Progress Report Issue 1 Period 6 1 of 33



# 4 Week Period Reporting Pack 08/09

# Project Title:

Edinburgh Tram Project

# **Reporting Period:**

Period 06 2008/09

# **Transport Scotland Project Manager:**

John Ramsay

# **Progress Meeting Date:**

Report authorised by:

Steven Bell

Signature:

Date: 1/9/9/08

For and on behalf of tie Limited

Delivery Organisation Period Progress Report

Document Type: Issue: Progress Meeting Date: Page:

Co	ntents	Page
1	Executive Summary	3
2	Progress	6
3	Headline cost report	10
4	Time schedule report	13
5	Risk and opportunity	17
6	Health, safety, quality and environment	19
7	Stakeholder and communication	22
App	pendix 'A' Detailed cost report	23
App	pendix 'B' Change control register	26
App	pendix 'C' Programme information	27
App	pendix 'D' Primary risk register	28
App	pendix 'E' Resource information	33

Progress Report Issue 1 Period 6 3 of 33

# 1 Executive Summary

# 1.1 Key issues

#### **HSQE**

There were no RIDDOR incidents in the Period and the AFR for the project is continuing to reduce and is now 0.09 with 106,600 hours worked in the period. This compares well to selected industry benchmarks (shown in section 6). Continued focus is being applied to ensure a range of initiatives are implemented to maintain this trend.

### **Programme**

Overall progress remains behind the master programme. This is due primarily to:

- Design slippages V26 / V31 at time of Contract Close;
- Design slippage since novation of design to Infraco (now at V35); and
- Slow mobilisation of Infraco

A robust and realistic four-month detailed construction programme has now been agreed with BSC. The milestones to be achieved are outlined in section 4.3. Whilst BSC deliver on the activities within this programme, work will proceed with agreement of a revised contract programme. This revised programme will incorporate opportunities to recover these initial delays. These opportunities include use of additional resources, improved productivity, use of alternative technology for OLE installation and track-laying and better use of integrated traffic management. It is anticipated that this work will be complete with a revised Infraco contract programme and overall revision to the Tram Master Project Programme will ready by the end of this calendar year. Infraco proposals for recovering the effects of their slow mobilisation will be included within the revised programme.

Whilst a straight import of the progressed programme into the master programme forecasts a potential revenue service slippage of up to five months, **tie** is confident that sufficient float and false logic constraints exist in the programme, along with methodology improvements, to maintain OPEN for Revenue Service as July 2011 with a range of May 2011 to December 2011. A detailed breakdown of this potential slippage and opportunities to recover is being produced and will be incorporated in the Period 7 report.

Additionally, the MUDFA Rev07 programme is almost finalised and this will be reflected in the overall update to the Tram Master Project Programme. Any commercial impact of revised programmes will be addressed in line with the final agreement of those programmes.

#### Progress - Design

SDS road design submissions have slowed as they incorporate necessary CEC comments. CEC have performed well at turning around approvals. BSC management of SDS is being challenged to ensure sufficient focus. The following table identifies outstanding approvals.

Phase 1a only	only Submitted to CEC Granted by CEC		% complete	% of		
	v31	Actual	v31	Actual	Meetro J. Tr. Tel. Tr. No. P. M. Collecter and St.	plan
Prior approvals (52)	52	47	50	39	75%	78%
Technical approvals (73)	71	64	46	41	56%	89%
IFC (submitted to tie) (86)		*	64	47	55%	73%

Phase 1a and 1b	Submitte	ed to CEC	Granted by CEC		% complete	% of
	v31	Actual	v31	Actual		plan
Prior approvals (70)	70	64	68	56	84%	82%
Technical approvals (95)	93	86	67	61	64%	91%

Delivery Organisation Period Progress Report

Document Type: Issue: Progress Meeting Date: Page: Progress Report Issue 1 Period 6 4 of 33

<u> </u>	60 00	320	20	37
IFC (submitted to tie) (117)	94	74	63%	79%

Two additional IFCs have been identified for additional works (not incentivised). Key design areas affecting critical path are identified within the main report.

