transport Scotland on 10/12/09, and updated milestones and forecasts were presented.

Key cost related items to note in Period 9 are:

- The budget for ETP in 2009/10 is £150.1m (£153.3m inc 1b) , which was produced linking the **tie** re-baselined programme to Infraco construction milestones. **tie** are now escalating all key issues to Dispute Resolution Procedure (DRP) and other contractual measures following the failure of mediation to provide an acceptable outcome.
- The outturn figure reported in P8 for 2009/10 (£122.9m) has been re-assessed in period 9 (£114.5m) using the latest construction milestone live forecast and QS view of changes profiled to the end of the year.
- The latest forecast (£114.5m) 2009/10 includes costs of £3.2m which relate to the demobilisation of Phase 1b Infraco construction contract. A payment of £3.2m was made to the Infraco Contractor in August.
- Funding available from TS for the project in 2009/10 is £149m. The TS share of this year's updated forecast (£114.5m) is £105.0m, giving available headroom of £44.0m.
- The negative figure forecast P10-13 in the table below relates to the net cost to utilities (cost-betterment), with betterment being greater than cost in the last quarter.

Actual YTD P9 & forecast P10-P13 FY09/10

£m	YTD P9	Forecast P10-P13,09/10	Total FY09/10
Infrastructure and vehicles	54.4	29.6	84.1
Utilities diversions	9.2	-1.6	7.6
Design	1.7	0.9	2.5
Land and compensation	0.8	0.8	1.5
Resources and insurance	11.1	5.4	16.5
Base costs	77.2	35.2	112.3
Risk allowance	0.0	2.2	2.2
Total Phase 1a	77.2	37.4	114.5

- ETP COWD to Period 9 is £77.2m (Period 8 £65.8m) against budget £97.8m. The main drivers for the -£20.6m variance are: the timing of Infraco works costs forecast in 2009/10 offset by MUDFA spend incurred over the original 09/10 budget plan
- As previously reported and agreed with CEC and TS, initial milestones under the Infraco and Tramco contracts in the aggregate amount of £24.2m, in respect of advance material purchases, have been classified as prepayments. These will be reclassified as expenditure against funding in the periods when the related materials are delivered to site and incorporated in the works. The release will occur on the achievement of trackwork and structures milestones in 2009/10 and future years.

Risk & Opportunity

There were twelve risk reviews held in the period. Four items were closed on the Infraco concerns register. There were thirteen draw downs on the risk allowance approved in the period totaling £1,191,219. These are detailed later in this report. This leaves a risk and contingency balance of £2,229,630 (based upon the approved Project Risk Allowance at Financial Close).

The Project Risk Allowance at financial close was £30,336,196. Drawdowns to the end of Period 9 09/10 now total £28,106,566. Remaining risk balance based on the approved QRA is £2,229,630.

An opportunities workshop was held in Period 7, and the treatment plans have been reviewed and updated in Period 9 with initial progress being made on track related items.

Communications & Customer Service

The media activity has been steady, mainly with balanced and positive coverage surrounding two key themes – Edinburgh Sparkles and the re-opening of Princes Street. In terms of the re-opening of Princes Street on 29th November, the lead up to the day provided a mixture of positive, balanced and some negative coverage based mainly on scepticism. However, with Princes Street opening on the 29th November as planned, there was a significant shift towards much more positive coverage regarding the trams project generally. There were a few exceptions, however, we were able to mitigate these rapidly along with our partners.

The Edinburgh Sparkles campaign in which Edinburgh Trams played a significant role, provided a joint approach to widespread positive coverage of the festive events in the City and in turn providing a platform for Edinburgh Trams being a key stakeholder within the Capital.

There were 20,526 visits to the www.edinburghtrams.com website, making this our busiest period on record. This increase in online activity is both reflected by and attributable to the ongoing success and growth of our social media presence.

Worksites are in the process of being removed across Edinburgh as part of the combined city centre Christmas embargo and goodwill gesture on behalf of Edinburgh Trams. Notifications therefore are aimed at giving businesses and residents a snapshot of the upcoming work and traffic management which is due to commence in January 2010. Updates have also been produced on off road sections of work as well. In particular, updates have been produced for Haymarket, the West End, York Place, Broughton Street and the stretch of work between Newhaven and Constitution Street.

A new booklet of tram facts has been produced which contains 20 key facts on the project. The facts cover a range of topics from why we are building the tram route to tram integration with Lothian bus services alongside general facts and figures relating to the length of the route, number of tram stops etc. The tram facts booklet is available to the general public and will be distributed to Edinburgh City Council as well as being available on the Tram Mock-up.

2 Progress

2.1 Overall

The cost, programme and risk information in this Period 9 report continues to be based upon an unapproved forecast on the information reported in May 2009. This will be updated once agreement is reached with BSC on a new revised programme. Work is ongoing to this end, and the current expectation is that this will be achieved at the end of January 2010.

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

- Finalisation of the agreement of change delaying the commencement of work;
- Incomplete utility diversions in the On-Street sections caused in part by traffic management constraints ;
- Slow mobilisation of INFRACO, including lack of formal sub-contracts being in place;
- Failure of INFRACO to submit preparatory paperwork in a timely manner and of a suitable content i.e. Work Package Plans, Method Statements etc;
- Requirement for re-design of temporary works;
- Design slippage since novation of design to INFRACO (now recorded in v51 of the design programme);
- Design changes as a result of the Prior and Technical Approvals process; and
- Consortium integrated design programme and validation

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

The **tie** live programme currently predicts an Open for Revenue Service date in mid Dec 2012. This has slipped since the last period and is mainly due to the lack of progress being achieved by INFRACO across the route compounded by delays caused by Utility Diversions at Haymarket, Leith Walk, York Place and Newhaven, alternative delivery arrangements are in place to mitigate further slippage.

Section	Description	Contract Programme Rev.01	BSC Forecast (P09)	BSC Movement in Period (Cal Days)	tie Live Forecast (P09) Rev.01**
Section A	Depot completion	01-Jun-10	20-Jun-11	-17	10-May-11
Section B*	Test Track Available	01-Jul-10	07-Nov-11	-28	12-Dec-11
Section C	All Phase 1a Construction complete	10-Mar-11	26-Jun-12	-04	19-Jun-12
Section D	Open for Revenue Service	06-Sep-11	23-Dec-12	-04	16-Dec-12

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

** V51 information used.

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.

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

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

2.2 Dispute Resolution

Dispute Resolution (Infraco)

At the end of Period 9 only one item remained in dispute with BSC. This relates to Russell Road and a decision is due on 18/12/09.

DRP No	Subject	Launched or planned	PD Mtg	Position Papers	CEO Meeting	Referral	Decision
5a	Gogarburn	√	√	√	√	√	Decision made and under review
5b	Carrick Knowe	√	√	√	√	√	
5c(B)	Russell Road	√	√	√	√	√	17/12
A	MUDFA Rev 8	√	√	√	√	On hold	
5e	Tower Bridge	P10					
5h	Bankhead Drive	P10					
5m	A8 Underpass	P10					
5l	Section 7 Drainage	P10					
5k	A8 Underpass Piles	P10					
5i	Baird Drive	P10					

Launched by tie

Launched by BSC

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

outturn. It is also not possible at the present time to predict the conclusions of reviews of contingency option programme delivery options, including additional sources of funding.

tie has instructed works under a Clause 80.15 instruction for 2 of the structures identified in the DRP and work has subsequently started at Carrick Knowe Bridge and Russell Road in the period. As a result of Senior intervention discussions with Bilfinger Berger Principals in relation to agreement on EOT1 and programme, work will also commenced at the following locations in Period 9:

- Haymarket Viaduct – Excavation work started on 30/11/2009
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- A8 Underpass - BT works finished. Piling platform works to follow on with a view to piling rig commencing work w/c 04/01/2010
- Depot Drainage - works continue, Estimate to be discussed after re-submission incorporating latest issued drawing

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

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

Commercial Update (MUDFA)

Changes – £5.5 million pounds of change has finally been agreed with Carillion in the period, this being within forecast allowances and substantially reducing the risk to the final cost for this element of the works.

The remaining changes are being reviewed and CUS require to provide substantiation of the amounts claimed. It is anticipated that discussions regarding these changes will be concluded by the end of January '10. However Carillion continue to introduce requests/changes for additional monies under headings not previously notified. Therefore despite agreement of a significant value the difference between the parties has not reduced.

Remeasurement of Works – Remeasurement of Work Sections is progressing with 20 No sections available. The value of the work has been agreed with Carillion for 8 No sections with a further 11No sections remeasured and the value of the work under discussion. The remaining as-built drawings will be available by the end of the next period and it is anticipated that the works will be completely remeasured by the end of Jan'10 . Meetings have taken place to agree the value of the measured sections however Carillion have taken this opportunity to re evaluate significant proportions of their works and agreement has not yet been reached in any additional sections.

Disruption Claim – No further information has been submitted by Carillion in the period and discussions are continuing to try agree how the claim, may be conclude. it is likely that it will require formal dispute resolution.

2.3 Design

IFC Design

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

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

- IFCs – Phase 1a: 89 issued out of 126 (figures in this report reflect the dates and progress shown in the unofficial version of v51 but do not include the 91 new IFCs included in v51. These will be reviewed once the official version of v51 is submitted.);
- Murrayfield Accommodation Works - granted in Period 9 raising the number of Prior Approvals granted to 93%. 4 left to be submitted (the RBS Gogarburn Tramstop, Modifications to Murrayfield TS retaining Wall, Gogar Interchange, Canopy & Boundary Treatment at Airport Kiosk) and 4 left to be granted;
- There has been an increase to the number of Technical Approvals granted (from an increased no. of TAA's), two remaining to be submitted 9 left to be granted;
- Structures approvals are progressing well – 5 to date remain to be approved and all but 1 of the original structures have been approved (Murrayfield Stop RW);
- Roads approvals - One area remains outstanding for Technical Approval in Phase 1a (1C2- Picardy Place to St Andrew Square);
- Scottish Water has sent formal acceptances to BSC for all sections with the exception of 1C2 (Picardy Place to St Andrew Square);) & 1C1 (McDonald Rd to Picardy Place).
- Sections 1B, 1D, 1C3, 5B & 5C close reports have been signed off by CEC, subject to BSC concluding any concessions included in the reports during construction. CEC are reviewing all other sections based on the prioritisation list provided by BSC.

Design approvals status in Period 9 is summarised below:

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

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

There is little evidence of better management of SDS by BSC, and the lack of support in supplying the Design programme only helps to strengthen this opinion coupled with the poor design performance. The approvals task force has been supplemented by a Design Progress and Design Issues meeting to provide additional management focus on design resolution. The withdrawn V51 includes further design integration activities and redesign activities, the impact of these will be analysed on receipt of the official SDS programme.

It should be noted that this is a consortium issue to manage and **tie** will provide support in this respect. **tie** has implemented an extensive programme of site based monitoring to validate & verify the installation of works in line with an integrated design assured construction.

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

2.4 Utility works (MUDFA)

Progress on MUDFA works during Period 9 is presented below (this excludes the remaining utility works being undertaken outwith the MUDFA contract between Cosntitution Street and Newhaven). Progress has slowed significantly due to the close-down of worksites for the December Embargo and the transfer of remaining workscope from Carillion to Clancy Docwra.

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

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- Carillion works between Constitution Street and Newhaven are complete, and Farrans have been awarded the remainder of the Section 1A utilities diversions which commenced early Period 9.
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- Farrans started works on Utilities in the Forth Ports area, and Clancy Docwra are undertaking diversion works at Lindsay road.
- MUD works at Airport are 98% complete, and due to a BAA requirement a return visit will be required January/February 2010.

2.5 Tramworks (INFRACO)

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Progress in the Period for INFRACO works reflects a total cumulative completion of 12.5%, an increase of 1.7% against a plan of 3.0%. Works on Princes Street in the period indicate progress of 11.3% against a planned 4.9%, reflecting the efforts to complete these works to the planned opening date.

The project does however, continue to experience problems with slow progress on INFRACO works and in particular, the appointment of direct BSC resource and the final appointment of the main package contractors. The BSC sub-contractors continue to operate with Limited Letters of Intent whilst awaiting conclusion of the full sub-contracts. Slow provision of estimates and finalisation of the agreement of change - Base Date Design Information (BDDI) to IFC is delaying the commencement of works at various locations including at Tower Place Bridge, Russell Road bridge, Murrayfield pitches Retaining Wall and Baird Drive Retaining Wall. Work on hold at Gogarburn Bridge due to issue regarding OLE pole position at the East abutment.

During Period 9 however, BSC has re-commenced works at Haymarket Viaduct & Edinburgh Park approach ramps. Works in Section 2A (corridor from Haymarket to Roseburn junction) to commence site clearance prior to track works are due to start in Period 10, with a planned completion at the end of April 2010.

Successes in Period 9 are:

- Princes Street reopened to Buses & Taxis on Sunday 29th November 2009 as planned.
- 90% of Track installed on outbound route with approx. 50% of the welding work completed on the Guided Busway section.
- Enabling and piling works on Russell Road Retaining Wall (W4) continued in Period 9, and will restart in Jan 2010 – awaiting new piling rig on site.
- Carrick Knowe Bridge construction recommenced and on revised programme.
- Depot building construction ongoing and on programme.
- Depot site drainage continues
- Haymarket Viaduct works recommenced in Period 9.
- Hilton Car park works were completed during Period 9.
- Murrayfield accommodation works planning approval was granted.
- An agreed way forward for Constitution Street wall with CEC and the funding arrangements for this are still to be agreed.

Work has continued on a number of worksites including:

Section 1C/1D: City Centre Princes Street – opened 29th Nov 09:

- Snagging continuing and due for completion in Period 10
- Frederick Street and Castle Street Junctions – Zebra crossing installation scheduled to be in place mid-Dec 09
- A revised traffic signal controlled junction at George Street/Hanover has been commissioned as part of the works.

Section 2: Haymarket to Roseburn Junction

- Site clearance prior to track works

Section 5A Roseburn to Balgreen Road

- Piling works on W4 retaining wall commenced 03 November 2009, however stopped on 05/11/09 due to damage to the auger bits due to underground obstructions.
- Additional SI commenced and completed.
- Cased piling rig will not be available until Jan10 to recommence piling to RW W4.
- Demolition of the JB McLean Lean-to commenced w/c 23/11/2009.

Section 5B Balgreen Road to Edinburgh Park Central:

- Carrick Knowe Bridge - South abutment and North abutment wall poured.
- Guided Busway – Track installation commenced and progressing well.
- Bankhead Drive – No works by BSC during the period.
- Edinburgh Park bridge – Pier 1 & 2 & the south abutment cantilever poured. BSC commenced excavation for the north approach and the south approach ramp.

Section 5C Edinburgh Park Central to Gogarburn:

- A8 underpass combined phase 1 & 2 remains on hold.
- Works to slew BT 6 way completed.
- Piling works programmed to commence 4th January 2010.

Section 6 Gogar Depot

- Depot Access Road and Depot Building Foundations started on 31st August 2009 and continuing with Drainage works;
- Depot Building Steelwork erection commenced 5 Oct 09 and the majority of primary and secondary steel works have been erected. Roof cladding works commenced during Period 9.

Section 7 Gogarburn to Edinburgh Airport

- Gogarburn Bridge: Beam West Abutment completed and bridge deck false work removed
- Culvert 3: Concrete works completed during period 9 .
- Hilton Hotel: works completed wc07/12/09.
- EAL INFRACO works confirmed to commence 11/1/10.
- S.I. commenced week 4 at Gogar Landfill

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

Milestones	Period 08		Cumulative (Short-Term)		Contract Planned to P09
	Planned	Actual	Planned	Actual	
Prelims	2	2	57	57	57
Construction	29	19	72	70	706

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 09 2009-10	Period		Delta	Cumulative		Delta
INFRACO PERIOD 08 PROGRESS (Contract Rev.01 Programme)	Plan	Actual		Plan	Actual	
Section 1a Newhaven to Foot of the Walk	3.1%	0.0%	-3.1%	39.1%	0.0%	0.0%
Section 1b Foot of the Walk to McDonald Road	3.0%	0.0%	-3.0%	51.4%	1.4%	-0.1%
Section 1c McDonald Road to Princes Street West	5.4%	0.0%	-5.4%	30.3%	0.0%	-10.8%
Section 1d Princes Street West to Haymarket	4.9%	11.3%	6.4%	84.9%	39.2%	-3.5%
Combined Sections 1A-1B-1C-1D (On-Street) Newhaven Road to Haymarket	4.0%	2.2%	-1.9%	47.5%	7.7%	-4.2%
Section 2 Haymarket to Roseburn Junction	5.0%	1.1%	-3.9%	95.1%	12.9%	0.0%
Section 5a Roseburn Junction to Balgreen Road	2.0%	0.0%	-2.0%	80.4%	3.5%	0.0%
Section 5b Balgreen Road to Edinburgh Park Central	1.5%	1.8%	0.2%	88.2%	23.1%	0.0%
Section 5c Edinburgh Park Central to Gogarburn	3.8%	1.4%	-2.4%	81.6%	4.2%	0.0%
Section 6 Gogar Depot	2.0%	1.2%	-0.8%	93.2%	13.9%	0.0%
Section 7a Gogarburn to Edinburgh Airport	3.0%	3.9%	0.9%	66.9%	34.0%	0.0%
Combined Sections 2A-5A-5B-5C-6A-7A (Off-Street) Haymarket to Edinburgh Airport	2.4%	1.5%	-0.9%	84.6%	15.8%	0.0%
FULL ROUTE PHASE 1A NEWHAVEN ROAD TO EDINBURGH AIRPORT	3.0%	1.7%	-1.3%	69.3%	12.5%	-3.4%

Section	Commentary
Section 1a Newhaven to Foot of the Walk	Section 1A4 Lindsay/Newhaven Road under review with both design and construction methodology challenges. Draft OSSA programme under review. Contract awarded to Clancy Docwra to allow Utility diversions to be carried out for W1 Lindsay Rd RW which releases Infraco works in this section. Temp. Utility diversions at bridges complete. Infraco Bridges works start date depending on BDDI – IFC agreement. Utility Diversions Transferred in Section 1A1 Plates 1-10 transferred from Utilities. Plates 15, 16, 17 & 18 (Baltic St Junction) Novated from Utilities. Design outstanding (IFA's Due MID November 2009)

Section 1b Foot of the Walk to McDonald Road	Roadworks due to commence post Leith embargo delayed to Jan 10 awaiting MUDFA completion, following abandonments and completion of additional works. Cabling work will not be finished by that time which will take 22 weeks to complete. Draft OSA programme under review.
Section 1c McDonald Road to Princes Street West	Roadworks due to commence post Leith embargo between McDonald Rd and Picardy Place delayed to Sep-09 awaiting MUDFA completion. Now likely to start Jan 10 following abandonments and completion of additional works. Cabling work will not be finished by that time which will take 22 weeks to complete. Section between Picardy Place and St Andrew Square still subject to programme challenge. Section of east side of St Andrew Square dependent on successful solution to telecoms diversions. Draft OSA programme under review. Princes Street re-opened to traffic on 29/11/09.
Section 1d Princes Street West to Haymarket	Princes Street re-opened to traffic on 29/11/09 with the first bus running along the street at 8.03am. The north south route through Hanover Street / the Mound reopened to traffic at about 11.00am. snagging works started.
Section 2 Haymarket to Roseburn Junction	Haymarket Viaduct recommenced with excavation works. Track works(earthworks) to start from Dec09
Section 5a Roseburn Junction to Balgreen Road	Temporary & permanent works re-design along with commercial resolution delaying various structures. All required consents in place for track installation. W4-Piling stopped on 05/11/09 as 2no. drill bits on 04/05 Nov 09. BSC decided on 05/11/2009 to demobilise the piling rig and equipment as the CFA piling was not working. Additional SI commenced 09/11/2009 and was completed w/e 20/11/2009. Now it's likely to restart on Jan10 due to the non availability of Rig.
Section 5b Balgreen Road to Edinburgh Park Central	Temporary & permanent works re-design along with commercial resolution delaying various structures. Progress in period is against S27 Edinburgh Park viaduct. All required consents in place for track installation. Carrickknowe Bridge progressing during Period 9 with steel fixings and shuttering on the both abutments.. Guided Busway section: Majority of civil works completed. 9 OLE piles failed to be rectified by Dec09. Track laying works started during period 9 Edinburg park Bridge- both approach ramp works started period-9.
Section 5c Edinburgh Park Central to Gogarburn	A8 Underpass recommenced during P13 2008-09 but has since been on hold due to discovery of obstructions & refusal of piles. Design solution to combine Phases 1 & 2 now in place. Traffic diversion completed. Delayed awaiting BSC to resolve construction methodology issues with telecoms companies. BT works have been completed period 9. Piling work to commence Jan10.
Section 6 Gogar Depot	Depot works recommenced 17 th August 2009. Depot Building column foundations completed . Depot Steelwork installation commenced 5/10/09 and completed to GL 12 of 20 . Roof Cladding works started and progressing during period-9.
Section 7a Gogarburn to Edinburgh Airport	Gogarburn Bridge: Bridge deck and embankment works completed. Culverts 1,2and 3 have been completed.

2.6 Tram construction (Tramco)

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

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

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

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

2.7 Preparing for Operations

tie has launched a new workstream know as 'Preparing for Operations'. This is a joint initiative with TEL and is focussed on getting ready for the Testing & Commissioning phases as well as the operational introduction of trams. As part of the process, a new Committee (Benefits Realisation & Operational Readiness) has been set up and is reporting to the TPB. Closely related to this, **tie** has recently notified Transdev of its intent to exercise its option to conclude the existing contractual arrangements as allowed for in the DPOFA contract. Discussions about an ongoing relationship are underway.

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

2.8 Interface with other projects

The following table identifies the other projects ongoing within the city which may impact on the Tram project. This is reviewed on an ongoing basis both internally and in conjunction with TS to identify conflicts and mitigations. The most significant interface of concern is the Gogar interchange. **tie** has instructed the design change and this is underway. A new project has been included this period identifying the movement of abnormal loads through the Leith Docks area for Fallago Rig wind farm.

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

External Projects	Promoter	Project Description	Potential Conflict	Tram Contract Dates		Project Dates		Comments
GREEN - No conflict anticipated but being monitored. AMBER - Managing any conflict. RED - Conflict which causes programme concern / unknown effect on tram programme.				Start	Finish	Start	Finish	
St.James Centre Re-development	CEC / Henderson Global	Redevelopment of existing shopping centre.	Interface with Picardy Place junction re-construction and Cathedral Lane sub-station	Mar-10	Jan-12	2011	2016	This project is now indicated towards the completion of Tramworks and therefore interfaces should diminish.
National Portrait Gallery		Major building construction and re-furbishment. The renovation of the external facadesy, the overhauling of the existing windows, the renewal of the existing rooflights and roof covering. Additionally, it is proposed that an external ramp is formed to the front main entrance to allow disabled access.	Interface with Infraco works on St Andrew Street / York Place	Mar-10	Oct-11	Oct-09	Nov-11	Combined TPM has been implemented and close working relationships for interface matters have been established.
St.Andrew Square Development	CEC	Demolition of existing buildings bordering South Side St.Andrew Square, South St David Street and Meuse Lane	Infraco Programme	Jan-10	Mar-10	TBA	TBA	Infraco activities will not commence until Jan 2010
Waverley Steps	Transport Scotland	Refurbishment of existing Waverley Steps with inclusion of new escalators and elavators	PRINCES STREET Traffic management issues when Infraco in Princes Street should this project require deliveries, craneage or Traffic management in same time period	Feb-09	Nov-09	Jun-10	May-12	No conflicts expected.
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 (Oct-10)	Jun-10	May-12	No conflicts expected.
Waverley Station Re-roofing	Transport Scotland	New roof and general upgrade to station interior	May be Traffic Management issues	Jan-10	Mar-10	Apr-10	Apr-14	No conflicts expected.

External Projects	Promoter	Project Description	Potential Conflict	Tram Contract Dates		Project Dates		Comments
GREEN - No conflict anticipated but being monitored. AMBER - Managing any conflict. RED - Conflict which causes programme concern / unknown effect on tram programme.				Start	Finish	Start	Finish	
NATO Conference				Jan-10	Nov-10	13-Nov-09	17-Nov-09	No conflicts expected.
Princes Street Hotel	Deramore Property Group			Mar-09	Nov-09	Early 2009	Jun-11	Princes Street works complete with no issues
Princes Street Property	asediqbal consulting			Feb-09	Nov-09	TBA	TBA	Princes Street works complete with no issues
New Hotel in Haymarket	Tiger Developments	New build hotel		Jan-10	Sep-11	TBA	2012	No issue as Project cancelled as Planning Application rejected October 2009.
Haymarket Interchange	First Scotrail	Capacity Increase Project - Installation of new lifts and walkways from Haymarket Terrace	Utility diversions continue until late Jan.2010 Potential Interface with Infraco works at Haymarket junction commencing Jan.2010	Jan-10	Sep-11	Dec-11	Dec-12	No conflicts expected.
Haymarket Station Re-furbishment	Network Rail/Scotrail	Main Building refurbishment works	Any external works could conflict with TM for either or both MUDFA and Infraco and could conflict with Infraco construction works. Bridge to be installed from Haymarket terrace to Platform 0 to comply with DDA	Jan-10	Sep-11	Aug-09	Jan-10	May Gurney programme received during Aug09. No conflicts expected. TM requirements being monitored. Remaining utility works are to the east of the station/haymarket junction. Infraco works not expected to commence until Jan 2010.
Haymarket Station	First Scotrail	Installation of new lifts and walkways from Haymarket Terrace	Construction of Haymarket viaduct	Jan-10	Sep-11	Jan-10	TBA	

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

Colour code

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

This has been sent to TS for their input for projects they are sponsoring and will continue to be reviewed by **tie** to identify any potential impacts on the Tram programme as early as possible in order to manage them. A review of the TS projects was carried out mid November with a wash-up session for 2009 arranged for late December with TS.

2.9 Other

Gogar Surface Station

Key issues/Decisions Required

1. Network Rail has written to **tie** stating its requirements for site access and seeking binding assurances from **tie**. These cannot be given without significant risk to the overall Edinburgh Tram Network.
2. **tie** are submitting budget estimates to Transport Scotland for these NR related issues to enable a considered decision to be made in the best interests of the ETN and EGIP programmes by the principal funder of both schemes.
3. NR and Scottish Water to agree on the diversion route for a sewer at Gogar as the chosen route and consequent impact on trackform design and/or retaining wall design to be evaluated.
4. Decision required on BSC involvement in construction staging discussions and how BSC costs for this would be met. **tie** seeks agreement from Transport Scotland to fund BSC's demonstrable costs for construction staging.
5. Decisions required on long-lead items and abortive works between all concerned parties (TS/**tie**/NR) and discussions are ongoing to this end.

Design progress

At the end of Period 9 **tie** assesses the design phase as 44% complete compared with 62% planned. The cost of work done is £385k compared with £550k planned. The forecast outturn remains unaffected.

Civils and system design is now progressing in parallel with resolution of the commercial issues that have arisen from the change in layout of vertical circulation tower from that originally proposed in the GRIP 3 report. **tie** is pressing BSC to produce an integrated design programme that reflects the actual start date and completes by the end of the 2009-10 financial year.

Period 9 progress and actions to recover slippage

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

tie has identified a number of actions that can help to recover earlier design slippage. These have started to be implemented but the potential recovery has not yet been realised. The table below outlines measures being taken, their potential effect and progress to date.

Activity	Potential impact	Progress to date	Dependencies
Bring forward submission of Prior Approval to December 2009	Prior approval granted 11 days earlier	Informal consultation taken place with tram operator & scheduled with CEC Planners	Depends on Prior Approval not being delayed to re-align retaining wall to accommodate sewer diversion

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

tie did not start the Joint Revenue Committee tram revenue modelling work in Period 9 as originally planned. **tie** requires further information on likely patronage of the rail station from Transport Scotland and a confirmation of the runtime impact of introducing the extra tram stop from SDS. **tie** has requested confirmation of when this information will be available from TS and SDS and will re-programme the JRC modelling when the timescales are confirmed.

Programme milestones

Activity	Planned	Period 6 forecast	P9 forecast / Actual
Complete prelim design of additional tram stop	10/8/09	18/9/09	30/9/09 (A)
Submit Structures Technical Approval application	19/11/09	8/1/10	8/1/10
Submit Prior Approval application	26/11/09	15/1/10	18/12/09
Receive Prior Approval	5/2/10	12/3/10	1/3/10
Receive Structures Technical Approval	5/2/10	8/3/10	8/3/10
IFC	26/2/10	22/3/10	22/3/10

Integrated Programme Development

tie has continued to meet TS and NR to allow TS to develop the integrated programme but little progress has been made in Period 9 due to the fundamental difference in view held by Network Rail over approach to programme and site access.

Further work is required and important decisions of principle are needed by Transport Scotland as Network Rail is seeking guarantees on access that **tie** cannot give and as sated previously, discussions between the parties are ongoing.

tie is investigating mitigation measures that could be instructed by Transport Scotland that would increase the likelihood of meeting access dates sought by Network Rail. However, **tie** would still not be able to guarantee access and risk around these dates would need to be borne by Transport Scotland.

Further meetings have been taking place on the diversion of the 1500mm combined sewer by Network Rail. **tie** has assisted Network Rail by attending meetings on this issue and reviewing potential solutions to the conflict between Scottish Water's preferred diversion and the tram trackform.

A new option was put forward in the last week of Period 9 to divert the sewer such that it would not conflict with the track – however, this could necessitate a change to the retaining wall alignment. **tie** is proceeding with design of the Retaining Wall in its existing alignment while this conflict is being resolved.

Overall design co-ordination

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

The significant outstanding design co-ordination issues are:

- conflict between 1500 mm sewer diversion and tram trackform
- location of tram radio mast – **tie** is providing technically acceptable locations to Network Rail for them to choose one of those locations

Tram design issues

BSC has identified a need to discuss the reduced headroom for the OLE through the tramstop with the Independent Competent Person. BSC is arranging a meeting with the **tie** engineering team for Period 10 so that BSC can present a proposal to the ICP with the support of **tie**.

Land

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

Other agreements

tie has highlighted the need for various operating and commercial agreements between **tie** and Network Rail and has asked Network Rail to arrange initial meetings to discuss the scope of these agreements. Network Rail arranged the first meeting on this issue on 2 December.

Patronage modelling

tie had originally forecast that we would start patronage modelling in Period 9 but **tie** is still seeking 2 sets of information to provide to JRC. **tie** has requested an update to the run-time model from SDS that shows journey times with and without the Gogar Interchange, and have also requested rail patronage information from Transport Scotland that is consistent with the likely stopping pattern at Gogar Interchange.

Cost reporting

Cost of work done to date is £385k versus the £550k originally forecast.

Agreement has been reached with Transport Scotland on the substantiation and payment of the £100k contribution to **tie** costs.

Scope of **tie** works

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

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

We have also reached the point where further construction staging meetings need to involve BSC for **tie** and Network Rail to make meaningful progress. As **tie** has not been able to issue any instruction

on the construction of the Gogar Interchange BSC is legitimately concerned that their costs for attending construction staging meetings would not be covered if the Gogar Interchange did not go ahead.

tie considers that it will be necessary to underwrite BSC's demonstrable costs to take part in construction staging meetings and **tie** requests a commitment from Transport Scotland to support this.

The scope of **tie** works also does not include any external legal costs in relation to land or agreements and it is likely that **tie** will need legal advice on before the end of the financial year in relation to agreements with Network Rail. **tie** expects that the extent of this will become clearer during Period 11 as Network Rail tables some draft agreements for review.

Long-lead items / abortive works

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

Two examples are:

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

tie will continue with the implementation of the existing ETN scheme unless otherwise instructed by Transport Scotland. **tie** will hold further discussions on the options with Transport Scotland in Period 10.

Other Reporting Streams Progress

The following sections describe progress on other areas of the project during period 9.

Temporary traffic regulation orders (TTROs)

- No major traffic switches implemented in the period.
- Traffic management planning ongoing for Princes St Phase 3, Haymarket and Picardy Place.
- Buses returned to Princes Street on 29th November 2009.

Traffic regulation orders (TROs)

- The Council decision made on 22 September 2009 in support of the TRO process triggered commencement of TRO1.
- The Statutory Consultation process commenced on 12 October 2009, this process being limited to 7 Statutory Consultees only at this stage. This process concluded on 12 November, with no showstoppers identified, although a number of comments raised by L&B Police and Lothian Buses will require to be addressed in TRO2.
- It is envisaged that the Public Deposit of TRO1 will take place in Q1 2010, and envisages the order being made in July 2010.
- TRO 2 will follow the making of TRO 1. TRO 2 will reflect the complete design and issues that have arisen from TRO 1.

Network Rail

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

Third party interfaces

- Forth Ports – It is anticipated that CEC will enter into Licence agreements with Forth Ports for the remaining utilities and BSC works separately. The terms of the BSC Licence to work in the Leith Docks area has been agreed in principle with Forth Ports, and it is expected that the licence will be executed before the Christmas break. Discussions are reaching a conclusion between CEC and Forth Ports regarding a renegotiated S75 arrangement, and to this end it is anticipated that CEC and FP will execute the variation to the Original Tram Agreement early in 2010.
- Haymarket car park compensation – **tie** have agreed compensation with NR. **tie** continue to discuss with TS the additional compensation payable to First ScotRail, as a result of the extension of the FSR franchise from Nov 2011 to Nov 2014. It is believed that this should have been allowed for in the franchise extension discussions between TS and FSR. **tie** plan to take the matter up directly with TS;
- Building fixings – CEC has reached agreement with the parties objecting to the building fixings process without the need to resort to court action. It is expected that BSC will begin the process to notify owners for commencement of preparatory works.
- Interfaces are being managed to ensure that the SRU accommodation works and events are cohesive. **tie** have now agreed approach to the design and construction of the works with SRU.

BAA - Burnside Road (BAA) Raynesway Construction

- Bridge installation and abutment works completed.
- Road construction experienced weather delay in the period however; this is being recovered within the programme.

- The new road and barrier system are forecast to be in operation by 18th December 09.
- Planned Completion Date is 12th January 10.

Section 7B Utilities

- Service diversions and reinstatements complete with the exception of the HV cable installation, which is due for completion on 18th December, 09 and the foul main tie-ins, which will commence 11th January 2010.
- The Completion Date will be amended formally to January 10 on review of the work methodology from Farrans for the foul main works.

Hilton Car Park

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

Section 1 Utilities

- Farrans commenced works 9th November 09
- C4 agreements with Scottish Power, Scottish and Southern Energy, BT, Tele West and GEO are all to be agreed.
- Scottish Water are still to approve the protection proposals including the adoption of the sewer design at Ocean Drive.
- The way-leaves through ADM Milling are not agreed, although the intent to carry out a land acquisition may negate this element, principle of land agreement is in place, finalisation required with Forth Ports and AD.
- The licence with ADM is in place and works commenced as of 30th November. The tender works exclude all diversions in plates 11-17 and there remains substantial utility works in plates 14-17 to resolve.
- The utilities are being relocated out of Lindsay road by Clancy Docwra, who commenced on 11th November. BT and GEO cable diversion works by the utilities will dictate the programme.

Murrayfield Pitches (Souters)

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

Archaeological works at Constitution Street (Frontline)

- Archaeological works completed Period 9.

Following meetings involving CEC and Historic Scotland (HS) it has been agreed the Cemetery Wall can be taken down and rebuilt, Heath architects are producing an investigation schedule to precede the down taking and will also produce the redesign for the wall in consultation with CEC and HS.

3 Headline cost report

3.1 Current financial year

	FY 09/10			FY 09/10			FY 09/10			COWD To Date	Costs To Go	Total AFC
	COWD Period			COWD Year To Date			COWD Full Year Forecast					
	Actual	Budget	Variance	Actual	Budget	Variance	Forecast	Budget	Variance	Actual	Forecast	Forecast
Total Project COWD	11.343	14.032	-2.689	77.151	97.806	-20.655	114.503	150.072	-35.569	311.180	222.129	533.309
Other Funding	0.937	1.159	-0.222	6.370	8.076	-1.705	9.454	12.391	-2.937	25.693	18.341	44.034
Demand on TS	10.406	12.873	-2.467	70.781	89.731	-18.950	105.049	137.680	-32.632	285.487	203.788	489.275

Note: the budget figure in the table above does not include £3.2m for ph1b costs in 09/10. These were budget as 'below the line costs' and the value has not yet been drawn-down.

- **tie** Ltd and BSC reached commercial agreement prior to adjudication on the EoT1 DRP.
- Following the agreement for EoT2 liabilities BSC indicated that they now intend to bring projected start dates forward for Haymarket Viaduct, Building Fixings works, and works at the Guided Busway. Work has started in both areas.
- We continue in this report to reflect an outturn estimate of £533.3m. However, given the commercial uncertainties with the Infraco and continuing delays to the project it is now considered unlikely that the full scope of Phase 1a will be completed within the available funding envelope of £545m. Until the key issues are resolved through the contractual and legal process, it will not be possible to forecast accurately a revised budget outturn.
- **The contract with the BSC consortium prescribes a timetable for resolution of contractual disputes and it is expected that the budget and programme implications will become increasingly clearer during the remainder of 2009.**
- **Regular briefings will be provided to both CEC and Transport Scotland to keep them updated on progress and implications for the project programme and finances of all the above matters (last TS briefing 10th December 2009).**
- The budget for ETP in 2009/10 is £150.1m (£153.3m inc 1b), which was produced linking the **tie** re-baselined programme to Infraco construction milestones. **tie** are now escalating all key issues to Dispute Resolution Procedure (DRP) and other contractual measures following the failure of mediation to provide an acceptable outcome.
- The outturn figure reported in P8 for 2009/10 (£122.9m) has been re-assessed in period 9 (£114.5m) using the latest construction milestone live forecast and QS view of changes profiled to the end of the year.
- Funding available from TS for the project in 2009/10 is £149m. The TS share of this year's updated forecast (£114.5m) is £105.0m, giving available headroom of £44.0m.
- The negative figure forecast P10-13 in the table below relates to the net cost to utilities (cost-betterment), with betterment being greater than cost in the last quarter.

Actual YTD P9 & forecast P10-P13 FY09/10

£m	YTD P9	Forecast P10-P13,09/10	Total FY09/10
Infrastructure and vehicles	54.4	29.6	84.1
Utilities diversions	9.2	-1.6	7.6
Design	1.7	0.9	2.5
Land and compensation	0.8	0.8	1.5
Resources and insurance	11.1	5.4	16.5
Base costs	77.2	35.2	112.3
Risk allowance	0.0	2.2	2.2
Total Phase 1a	77.2	37.4	114.5

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

- On-street works - Risks: Haymarket to Roseburn Junction Trackwork (£-637k); Leith Walk Roadworks (£-169k); Depot structure milestones in P13 (-£741k)
 - Structures - Opportunities: Tower Place Bridge (+£523k), Depot blockwork & Ducts (+£742k)
- Other key non-Infraco risks to the current forecast include (-£704k) Network Rail/ TS agreement.

- ETP COWD to Period 9 is £77.2m (Period 8 £65.8m) against budget £97.8m. The main drivers for the -£20.6m variance are: the timing of Infraco works costs forecast in 2009/10 offset by MUDFA spend incurred over the original 09/10 budget plan.
- Tramco production activity is running in-line with schedule; this is reflected in the Tramco construction works forecast profile

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

£m	Q1 (p1-3)	Q2 (p4-6)	Q3 (p7-10)	Q4 (p11-13)	Total FY09/10
Infrastructure and vehicles	15.8	18.5	29.2	20.6	84.1
Utilities diversions	3.2	4.3	1.6	-1.5	7.6
Design	0.7	0.4	0.7	0.7	2.5
Land and compensation	0.6	0.1	0.1	0.8	1.5
Resources and insurance	2.9	3.5	6.1	4.0	16.5
Base costs	23.2	26.9	37.6	24.6	112.3
Risk allowance	0.0	0.0	0.0	2.2	2.2
Total Tram	23.2	26.9	37.6	26.8	114.5

- A full reforecast of the Infraco 2009/10 cost profile was produced in period 9 in lieu of **tie** receiving any updated agreed programme from the Infraco contractor. The 2009/10 reforecast has been informed by linking the latest **tie** programme to Infraco construction milestones and taking Project Managers best view of what is likely to be achieved in the year. The realigned base costs and risk have then been linked against this programme; and
- The cost profile above shows a forecast ramp-up in activity throughout 2009/10, with base costs increasing from £23.2m in Q1 to a peak of £37.6m in Q3. This reflects the anticipated shift in Infraco milestone activity from Q1 to Q3 & Q4.
- Note: Utilities diversions -£1.5m forecast in Q4 relates to the nett (utilities costs -betterment credit) final betterment elements forecast against utilities providers.

3.3 Total project anticipated forecast cost

Re-baselined Phase AFC and profiling

£m	Cum FY07/08	Actual 08/09	FY 09/10	FY 10/11	FY 11/12	AFC
Infrastructure and vehicles	30.7	45.4	84.1	131.6	10.4	302.1
Utilities diversions	18.4	33.4	7.6	0.0	0.0	59.4
Design	24.4	4.7	2.5	1.8	0.6	34.1
Land and compensation	16.8	1.7	1.5	0.0	0.8	20.9
Resources and insurance	42.8	15.8	16.5	12.7	11.9	99.7
Base costs (inc 1b)	133.1	101.0	112.3	146.1	23.7	516.1
Risk Allowance	0.0	0.0	2.2	15.0	0.0	17.2
Total	133.1	101.0	114.5	161.1	23.7	533.3

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

- The table above reflects the base costs and risks aligned to the **tie** re-baselined programme (Feb-12), and is informed by the re-alignment of the Infraco milestones schedule for 2009/10 in-

line with the latest live programme and Project Management assessment of deliverables. The AFC above includes an unapproved increase of £15.1m to the project risk allowance. The approved cost estimate for delivery of Phase1a of the project remains at £512m. The phasing of the £533.3m has been updated in period 9 by **tie**, and will be further updated when there is an updated agreed programme with the Infraco contractor.

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 mid December 2012.

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

Milestones	Baseline programme date	BSC Rev 2 programme – unapproved *	Actual / current forecast date tie live prgm
Approval of DFBC by CEC	21 Dec 06A		21 Dec 06A
MUDFA – commencement of utility diversions	02 Apr 07A	02 Apr 07A	02 Apr 07A
TRO process commences	14Dec07A		10-Dec-07A
Approval of FBC by TS – approval and funding for INFRACO / Tramco	09 Jan 08		Dec 07A
Princes Street closed	03-Feb-09	Mar-10	22-Feb-09A
Tramco / INFRACO – award following CEC / TS approval and cooling off period and SDS novation.	28 Jan 08	14 May 08A	14 May 08A
Construction commences	14-Apr-08	14-May-08A	14-May-08A
First track installation commences – on street	03-Nov-08	09-Jun-09	Jun 2009A
Carrick Knowe Bridge commences	21-Aug-08	31-Mar-09	19-Aug-08A
A8 underpass commences	08-Aug-08	12-Jan-09	28-Aug-08A
Haymarket viaduct commences	08-May-08	18-Jun-09	01 Sep-08A
Edinburgh Park viaduct commences	06-Aug-08	02-Dec-08	01-Sep-08A
Tram mock-up delivered	Oct 2008		Nov 2008A
Demolition of Wanderers clubhouse	25-Aug-08	01-Jun-09	22-Jan-10
Edinburgh Park viaduct complete	24-May-09	14-Oct-09	02-Apr-10
Princes Street re-opened	01-Aug-09	15-Jun-10	29-Nov-09A
NR immunisation complete	Nov 2009		Sep-10
Utilities works complete (including telecoms)	Nov 2008	Sep-09	Sep-10
All demolition work complete	22-Aug-08	Sept-10	May-10
All Issue for Construction (IFC) drawings delivered (inc Gogar interchange design)	21-Jan-09	08-Oct-09 (not inc Gogar interchange)	May-10
Haymarket viaduct complete	08-Dec-08	07-Jan-10	Jun-10
All consents and approvals granted	18-May-09		May10
Design assurance complete	20-Jan-09		Jun-10
1 st Tram delivered	09-Apr-10	09-Apr-10	09-Apr-10
Carrick Knowe bridge complete	11-May-09	24-Dec-10	Nov-10
A8 underpass complete	14-Jul-09	30-Sep-10	Nov-10
Roseburn viaduct commences	20-Jan-09	20-Oct-09	May-10
TRO process complete	01-Dec-09		Jun-10
Driver recruitment commences	July 2010		Oct-10
1 st OHL installed (Commence Section 6)	11-Dec-09	Dec-10	Apr-11
1 st section (other than depot) complete ready for energisation (2)	25-June-10	May-11	Dec-10
Commission Section 2 (Haymarket to Roseburn)	11-Jan-10	Dec-11	May-11

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

*BSC Rev 2 programme is not an agreed Contract programme

Guidance for Completion:

Legend for colouring of Actual / forecast date text

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

4.2 Key issues affecting schedule

tie and BSC have now entered into an agreed timetable to build and prepare a revision 3 programme, with a first draft expected by the end of January 2010. This process is underway with weekly reviews of data

4.3 12-Week look-ahead

Milestones	Actual / current forecast date
1A Commence remaining non-MUDFA utility Diversions	09-Nov-09A
7 Complete Utility diversions Ingliston Park and Ride to Airport	13-Nov-09A
2A S19 Haymarket viaduct re-commences	23-Nov-09A
1C Complete Road & track installation on Princes Street	29-Nov-09A
1D Complete Road and Track works Lothian Rd junction	29-Nov-09A
2A -Trackworks Haymarket to Roseburn Junction -1135m	07-Dec-09S
5A Construct New Scotrail Carpark	07-Dec-09S
5B Trackworks Bankhead to Edinburgh Park Stn	07-Dec-09S

Milestones	Actual / current forecast date
A8 Underpass -phase 1 recommence	07-Dec-09S
7 Hilton Hotel Carpark	08-Dec-10F
6 Depot Building Pits	11-Dec-09S
6 Depot Building Steelwork	18-Dec-09F
5A W4 Russell Road retaining wall piling - recommencing in Jan	04-Jan-10S
1A3 Commence Temporary Platforms and Demolition Tower Place bridge	04-Jan-10S
5C S32 Commence Depot Access bridge	04-Jan-10S
1A - Newhaven Rd to Ocean Terminal - ch 0000-0160 - Roadworks	04-Jan-10S
1A - Newhaven Rd to Ocean Terminal - ch 0000-0160 - Trackworks	04-Jan-10S
1B - Leith Walk - ch 350-100 - Roadworks	05-Jan-10S
6 Depot Building Foundations	06-Jan-10F
5A Demolition of Wanderers Clubhouse	11-Jan-10S
5C W16 Commence Gyle Stop RW	11-Jan-10S
7 Burnside Road construction	14-Jan-10F
1B Complete Utility diversions Balfour St to McDonald Rd	23-Jan-10F
1D - Haymarket ch 1250-1125 - Roadworks Phase 1	04-Feb-10S
6 Depot Earthworks	05-Feb-10F
1D Complete Utility diversions Haymarket to Shandwick Place	06-Feb-10F
6 Depot Sub-station	08-Feb-10S
5A S20 Russell Road bridge	26-Feb-10S
7 W14/W15 Gogarburn RW	01-Mar-10S
1B - Leith Walk - ch 600-850 - Roadworks	03-Mar-10S
1C1 - Complete Utility diversions McDonald Road - London Road	21-Mar-10F
5B Trackworks Balgreen Rd Saughton Road North	23-Mar-10F
5B Trackworks Saughton Rd to Bankhead (Guided Busway)	26-Mar-10F

A = Actual date

S = Forecast Start Date

F = Forecast Finish date

5 Risk and opportunity

5.1 Review of risk register

Summary

There were twelve risk reviews held in the period. Four items were closed on the Infraco concerns register. There were thirteen draw downs on the risk allowance approved in the period totaling £1,191,219. These are detailed later in this report. This leaves a risk and contingency balance of £2,229,630 (based upon the approved Project Risk Allowance at Financial Close).

Risk and Opportunity Reviews

The following reviews took place in the period:

Date	Format of review	Attendees	Comments
19/10/09	Change and Risk Review	Project Risk Manager Infraco QS Infraco Commercial Mgr	Review of current and proposed changes against risk allowance
30/11/09	Signalling, Communication and Control (SCC) Risk Review	Project Risk Manager SCC Project Risk Manager	Risks and Treatment Plans Reviewed
30/11/09	Depot Risk Review	Project Risk Manager Project Manager	Risks and Treatment Plans Reviewed
01/12/09	Mudfa Risk Review	Project Risk Manager Mudfa Construction Director	Remaining Treatment Plans Reviewed
01/12/09	Structures Risk Review	Project Risk Manager Project Manager	Risks and Treatment Plans Reviewed
01/12/09	Network Rail	Project Risk Manager Project Manager	Risks and Treatment Plans Reviewed
01/12/09	High-level Infraco Risk Review	Project Risk Manager Infraco Director Engineering Director	High-level risks reviewed
02/12/09	Section 1A Risk Review	Project Risk Manager Project Manager	Risks and Treatment Plans Reviewed
03/12/09	Roads and Drainage Risk Review	Project Risk Manager Project Manager	Risks and Treatment Plans Reviewed
3/12/09	Design Risk Review	Project Risk Manager Design Project Manager	Risks and Treatment Plans Reviewed
3/12/09	Princes Street Risk Review	Project Risk Manager Project Manager	Risks and Treatment Plans Reviewed
3/12/09	Gogar Interchange Risk Review	Project Risk Manager Project Manager Programme Manager	Risks to Tram Project and construction of interchange identified

Risk Register

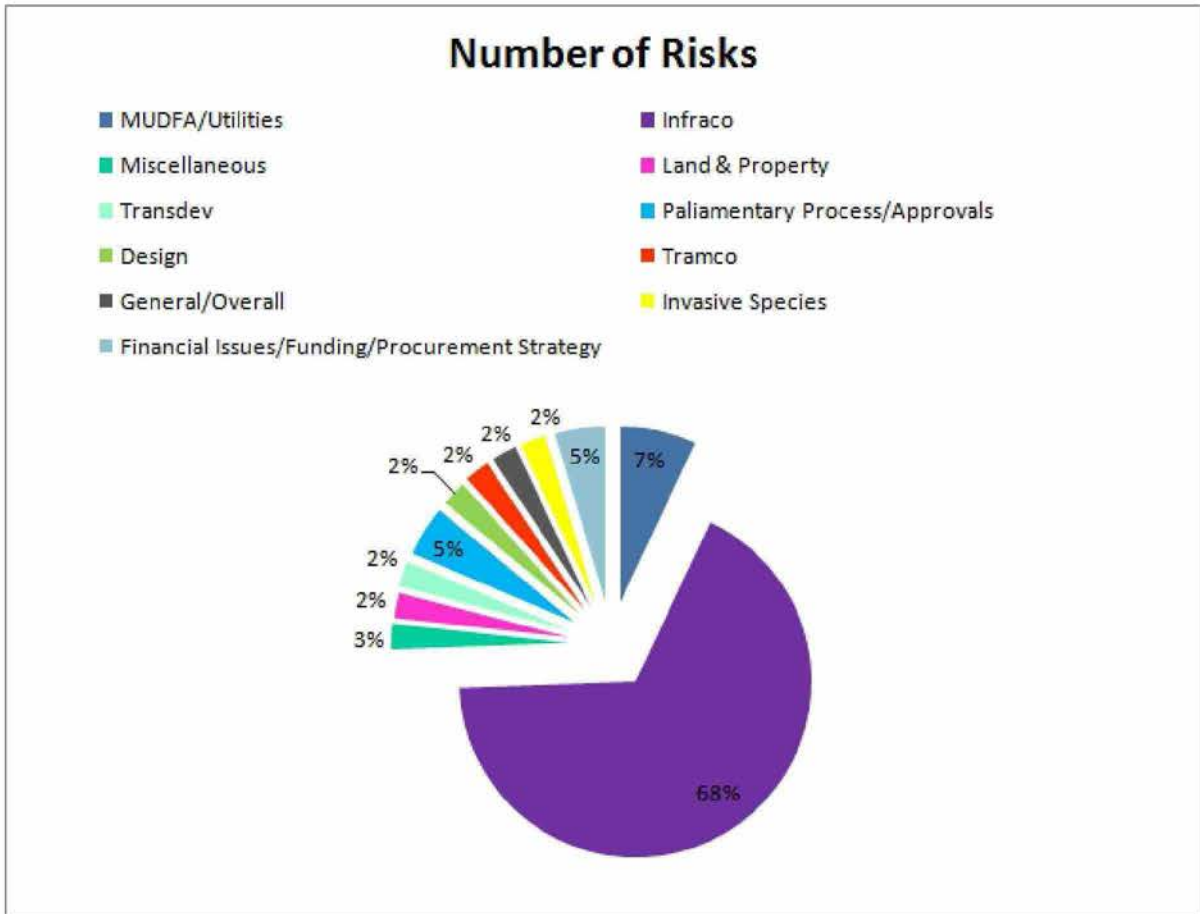
The Primary Risk Register is attached at Appendix D. The Primary Risk Register contains those high impact risks which are impacting (or have the potential to impact) the project at this moment in time. In addition, the potential risks identified in regard to programme slippage are being reviewed periodically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

Top 5 Risks - Period 9 2009/10

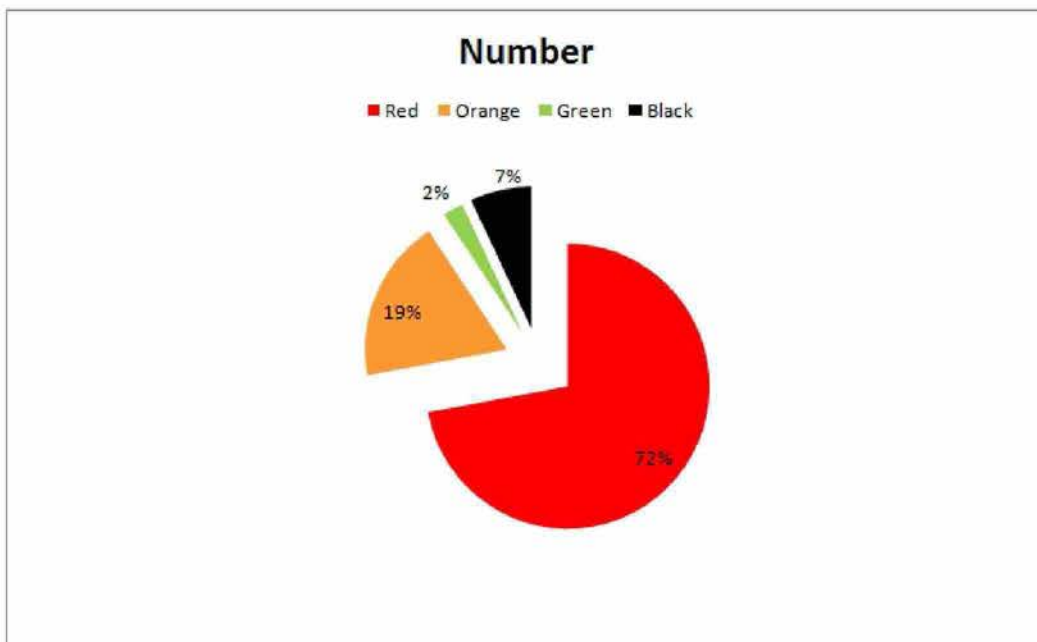
ARM Risk ID	Cause	Event	Effect	Risk Owner	Significance	Black Flag	Treatment Strategy	Previous Status	Current Status	Due Date	Action Owner
343	General delay to programme with various causes e.g. failure to obtain approvals on time; parliamentary processes, contractor issues.	Delay to completion of project	Increased out-turn cost due to delay plus revenue loss	S Bell	High - 25.90		DRP on programme management (EOT1)	Complete	Complete	30-Oct-09	S Bell
							Liason between tie/BSC programme managers	On Programme	On Programme	30-Dec-11	T Hickman
							Programme Management Panel process	On Programme	On Programme	30-Dec-11	F McFadden
							Weekly tie/BSC commercial meetings	On Programme	On Programme	30-Dec-11	M Paterson
1077	Base Date Design Information to Issued For Constructions (BDDI-IFC). Lack of visibility of design changes between November 2007 and May 2008	Tramworks price based on a design which may have been altered. Unclear who authorised design change.	Additional cost and programme delay	S Bell	High - 25.30		Establish a process which will act as a control mechanism for design changes. (If one exists already then ensure process is complied with)	Complete	Complete	30-Jun-09	T Glazebrook
							Intensive Mediation Marathon 29/6/09 to 6/7/09 to try and resolve issues.	Complete	Complete	30-Jun-09	S Bell
							Mediation resulted in no overall agreement on BDDI - IFC although it gave useful background information. Strategy paper to be presented to TPB on 29 July to seek approval for way forward including utilising necessary contract mechanisms (DRP, audit etc)	Complete	Complete	14-Aug-09	S Bell
							Resolution Strategy approved - 1st DRP to go 10th August, audit requests to BSC for information going w/c 3.8.09	Complete	Complete	10-Aug-09	S Bell
							Of the issues previously highlighted as going through DRP, 1 has been ruled in favour of tie, 2 have been agreed, 2 have been ruled in BSC's favour and this is being reviewed by tie. Further issues are due to enter DRP in December 09 and January 10.	On Programme	On Programme	17-Dec-09	S Bell

1091		Excavation of soft, unsuitable material below Earthworks outline	Additional cost	F McFadden	High -25.00	Donaldsons to carry out surveys	Complete	Complete	30-Jul-09	C Neil
						Extent of soft ground being investigated. External specialist advice deployed.	On Programme	On Programme	31-Dec-09	M Paterson
1101	Unreasonable behaviour of BSC commercial management	Unrealistic estimates being submitted for potential changes	Programme delay while disputes regarding estimates are resolved	F McFadden	High -25.00	Additional resource from TNT	Complete	Complete	30-Jul-09	M Paterson
						Agreed with BSC for independent evaluation to get benchmark	Complete	Complete	30-Jul-09	M Paterson
						All estimates to be scrutinised by the commercial team and, where appropriate, challenge made to BSC. Additional resource (T&T) being used to check estimates to reduce delay.	On Programme	On Programme	30-Dec-10	M Paterson
1094		Roads throughout works require full depth reconstruction	Programme impact plus additional costs. £1.5m cap applies to only 4 areas.	F McFadden	High -24.00	Carry out surveys to confirm extent of roads requiring full depth reconstruction	Complete	Complete	30-Jun-09	C Neil
						Suite of options from surveys to be reviewed and agreement reached	On Programme	On Programme	31-Dec-09	M Paterson

The risks within the Project Risk Register are categorised below.



The ratings of the risks are illustrated below.



New risks and concerns

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

Infraco

The following four items were closed in the period.

Discipline	Risk description			
	Risk Number	Cause	Risk Event	Effect
NR	13	Possession cancelled or tie stop being possession owner	Loss of disruptive or RotR possession	Could prevent critical work being completed, i.e. a bridge installation. For RotR possession there would be a delay in completing the works
Section 1D	61	Planning permission granted for other works in this section	Potential conflict with other projects in this area	Delay to programme, extension of time claim. Additional cost.
Section 1D	65	Inadequate management of stakeholders in Princes Street and Haymarket junction	Stakeholders dissatisfied with level of information from tie resulting in complaints etc	Negative publicity for project. Damage to tie's reputation.
Section 1D	82		Analysis which informed the approved TM arrangements proves to be incorrect/flawed when implemented on site	Unacceptable delays/congestion in city centre

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

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

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
B Cummins	928	690	The tie "Safety" bus is being used to deliver safety talks & culture surveys to the contractors workforce.	31/12/2009	Yes	No	No	Period 10
C Neil	931	681	Obstructions and voids survey, establish ownership reduced delay on discovery.	31/12/2009	Yes	No	No	Period 10
C Neil	1076	645	Tramworks PMs attendance at Traffic Management meetings. Weekly meetings between tie Tramworks and Utilities PMs. 4-weekly tie Tramworks/Utilities management meetings. Identification of programme clashes between Tramworks and Utilities works tracked.	31/12/2009	Yes	No	No	Period 10
C Neil	1078	647	Engagement between tie and BSC at different levels. Regular review of BSC management of third parties as per Employers Requirements.	31/12/2009	Yes	No	No	Period 10
D Burns	869	644	Length of Line 1a to be re-surveyed on regular basis	30/12/2009	Yes	No	No	Period 10
D Sharp	271	559	Assure the quality and timing of submissions	31/12/2009	Yes	No	No	Period 10
F McFadden	914	557	SDS to obtain consent for design in accordance with programme requirements - SGN and Scottish Power. Complete with the exception of section 1A1	31/01/2010	Yes	No	No	Period 12
F McFadden	914	573	SDS to obtain consent for design in accordance with programme requirements - Scottish Water and all Telecoms. Complete with the exception of section 1A1	31/01/2010	Yes	No	No	Period 12
G Barclay	1084	654	Assess TM implications to minimise enabling works and additional cost	31/01/2010	Yes	No	No	Period 12
M Blake	164	42	In conjunction with MUDFA, undertake trial excavations to confirm locations of Utilities and inform designer. York Place to Picardy Place and particularly Broughton St Junction IFC design incompatible with congested utilities.	31/12/2009	Yes	No	No	Period 10
M Blake	139	42	In conjunction with MUDFA, undertake trial excavations to confirm locations of Utilities and inform designer. York Place to Picardy Place and particularly Broughton St Junction IFC design incompatible with congested utilities.	31/12/2009	Yes	No	No	Period 10
M Paterson	1091	667	Extent of soft ground being investigated. External specialist advice deployed.	31/12/2009	Yes	No	No	Period 10
M Paterson	1094	673	Suite of options from surveys to be reviewed and agreement reached	31/12/2009	Yes	No	No	Period 10
P Dobbin	931	660	Infracore trial holes where applicable.	31/01/2010	Yes	No	No	Period 12
P Dobbin	105	683	Headland working at Constitution Street.	31/12/2009	Yes	No	No	Period 10
S Bell	1077	691	Six issues going through DRP process. Anticipated conclusion mid-November 09.	17/12/2009	Yes	No	No	Period 10
W Biggins	911	628	Liase with Scottish Power to agree and approve method of crossing tunnel.	31/12/2009	Yes	No	No	Period 10

5.3 Cost Quantative Risk Analysis

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

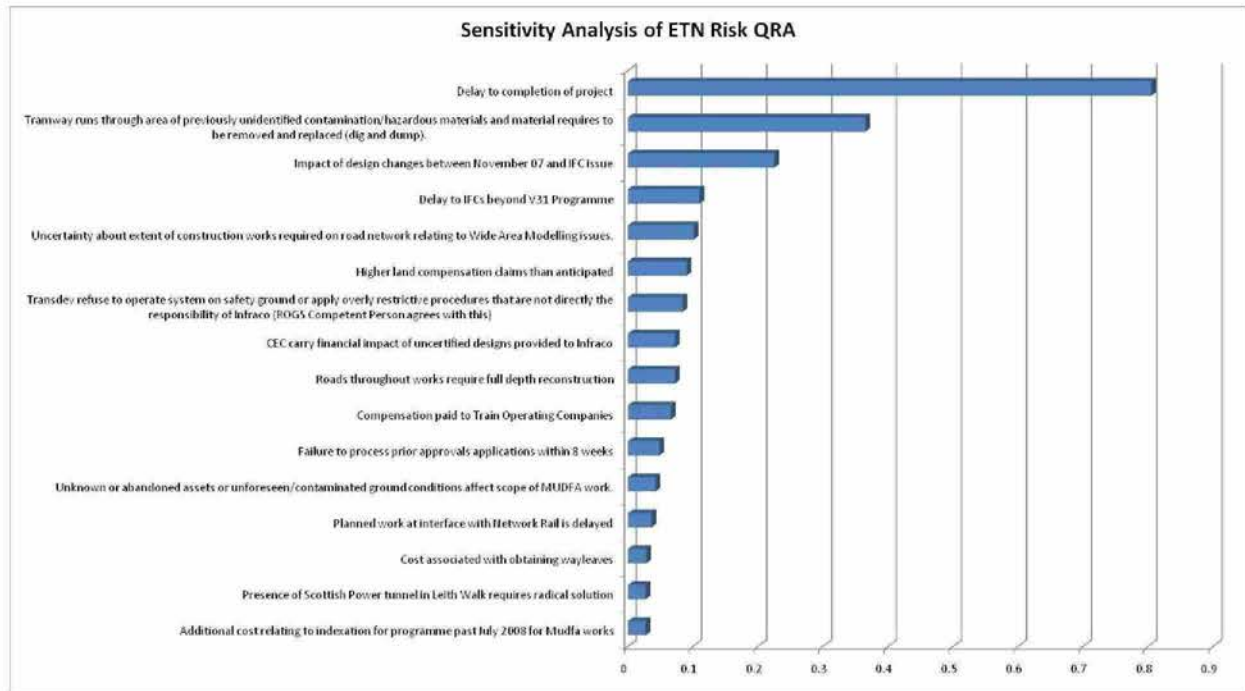
The Project Risk Allowance at financial close was £30,336,196. Drawdowns to the end of Period 9 09/10 now total £28,106,566. Remaining risk balance based on the approved QRA is £2,229,630.

Risk drawdown

The following table illustrates the drawdown applications on the project risk and contingency allocations in Period 9.

Description	Owner	Value (£)
Carrickknowe - works out with LOD	Mike Paterson	4,324
Haymarket BDDI - IFC increase	Mike Paterson	67,315
Network Rail costs	Gail Blythe	644,128
Boundary Hedge between Gogarburn Tramstop & Depot	David Carnegie	5,369
Depot Access Road Specification	Mike Paterson	78,675
Levels BDDI to IFC at Edinburgh Park Bridge	Mike Paterson	62,851
TRO Infracore Consultation Plans	David Carnegie	23,480
A8 Underpass Existing 1 way BT service	Mike Paterson	22,847
Trial Soil Nailing - Russell Road Underbridge	David Carnegie	44,718
Approach Ramps	Mike Paterson	185,000
Design Changes for MUDFA	Damian Sharp	3,527
5C CEC Comments for Lochside Av up to Adoptable Standard	Mike Paterson	40,071
Depot Floor-Pit for turntable	Mike Paterson	8,914
	Total	1,191,219

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.

Opportunities

An opportunities workshop was held in Period 7. Treatment plans were reviewed and updated in Period 9. The schedule below highlights the opportunities identified and current position.

Opp number	Event	Opp rating	Open?	Treatment plan	Owner	Due date	Review Comments	Progress (%)
1	Original forecast value for incentivisation was £400k. In-line with performance it is the management view that the SDS incentivisation cannot be fully justified, with £400k the worst case.	18	Open	tie PM to manage SDS KPI agreement to ensure that the maximum incentivisation paid out should be £300k.	Damian Sharp		Any savings expected to materialise in Period 6	
3	Within the current forecast figures is a cost of £547k for the additional cost of Land Value over and above the market rate when the project budgetted. £162k of this benefit has already been taken to AFC leaving an opportunity of £785k.	19	Open	AS to lay out a timetable as to when land savings can be crystallised. In light of the stagnated property market it is unlikely that the additional £785k built into forecast or the duplication of cost in risk will be utilised.	Alastair Sim		Being managed by A Sim. Still regarded as possible saving	
4	Opportunity to claw back £230k of costs directly to Transport Scotland on the back of the Scotrail settlement.	11	Open	AS to lay out plan/ timetable as to how specifically these costs can be passed onto TS.	Alastair Sim		SB and AS to meet with TS	
21	Programme allows for full depth road reconstruction. If this is not necessary there will be a programme time saving.	11	Open	B Ball managing through development workshop	B Ball			
23	CoCP working hours are 7am-7pm Mon-Fri, 8am-1pm Saturday. If these restrictions were relaxed in specific areas such as Balgreen to Carrick Knowe, Edinburgh Park and Bankhead Drive there could be a potential programme saving.	12	Open	Application to relax CoCP restrictions to CEC	TC/WB	31/12/2009	This has been made in a number of areas and working out with CoCP is currently underway.	
29	50metre radius curve at Gogar - at the moment the trackform will be embedded. Opportunity to convert to ballasted.	12	Open	tie/BSC to examine possibilities	WB/BB	31/01/2010	P7 - BSC are redesigning with ballasted track. Saving will be in moving from slab to ballasted but maintenance cost will increase P9 - desing underway.	
34	ERs identified 43 sets of breathers and expansion joints around structures throughout network. BSCs proposal is to install 5 sets. Saving of cost of 38 sets.	12	Open	tie have received BSC's proposal on longitudinal expansion and expansion around structures. Technical meeting arranged in P3 to review tie's return comments on BSC's proposal	WB/BB	31/12/2009	BAM review has confirmed 5 sets only can work however SDS disagree. WB to arrange workshop to progress final number. P7 - BSC not agreeing to change due to loss of profit in BB civil works. P9 - Siemens installing to their design which removes need for 38 sets of breathers. Resubmitted design proposal with design calcs and this is being reviewed. Saving of approximately £12k x 38. Actual saving to be agreed in P10.	
35	The depth of excavation (for S21b and S21d and WB) could be reduced thereby providing a cost/time saving. To do this the design needs to be revisited. (BSC did additional SI in this area in summer 2008 which could be used to review designs)	1	Open	tie would need to instruct BSC to revisit design as BSC have indicated they will not do so unless instructed.	TC/CN	30/11/2009	TC and CN to manage	
36	£260k cabling programme planned for Hope St junction. IF BT can be convinced to leave in situ then this will represent a saving.	1	Open	Meeting taking place with BT on 14 Oct to present proposal to BT	GB/CN	31/01/2010	Meeting still to happen but opportunity still 'live' P9 - BT rejected proposal. G Barclay to meet BT	
37	tie have paid NR risk fee totalling £510k to date with potential to increase to £900k. Possibility of (a) recouping the spend or (b) saving the remainder.	1	Open	Those who have a 3rd party agreement and have a principal contractor's license are meant to be exempt from the risk fee. DS to review agreement to confirm tie qualify for exemption.	GB/DS	30/11/2009		
38	Potential to make programme savings once systems programme has been received.	1	Open	BB and GB to review programme once received.	GB/BB		Programme still outstanding	
39	Trackform Haymarket to Rosabum - opportunity is to change trackform from direct fix to Rheda City C open. This would give a productivity saving as track would not be fixed to slab. Also opportunity to examine the need for slab track at all.	1	Open	Needs to be Infraco change - potential BB reluctance due to affect on civil works.	WB/BB		Siemens to prepare change proposal - would result in programme saving P9 - CEC planners have confirmed that Haymarket to Russell Rd Bridge (477m) and Russell Rd to Murrayfield Hall (490m) can be changed to ballasted from direct fix.	
40	Change rail section in all tramstops (in the off street section) from grooved to S49 rail. This would provide a cost and productivity saving.	1	Open	Consortium issue in removing work from civils to systems as the need for a transition slab is removed.	WB/BB		Siemens have submitted proposal for S49 through tram stops. P9 - S49 now being installed through tram stops. (production saving)	
42	Section 5Y (within 5B) - opportunity to remove asphalt, which has been noted as a requirement by CEC planner in the section from east side of Edinburgh Pk tram halt to Edinburgh Pk viaduct approach, and continue the S49 on track ballast from the pedestrian crossing to the approach to Edinburgh Pk viaduct. (removes 100m of grooved rail with crossover and 2 transition slabs and improves productivity)	1	Open	This has been discussed with Siemens who will write to tie proposing these changes.	WB/BB		Siemens progressing with design change and ordering switches and crossings based on S49 P9 - opportunity accepted by Siemens and being carried out. (Production saving)	
43	Re-railing points - 15 no identified in ERs for the depot area. These could be removed with resultant saving in cost and productivity	1	Open	tie to decide if these are required. If not then BSC to be instructed.	WB/BB		WB to discuss with Siemens	
44	Ground Improvement layer - adopt BAM's preliminary design for the floating slab developed to incorporate the noise and vibration measures.	1	Open	tie, BAM and SDS to discuss	WB/BB		BAM still working on design for ground improvement layer	
45	Edinburgh Pk grass track - soft ground through Edin Pk limits what can be installed. Opportunity is to change trackform to ballasted. Substantial cost saving as civils cost will be less.	1	Open	Edin Pk/CEC agreement required.	WB/BB		WB to take forward P9 - tie saving to be calculated. Proposal needs to be made to Edinburgh Park	

Opp number	Event	Opp rating	Open?	Treatment plan	Owner	Due date	Review Comments
46	Eliminate soil nailing in preference for 1:2 batter. This would provide a mitigated cost increase.	1	Open	AR/SB/FMF have agreed to reduce clearances in the depot stabling area. BSC to confirm conditions can meet 1:2 slope.	AS		
47	Advance Siemens commencement by 6-9 months as contract programme showing completion prior to handover to Siemens	1	Open	Programme team to be made aware of opportunity and attempt to negotiate with BSC	AS		
48	Obtain agreement with CEC to adopt a different road construction methodology thereby saving time and money.	1	Open		CN		
49	Opportunity to amend to standard foundations in off-street section which would reduce cost.	1	Open		CN		
52	Selling of land which has been purchased but is no longer required	1	Open		A Sim		
53	Recovery of costs from Siemens for recovery of stray current monitoring costs.	1	Open		CK/BB		
54	Opportunity to convert from direct fix to Rheda City C trackform at Approach to South Gyle Access Bridge (49m) East side of Bankhead Stop (33m) Eastern ramp at Edinburgh Park Station Bridge (72m) East Side of Castle Gogar Access Rd (679m) Departure side of IPR stop (104m) Gyle Tramstop to south side of A8 (165m)	1	Open	WB liaising with Siemens to agree proposals. Production saving to be made	WB		P9 - Approach to South Gyle Access Bridge (49m) - becoming Rheda City C from Direct Fix (Production saving) East side of Bankhead Stop (33m) - becoming Rheda City C (Production saving) Eastern ramp at Edinburgh Park Station Bridge (72m) - becoming Rheda City C (Production saving) East Side of Castle Gogar Access Rd (679m) - From A8 to Depot this can become ballasted throughout (200m to be Rheda City C and 479m to be ballasted) Potential cost/production savings Departure side of IPR stop (104m) - becoming Rheda City C (Production saving) Gyle Tramstop to south side of A8 (165m) - convert from greentrack to ballasted, agreed with CEC planner. Potential £350 per metresaving

The following opportunities have progressed well and commercial agreement needs to be reached as to any cost or programme savings, as the opportunity has been agreed in principle with Siemens.

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

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

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

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

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

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

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

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

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

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

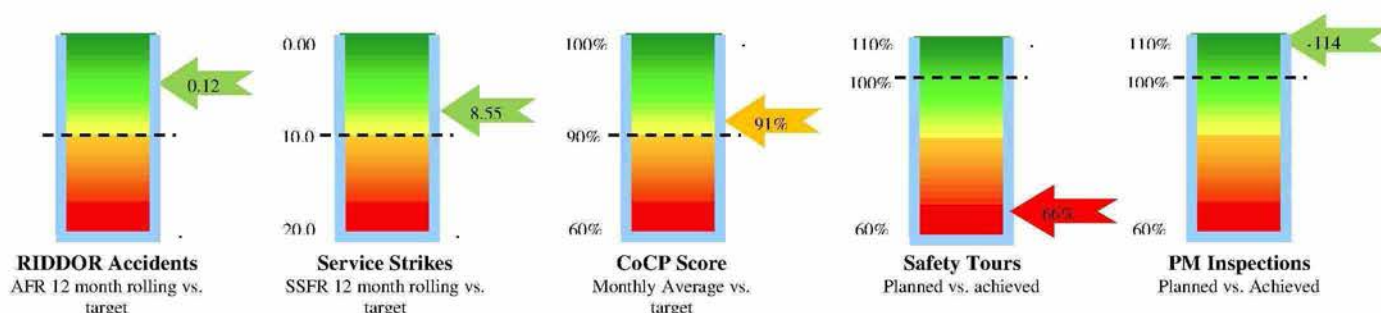
Gyle Tramstop to south side of A8 (165m) - convert from greentrack to ballasted, agreed with CEC planner. Potential for £350 per metre saving.

6 Health, safety, quality and environment

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

6.2

HS&E ACCIDENTS and INCIDENTS SUMMARY											
Total	Total Hours	>3 day	Major	Injury	NM/Unsafe Condition	Service Damage	EN V	R T A	MOP	AFR	SFR
Period	153,150	0	0	3	20	9	2	0	5	0.00	5.88
13 period rolling	1,717,639	1	1	31	258	146	13	8	51	0.12	8.50



There have been no reportable accidents during Period 9 bringing the 13 period Accident Frequency Rate to 0.12 which is ahead of the target for 09/10. Period 9 figures also show that the service damage frequency rate continues to fall, with no service strikes reported by MUDFA. BSC service strikes have risen in the period with a significant near miss and service strike recorded. However, the 13 period rolling frequency continues to fall significantly. As a result of a significant power cable incident on Princes St. BSC organized a safety stand-down to discuss safe digging practices and protocols, this involved 168 staff and operatives. The significant near miss was a cable strike in Princes St.; operative breaking out concrete and 'nicked' a power cable. Flash occurred and operative sustained minor burns to eyebrows. BSC are currently investigating the near miss.

There have been 10 near misses reported during Period 9 the majority of which were reported by the contractor - this is an improvement from last period. This can be attributed to better communication with all consortium partners and assistance from **tie**. The number of inspections planned by Project Managers was 15, the actual completed was 16; 12 CoCP inspections and 4 joint site inspections. 4 of the 6 planned safety tours were completed during Period 9.

Targeted support was given to the Princes Street team, which assisted in a successful hand back of a safe and suitable Princes St to the City with an emphasis on safety and quality. Lessons learned from the hand over process will be reviewed and where necessary taken on board for future handovers.

There was a significant reduction in the number of MOP incidents during period 9.

A poor return on Safety Tours has been noted in the period, and this will be addressed in subsequent periods going forward. This has, in part been due to the process to record the findings of tours completed towards the end of the period.

Environment

There was an increase in environmental incidents in period 9, with a significant diesel spill on Princes Street being recorded. Refueling practices need to be defined and improved. BSC have been instructed to review their process. Live Japanese Knotweed has been identified (subsequent to

treatment) at the Viking Building. TCM have carried out a formal review of the whole area and will remove this plant in line with the requirements of their guarantee. BSC Strategy for dealing with invasive species remains outstanding and has been escalated to Director level.

The project CoCP relaxation process has been refined and agreed with CEC, however, this does not allow for the breach of noise control requirements. The new procedure will be formally rolled out to the contractor and operatives in the new year.

Works ongoing regarding contaminated ground. BSC have been asked to provide clarification/evidence of areas that they believe to be contaminated in order that **tie** can review and advise.

6.3 Deliver a Safe Tram (Quality)

Section	Activity	Data Checked					
		Interdisciplinary Design Check	Hazards	Inspection and Test Plan System	Design Variation/Change	As Built	Asset Register
Section 1D Princes Street	OLE Bases/Structural Concrete	0.5	NA	1	NA	NA	NA
Section 2A Haymarket Viaduct	Re start on site 23/11/09	0.5	0.5	1	1	0	NA
PD	Total (y)	1	0.5	2	1	0	0
	Max Possible Total (y)	2	1	2	1	1	0
Total	Percentage P8	19%	69%	89%	50%	74%	21%
	Percentage P9	21%	73%	90%	53%	73%	50%

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

Due to the handover of Princes Street 3 / 4 Period 9 "Deliver a Safe tram" inspection metrics were held, at Princes Street to ensure records were fully in place. This has been noted as 1 inspection in order that there is no duplication.

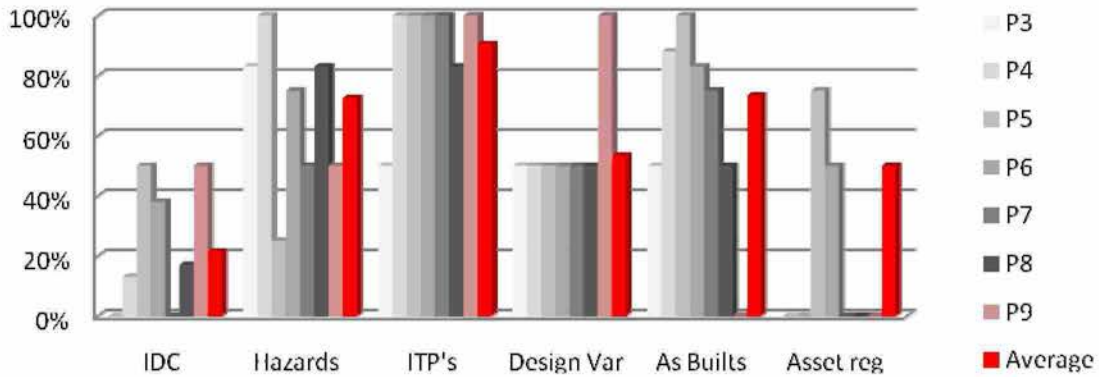
Asset Management meeting held with S. Smith/J. Ritchie **tie** and E. Ingles Siemens (BSC) on the 17/11/09. E. Ingles advised that he is happy to support the metrics inspections and that a full asset register will be set up in the New Year (2010). BSC advise that the Engineer for each area is responsible for ensuring that the asset register is being developed and that the information is being passed to E. Ingles. Asset Nomenclature Concept Document Revision 1 (Draft) previously submitted to S. Scott (Transdev) and L. Murphy (**tie**) for discussion.

ITP workshop carried out 11/11/09 to discuss the progress towards Princes Street handover. Follow up ITP inspection/workshop carried out on site with both McKenzie's and Crummock's on 24/11/09. Both workshops attended by **tie** representatives.

Design Assurance Audit (Tram) carried out 18/11/09. CAF have been given until end of play 2/12/09 to produce further evidence for audit as the majority of their records are held in Spain and were unavailable at the time of audit. Subsequent to this date the final report and findings will be written up and issued.

Initial meetings held with BSC to discuss the As Built drawing process. This is currently ongoing as initial discussions developed into a meeting to discuss Princes Street, thus **tie** will push the development of the As Built process during period 10.

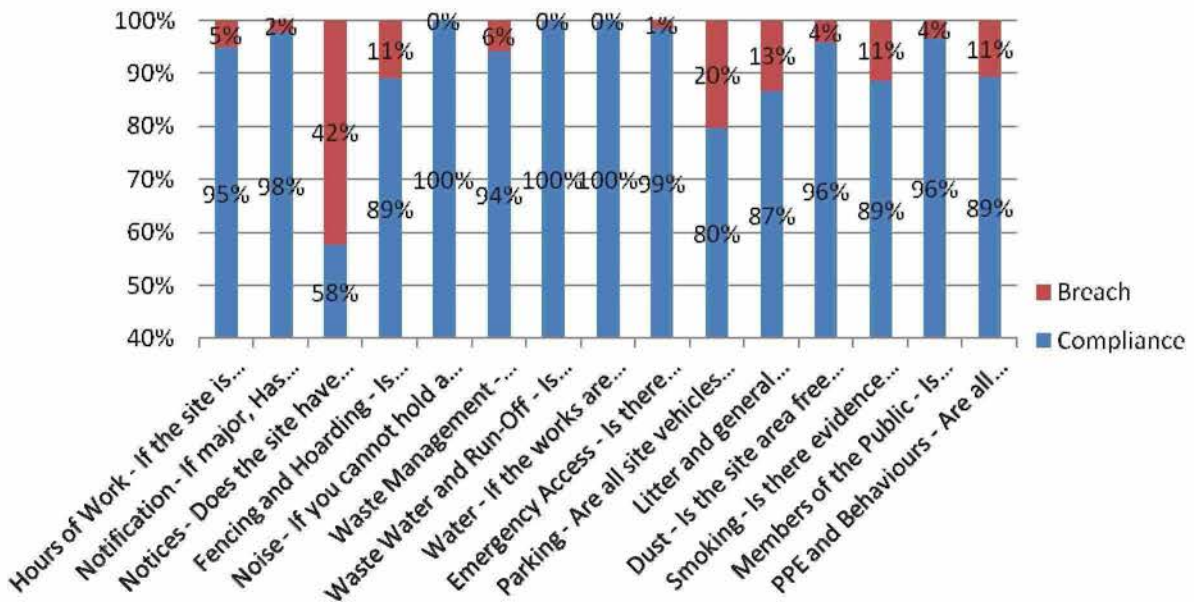
Period Tracker



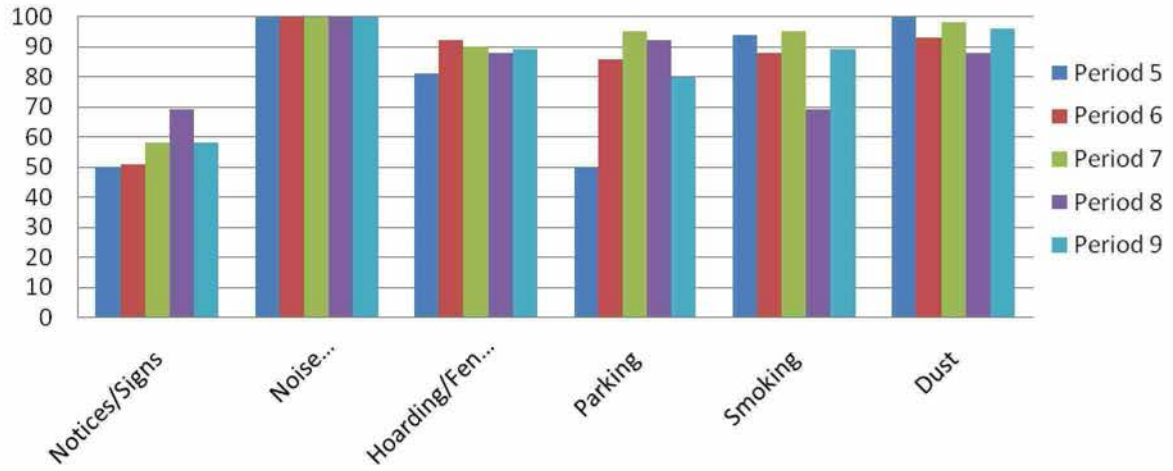
Action being taken

- Contact now established for all aspects of the Deliver a Safe Tram strategy, with the additional support from BSC helping to provide more meaningful outcomes from the weekly inspections.
- Areas previously inspected are being re-inspected to close out actions.
- Weekly meetings now being held with **tie** Quality and BSC quality departments.
- **tie** Project Manager start on site checklist to incorporate a version of the DaST questions.

Code of Construction Practice Period 9



CoCP compliance continues to be monitored by **tie** with a number of increases in non compliances being noted during period 9, specifically the increase in non compliance of no smoking within the site. However slight improvements were noted in the compliance of notices/signs and parking on site. The CoCP relaxation process was improved during period 9 and will be rolled out to all relevant staff in the new year - this should lead to improvements in compliance.



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

7 Stakeholder and Communications

7.1 *Media / Press Activity*

The media activity has been steady, mainly with balanced and positive coverage surrounding two key themes – Edinburgh Sparkles and the re-opening of Princes Street.

In terms of the re-opening of Princes Street on 29th November, the lead up to the day provided a mixture of positive, balanced and some negative coverage based mainly on scientism. However, with Princes Street opening on the 29th November as planned, there was a significant shift towards much more positive coverage regarding the trams project generally. There were a few exceptions, however, we were able to mitigate these rapidly along with our partners.

The Edinburgh Sparkles campaign in which Edinburgh Trams played a significant role, provided a joint approach to widespread positive coverage of the festive events in the City and in turn providing a platform for Edinburgh Trams being a key stakeholder within the Capital.

During the next reporting period we will continue to focus on an ambitious programme of works, particularly on the off-street works including, Carrick Knowe Viaduct, Burnside Bridge at the Airport; Haymarket Viaduct, Edinburgh Park Viaduct, Gogarburn Bridge and Gogarburn Depot. Towards the end of January, we can also expect to have some media activity surrounding planned works for 2010 which consists of a significant amount of on-street tram works.

7.2 *Customer Service Activity*

Customer enquiries have decreased by 89 from Period 8's total of 453 contacts to 364. Weekly totals remained low throughout the period with only week 2 breaching the 100 mark with 102 contacts.

Emails (145) and Phone calls (165) continue to be the main channels of communication with the Customer Service team, with numbers reaching the same volumes as Period 8. Correspondence via Face to Face meetings (F2F) however has dropped considerably from last period where 116 contacts were recorded compared with Period 9's 21. A distinct drop in information requests to Tram Construction Advisors by businesses can be attributed to the low figures for this period. This drop in F2F enquires by businesses could go towards explaining the overall decrease in Period 9s figures.

Information Requests again comprise the majority of all contacts made by the public numbering 330 in total. The remaining 34 contacts were concentrated in Complaints (6), Business Support (8) and Insurance Claims (6). Period 8 figures reflected the same amount of enquires in these areas.

7.3 *Public Information Planning*

Prior to the launch of Edinburgh Sparkles on Thursday, November 26, Edinburgh Trams worked with Winter Festivals, to produce various signage and banners giving directions, promoting the city, and thanking the city for its patience.

In order to facilitate a wider and more interactive view of how the trams will look, feel and be used in operation, we have ordered 500 copies of 'a day in the life of the tram' DVD, which shows modalities of usage, features of the tram and benefits. These will be distributed to key stakeholders and enquirers.

We have placed a duo of adverts in the local newspaper and EHLiving magazine thanking the Edinburgh public for their patience and support during the closure of Princes Street and a message re-iterating the fact that an embargo will be in place in the city centre over the winter period.

Discussions are ongoing regarding the livery and branding of the tram vehicle. To this end we have hosted a sub-group of the branding group tasked with recommending options for tram livery. Several designs have been produced, which are currently being evaluated.

7.4 Website / Internet Communications

There were 20,526 visits to the www.edinburghtrams.com website, making this our busiest period on record. This increase in online activity is both reflected by and attributable to the ongoing success and growth of our social media presence.

The number of followers on twitter has risen to 452 against last period's 377. Facebook interaction and membership has also risen to 468 members compared with last period's 423. The number and variety of influential stakeholders, such as MSPs, journalists and business leaders following our updates continues to rise, especially on twitter where our number of followers follows a steady rising trend to 452.

Video podcasts views have risen to 3342 from 2450 on www.edinburghtrams.com this period, largely attributable to popular video content about both the Edinburgh Sparkles Campaign and the re-opening of Princes Street.

RSS feeds, which actively push information to users were accessed 5,098 times this period – a record for the site, compared with 3,871 last period. "Local Updates" remain in second place, with podcasts continuing to be our most popular RSS item with almost twice as many hits. Partially explained by the increasing popularity of our Facebook and Twitter pages, these figures reveal a consistent trend over the last three periods making our video podcast our single most accessed online communications resource after the facebook and twitter feeds themselves.

Participation in online discussion forums on our Facebook continues to increase. with users now posting some of their own discussion threads about topics which are of interest to them. Photo and video features remain our most popular content items on social media networks.

7.5 Logistics

A limited logistic operation has been retained in the Haymarket area during December as a result of the complexity of traffic management. This service will be available to the stakeholders immediately around West Maitland St.

It is also the intention of the logistic team to maintain the cleanliness of those sites which have been left in place over the festive period to accommodate traffic management for tram work.

7.6 Partner and Stakeholder Communications

Princes Street re-opened on the 29th November complete with tram tracks, central reservation and tram stop, with great success. Excluding cars, traffic is now able to travel the length of the street with Bus stops now operational again.

Worksites are in the process of being removed across Edinburgh as part of the combined city centre Christmas embargo and goodwill gesture on behalf of Edinburgh Trams. Notifications therefore are aimed at giving businesses and residents a snapshot of the upcoming work and traffic management which is due to commence in January 2010. Updates have also been produced on off road sections of work as well. In particular, updates have been produced for Haymarket, the West End, York Place, Broughton Street and the stretch of work between Newhaven and Constitution Street.

Initial visits to schools across Edinburgh to inform the kids of the Tramformer scheme have now finished and visits to the Tram Mock-up and Princes Street site were arranged to give school children an idea of the scale of the project. The next phase of the scheme is now being planned, with site visits due to be arranged for March 2010.

Training for cyclists has been arranged to teach the correct way in which to cycle alongside the tram tracks. Instructors from the Bike Station will be available on Sunday 13th December at Castle Street for free drop in sessions.

A new booklet of tram facts has been produced which contains 20 key facts on the project. The facts cover a range of topics from why we are building the tram route to tram integration with Lothian bus services alongside general facts and figures relating to the length of the route, number of tram stops etc. The tram facts booklet is available to the general public and will be distributed to Edinburgh City Council as well as being available on the Tram Mock-up.

In addition to the tram facts another issue of the Tramlines newsletter will be published during Period 10 which will give an insight into the project. The newsletter will be distributed both internally as well as being available to the public via the Edinburgh Trams website.

Presentations were given to the following during Period 9:

- Newhaven and Leith Harbour Community Council
- Leith Business Association
- Update for Roseberry House Tenants
- Cockburn Association – On their concerns over traffic
- Women's Group - Merchants Golf Club
- City Regions Conference – tie Chief Executive, Richard Jeffrey was a speaker at the conference

7.7 Freedom of Information Requests

During Period 9 there have been 3 requests for information. Information given to a previous request has been asked to be reviewed.

Currently a one family FOISA strategy is being discussed with our partners in order to create a comprehensive system for dealing with requests from the public.

7.8 Winter Festival

Following the launch of the joint Edinburgh Sparkles campaign during the last reporting period the continued joint working with the City of Edinburgh Council, stakeholder groups and other partners, the significant media and marketing strategy has continued to provide heightened publicity within the City, Scotland and throughout the UK.

A wide variety of events, which Edinburgh Trams contributed both financially through the sponsorship of specific events and marketing materials as well as by way of practical resources has helped to encourage shoppers and visitors alike into the Capital following the re-opening of Princes Street.

In addition to the City Centre campaign through the Edinburgh Sparkles umbrella, tie has also provided support for promoting other areas of the City on the tram route for the festive period. Some of these include assistance in promoting the West End Retailers as well as co-sponsoring with the Council, three Christmas trees for Elm Row (Leith Walk); Coates Crescent & Shrubhill and assisting in arranging public relations support for the lighting up of these.

Publicity includes media articles, bill-board advertising taken out at Queens Street Railway Station in Glasgow for the Edinburgh Sparkles Campaign, newspaper advertising as well as joint marketing ventures with other partners within the Edinburgh Sparkles campaign group. tie has also supported traders in the Leith Walk and Constitution Street areas of the City in the lead-up to the festive season by removing tram works from Leith Walk and re-opening Constitution Street to through traffic throughout the City Centre embargo period (these areas are not usually covered officially by the embargo).

7.9 Customer Service Figures

a) Transport Scotland - Monthly Customer Service Report 09/11/2009 - 04/12/2009

Item	Volume Month	Volume (Cumulative from 21/11/08)	Performance (Month)	Performance (Cumulative)	Target Performance
Telephone response	228	3376	96	97	90% in 30 seconds
Telephone Same day resolution	212	3253	93	96	Info only
Email acknowledgement	140	1805	100		100% acknowledged within 24 hours
Email response			100	99	90% resolution in 7 days
Email same day resolution	124	1636	89	91	Info only
Letter acknowledgement	35	134	100		100% acknowledgement within 24 hours
Letter response			100	95	100% resolution in 7 days
Total Enquiry Volumes	403	5315			
Website update	23	971	100	100	Weekly

b) Out of Standard/Work in Progress statement at month end 04 Dec. 2009

		Volume of WIP @ m/end	Oldest date	Oldest Issue	Handled By
M/e 04 Dec. 2009	Email	2	30/11/09	Bus services – post tram	Mandy Nelson/John White (Lothian Buses)
	Letters	0	N/A	N/A	
	Calls	0	N/A	N/A	

c) Monthly Notifications Performance 09/11/09 to 04/12/2009 and Cumulative from 21 November 2008

0 Major notifications

11 Minor notification – 7 for utility (4 in standard 3 out of standard) 4 for tram works (all in standard)

0 Emergency notifications

Notification Type	Work Site		Utilities	Tram works	Total	% in Standard
	Month	Notifications				
Major works	Month	Notifications	0	0	0	
		In Standard	N/A	N/A	N/A	N/A
	Cumulative	Notifications	6	5	11	
		In Standard	0	2	2	18
Minor Works	Month	Notifications	7	4	11	
		In Standard	4	4	8	73
	Cumulative	Notifications	78	32	110	
		In Standard	66	24	90	82
Emergency	Month	Notifications	0	0	0	
		In Standard	N/A	N/A	N/A	N/A
	Cumulative	Notifications	14	0	14	
		In Standard	14	0	14	100

Appendix 'A' Detailed cost report

Headline Financial Information	Edinburgh Trams	FY 09/10	Period Nr:	9
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FY 09/10: Demand on TS	105.049
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1: HEADLINE FINANCIAL COMMENTARY

PERIOD (PD) RESULTS:
Period is for Phase 1a, which now includes £6.2m of lost economies of scale opportunities following the cancellation of 1b. See Section 3 of the TS report for further commentary.

YEAR TO DATE (YTD) RESULTS:
See Section 3 of the TS report for further commentary.

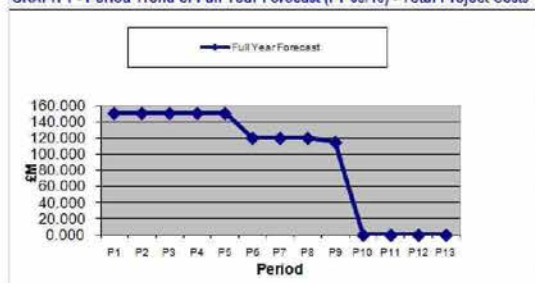
FULL YEAR FORECAST (FYE):
See Section 3 of the TS report for further commentary.

ANTICIPATED FINAL COST (AFC):
AFC includes an unapproved increase of £15M to the Project Risk allowance. See Section 3 of the TS report for further commentary.

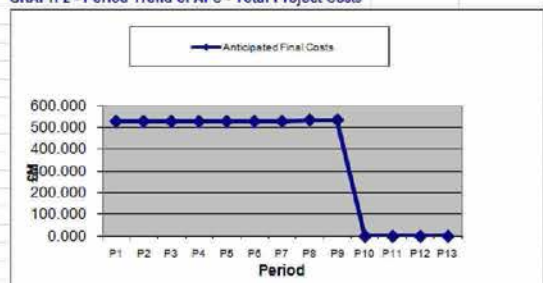
2: SUMMARY

	FY 09/10			FY 09/10			FY 09/10			COWD To Date	Costs To Go Forecast	Total AFC Forecast
	COWD Period			COWD Year To Date			COWD Full Year Forecast					
	Actual	Budget	Variance	Actual	Budget	Variance	Forecast	Budget	Variance			
Total Project COWD	11.343	14.032	-2.689	77.151	97.806	-20.655	114.603	150.072	-35.669	311.180	222.129	533.309
Other Funding	0.937	1.159	-0.222	6.370	8.076	-1.705	9.454	12.391	-2.937	25.693	18.341	44.034
Demand on TS	10.406	12.873	-2.467	70.781	89.731	-18.950	105.049	137.680	-32.632	285.487	203.788	489.275

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 includes an unapproved increase of £15M to the Project Risk allowance. See Section 3 of the TS report for further commentary.

4: ACCRUALS COMMENTARY

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

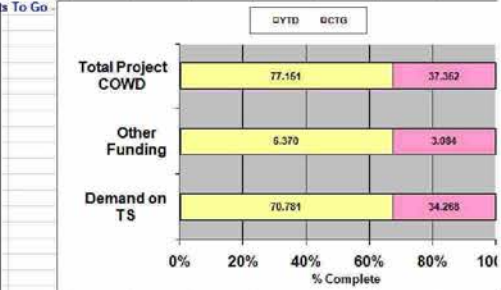
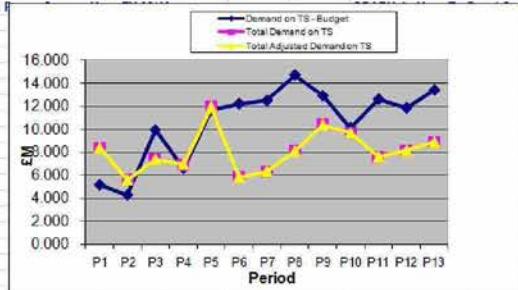
PLANNED/EMERGING/FORECAST
Allocated in accordance with standard WBS. Values relevant to business case or other agreed baseline date to be known as original estimate.

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	30.017	25.763	4.253	30.017	0.000
Procurement Consultant	68.173	68.173	87.551	60.338	27.213	87.551	0.000
Design	26.546	26.546	34.088	30.801	3.288	34.088	0.000
Financial Issues/Funding/Procurement Strategy	2.258	2.258	2.630	2.516	0.114	2.630	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	276.302	276.302	320.212	159.541	160.671	320.212	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	58.493	31.903	26.590	58.493	0.000
Risk	48.974	48.974	0.000	0.000	0.000	0.000	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	504.270	504.270	533.309	311.180	222.129	533.309	0.000

Detailed Financial Information		Edinburgh Trams										FY 09/10		Period Nr:			9
																	£m
6: Current Year 09/10 - Baseline Budget		P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	Total		
1 Total Project COWD - Budget		5,576	4,633	10,814	7,167	12,698	13,280	13,681	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	8,043	7,560	13,023	6,334	6,852	8,812	11,343	10,570	8,260	8,860	9,662	114,503		
7 Other Funding + Revised Forecast		0,754	0,500	0,664	0,624	1,075	0,523	0,566	0,728	0,937	0,873	0,682	0,732	0,798	9,454		
10 Total Demand on TS		8,373	5,557	7,379	6,936	11,948	5,811	6,286	8,085	10,406	9,697	7,578	8,128	8,864	105,049		
8: Variance tracker																	
12 Variance Line 1 to Line 4 - Project Actual vs Budget		3,551	1,424	-2,771	0,404	0,325	-5,947	-6,728	-7,224	-2,689	-0,498	-5,454	-4,037	-4,923	-35,569		
13 Variance Line 2 to Line 7 - Oth Funding Actual vs Budget		0,293	0,118	-0,229	0,033	0,027	-0,574	-0,556	-0,596	-0,222	-0,041	-0,450	-0,333	-0,407	-2,937		
14 Variance Line 3 to Line 10 - Demand on TS vs Budget		3,258	1,307	-2,542	0,370	0,296	-6,373	-6,173	-6,627	-2,467	-0,457	-5,004	-3,704	-4,517	-32,632		
9: Next Year 10/11 - Forecast (Updated 4 weekly)		Q1	Q2	Q3	Q4	Total	Financial Commentary - FY 10/11 Onwards All costs are includes an unapproved increase of £13M to the Project Risk allowance. See section 3 of the TS report for further commentary.										
18 Total Project COWD		44,741	38,200	34,492	43,513	161,026											
21 Other Funding		3,694	3,161	2,848	3,593	13,296											
24 Total Demand on TS		41,046	35,120	31,644	39,920	147,730											
10: All Years (Escalated) (Updated 4 weekly)		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		
26 Total Project COWD		0,000	3,093	10,664	31,478	87,815	100,579	114,503	161,026	23,750	0,000	0,000			533,309		
29 Other Funding		0,000	0,000	1,000	0,106	10,449	7,769	9,454	13,296	1,961	0,000	0,000			44,034		
32 Total Demand on TS		0,000	3,093	9,664	31,373	77,366	93,210	105,049	147,730	21,789	0,000	0,000	0,000	0,000	489,275		

GRAPH 3 - Demand on TS: Actual/Budget Run



11: Other Funding		P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	Total
Budget (Current Year 09/10)															
RAB Funding (If Applicable)															0,000
Other Funding Stream		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
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)															0,000
Other Funding Stream		0,754	0,500	0,664	0,624	1,075	0,523	0,566	0,728	0,937	0,873	0,682	0,732	0,798	9,454
Other Funding Stream															0,000
Other Funding Stream															0,000
Other Funding Stream															0,000
Total Actual Other Funding		0,754	0,500	0,664	0,624	1,075	0,523	0,566	0,728	0,937	0,873	0,682	0,732	0,798	9,454
12: Promoter Full Year Forecast Run Rate (Total Project Costs)		P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	
Period Trend of Full Year Forecast (Current Year 09/10)															
Full Year Forecast		150,084	150,084	150,084	150,084	150,084	119,728	119,728	119,728	114,603					
13: Promoter AFC Run Rate (Total Project Costs)		P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	
Period Trend of AFC															
Anticipated Final Cost		527,099	527,099	527,099	527,099	527,099	527,099	527,099	533,309	533,309					

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

0910 Period 9 - Primary Risk Register

ARM Risk ID	Cause	Event	Effect	Risk Owner	Significance	Black Flag	Treatment Strategy	Previous Status	Current Status	Due Date	Action Owner
343	General delay to programme with various causes e.g. failure to obtain approvals on time; parliamentary processes, contractor issues.	Delay to completion of project	Increased out-turn cost due to delay plus revenue loss	S Bell	High (25.00)		DRP on programme management (EOT1)	Complete	Complete	30-Oct-09	S Bell
							Liason between tie/BSC programme managers	On Programme	On Programme	30-Dec-11	T Hickman
							Programme Management Panel process	On Programme	On Programme	30-Dec-11	F McFadden
							Weekly tie/BSC commercial meetings	On Programme	On Programme	30-Dec-11	M Paterson

0910 Period 9 - Primary Risk Register

ARM Risk ID	Cause	Event	Effect	Risk Owner	Significance	Black Flag	Treatment Strategy	Previous	Current	Due	Action
1077	Base Date Design Information to Issued For Constructions (BDDI-IFC). Lack of visibility of design changes between November 2007 and May 2008	Tramworks price based on a design which may have been altered. Unclear who authorised design change.	Additional cost and programme delay	S Bell	High (25.00)		Establish a process which will act as a control mechanism for design changes. (If one exists already then ensure process is complied with)	Complete	Complete	30-Jun-09	T Glazebrook
							Intensive Mediation Marathon 29/6/09 to 6/7/09 to try and resolve issues.	Complete	Complete	30-Jun-09	S Bell
							Mediation resulted in no overall agreement on BDDI - IFC although it gave useful background information. Strategy paper to be presented to TPB on 29 July to seek approval for way forward including utilising necessary contract mechanisms (DRP, audit etc)	Complete	Complete	14-Aug-09	S Bell
							Resolution Strategy approved - 1st DRP to go 10th August. audit requests to BSC for information going w/c 3.8.09	Complete	Complete	10-Aug-09	S Bell
							Of the issues previously highlighted as going through DRP, 1 has been ruled in favour of tie, 2 have been agreed, 2 have been ruled in BSC's favour and this is being reviewed by tie. Further issues are due to enter DRP in December 09 and January 10.	On Programme	On Programme	17-Dec-09	S Bell

0910 Period 9 - Primary Risk Register

ARM Risk ID	Cause	Event	Effect	Risk Owner	Significance	Black Flag	Treatment Strategy	Previous	Current	Due	Action
1091		Excavation of soft, unsuitable material below Earthworks outline	Additional cost	F McFadden	High - 25.00		Donaldsons to carry out surveys	Complete	Complete	30-Jul-09	C Neil
							Extent of soft ground being investigated. External specialist advice deployed.	On Programme	On Programme	31-Dec-09	M Paterson
1101	Unreasonable behaviour of BSC commercial management	Unrealistic estimates being submitted for potential changes	Programme delay while disputes regarding estimates are resolved	F McFadden	High - 25.00		Additional resource from TNT	Complete	Complete	30-Jul-09	M Paterson
							Agreed with BSC for independent evaluation to get benchmark	Complete	Complete	30-Jul-09	M Paterson
							All estimates to be scrutinised by tie commercial team and, where appropriate, challenge made to BSC. Additional resource (T&T) being used to check estimates to reduce delay.	On Programme	On Programme	30-Dec-10	M Paterson
1094		Roads throughout works require full depth reconstruction	Programme impact plus additional costs. £1.5m cap applies to only 4 areas.	F McFadden	High - 24.00		Carry out surveys to confirm extent of roads requiring full depth reconstruction	Complete	Complete	30-Jun-09	C Neil
							Suite of options from surveys to be reviewed and agreement reached	On Programme	On Programme	31-Dec-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
							Fortnightly Meetings of Approvals Task Force	On Programme	On Programme	31-Mar-10	D Sharp
							Hold fortnightly Roads Design Group	Complete	Complete	31-Dec-07	T Glazebrook
							Informal consultation prior to statutory consultation	Complete	Complete	31-Mar-09	T Glazebrook
							Integrate CEC into tie organisation/accommodation (office move)	Complete	Complete	4-Jun-07	T Glazebrook

0910 Period 9 - Primary Risk Register

ARM Risk ID	Cause	Event	Effect	Risk Owner	Significance	Black Flag	Treatment Strategy	Previous	Current	Due	Action
279		Third party consents including Network Rail consent are denied or delayed	Delay to programme; Risk transfer response by bidders is to return risk to tie; Increased out-turn cost if transferred and also as a result of any delay due to inflation.	D Sharp	High - 23 Oct		Additional EMC modelling to give better info to NR	Complete	Complete	31-Dec-07	C Kerr
							CEC Planning - mock application by SDS	Complete	Complete	31-Dec-07	T Glazebrook
							Draft depot and station change proposals to NR	Complete	Complete	31-Jan-08	A Sim
							Fortnightly meetings of Approvals Task Force	On Programme	On Programme	31-Mar-10	D Sharp
							Identify fallback options	Complete	Complete	31-Aug-07	T Glazebrook
							Monitoring and tracking through the 3rd party rep	Complete	Complete	30-Jun-09	D Sharp
							Monitoring of BBS - 12 week look ahead	On Programme	On Programme	14-Jul-11	R Bell
							Obtain critical consents prior to financial close	Complete	Complete	31-Jul-08	T Glazebrook
52	Political and/or Stakeholder objectives change or require design developments that constitute a change of scope; Planning Department requires scope over and above baseline scope in order to give approval (may be as a result of lack of agreement over interpretation of planning legal requirements).	Amendments to design scope from current baseline and functional specification.	Programme delay as a result of re-work; Programme delay due late receipt of change requirements and lack of resolution; Scope/cost creep (dealt with through change process); Project ultimately could become unaffordable.	D Sharp	High - 22 Oct		Close working relationship with CEC and stakeholders	On Programme	On Programme	31-Jan-11	D Sharp
							Weekly critical issues meeting	Complete	Complete	31-Jul-08	T Glazebrook

0910 Period 9 - Primary Risk Register

ARM Risk ID	Cause	Event	Effect	Risk Owner	Significance	Black Flag	Treatment Strategy	Previous	Current	Due	Action
928	Political and/or Stakeholder Major single safety incident (including a dangerous occurrence) during construction	Safety incident during construction	Delay (potentially critical) due to HSE investigation and rework. PR risk to tie and stakeholders.	F McFadden	High - 21.00		All Site Staff to get CSCS or equivalent	On Programme	On Programme	30-Jan-11	C McLauchlan
							Develop and implement Incident Management Processes	Complete	Complete	27-Apr-07	T Condie
							HSQE Audits, site inspections and Management Safety Tours to be carried out	On Programme	On Programme	31-Dec-10	B Cummins
							Safety Induction to be carried out for all site staff	On Programme	On Programme	31-Dec-10	B Cummins
							Site Supervisors to be appointed by tie	Complete	Complete	28-Feb-07	S Clark
The tie "Safety" bus is being used to deliver safety talks & culture surveys to the contractors workforce.	On Programme	On Programme	31-Dec-09	B Cummins							
931	Utilities assets uncovered during construction that were not previously accounted for; unidentified abandoned utilities assets; known redundant utilities; unknown live utilities; unknown redundant utilities.	Unknown or abandoned assets impacts scope of Infraco work	Re-design and delay as investigation takes place and solution implemented; Increase in Capex cost as a result of additional works.	C Neil	High - 29.00		GPR surveys in areas where there are likely to be services	Complete	Complete	1-Apr-07	T Glazebrook
							Infraco trial holes where applicable.	On Programme	On Programme	31-Jan-10	P Dobbin
							MUDFA trial holes to verify GPR surveys	Complete	Complete	30-Jul-09	A Hill
Obstructions and voids survey, establish ownership reduced delay on discovery.	On Programme	On Programme	31-Dec-09	C Neil							

0910 Period 9 - Primary Risk Register

ARM Risk ID	Cause	Event	Effect	Risk Owner	Significance	Black Flag	Treatment Strategy	Previous	Current	Due	Action
977	Legal challenge. Extension of statutory consultation process. Large number of objections. TRO process is subject to a public hearing process.	Delay in achievement of TRO(s) due to a large number of public objections and/or a legal challenge to using a TTRO to construct Infraco.	Requirement to start construction using TTROs.	D Fraser	High (20.00)		Obstructions and voids survey, Comms strategy to include provision of process and drawings on website for public viewing	Complete	Complete	30-Sep-09	S Clark
							TRO strategy approved by board, discussion to be held with CEC head of transport to reduce risk of legal challenge.	Complete	Complete	31-Oct-09	S Clark
							TRO Strategy to CEC Transport, Infrastructure and Environment Committee on 22 Sept 09	Complete	Complete	22-Sep-09	D Fraser
							Use of TTROs to undertake construction of permanent works in advance of permanent TROs being approved. Statutory consultation complete 9 Nov 09 – no surprises advised. Paper to full CEC in January 2010	On Programme	On Programme	30-Jan-11	A Sim