#### Progress - MUDFA

Carillion has appointed a new Project Director as a result of **tie**'s management intervention to address Carillion's poor performance. Over the past period an improvement in management approach has been noticeable and improved outputs are expected as a direct result.

#### Progress - Infraco (including Tramco)

Summary against the agreed milestones is shown in the table below (number of milestones)

	Period			Cumulative		
3	Planned	Achieved	%	Planned	Achieved	%
Prelims	3	3	100%	18	18	100%
Construction	19	0	0%	54	0	0%
Total	22	3	14%	72	18	25%

Issues with slow mobilisation have been discussed. However, work has commenced on a number of worksites including Haymarket Viaduct, Edinburgh Park Viaduct and A8 underpass all commenced. Detailed progress reporting on the four-month construction programme will be in all future period reports.

The Tram mock-up is on programme.

#### Progress - Other

Pollution prevention works at the Scotrail Haymarket depot are reported to be on the NR programme for completion in November 2008.

Construction works for the relocation of the Murrayfield training pitches are progressing with approximately one week's slippage reported due to bad weather. The contractor aims to recover this over the next two periods.

#### Cost

The AFC for Phase 1a of the project remains unchanged from last period at £512m, including a revised risk allowance of £28.9m (up £0.5m from Period 5 see below). Funding available remains at £545m.

Cumulative expenditure to date (end of P6 08/09) on Phase 1a is £177.4m. COWD year to date, at £47.4m, is £11.5m lower than the 'budget' for the year to date. This is primarily due to delayed closure of the Infraco contract suite, slow Infraco mobilisation and delayed completion of land acquisition costs.

The FY08/09 outturn forecast has been reduced by £11.8m and now stands at £138.8m including a revised conservative risk allowance of £8.0m.

The current 12-week look ahead of the Infraco programme has established a revised position to the end of December 2008, which incorporates a realistic forecast linked to the completion of key milestone activities. Further detailed analysis of the programme, including discussion with the Infraco contractor is in progress to confirm the full year programme up to the end of March 2009. The completion of this exercise in Period 7, together with the finalising of the

Delivery Organisation Period Progress Report

Document Type: Issue: Progress Meeting Date: Page: Progress Report Issue 1 Period 6 5 of 33

MUDFA Rev07 programme, will provide better confidence of the new full year forecast. However, early indications are that the current year end figure of £138.8m should be treated as an interim position, with the understanding that it may be further reduced next period.

Based on the revised outturn above, the TS share of Phase 1a costs in FY08/09 at 91.7% (500/545) would be between £120m of Base Costs excluding risk allowance or £127m of the total costs, including Risk Allowance. This is being kept under review in the context of FY0809 funding allocated to the project by TS of £120m.

#### Risk

In the Period 5 report it was stated that £0.6m of contingency was to be drawn down to fund additional traffic management requirements which will arise when Infraco assume control of the Guided Busway in November 2008. Subsequently, it was determined that this work will now be funded from the Infraco provisional sum for wide area network measures.

The detailed development of the Infraco element of the Project Risk Register and associated treatment plans has progressed well in Period 6 and the QRA will be updated in Period 7. Four broader risks with potential to impact the Infraco works have been highlighted and are being treated:

- Infraco unable to commence works or work is delayed or disrupted (includes mobilisation by Infraco, conflicts with utilities work completion and traffic management interface requirements);
- Changes to the final design during approvals / final design completion (the design and consents task force provides focus and control for identifying and addressing any such items);
- "Partnership" approach between tie and BSC is not effective with the potential to impact
  third party relationships (tie continue to lead and engage with the Consortium Directors
  and their parent companies in addition to effectively measuring and reviewing BSC
  engagement with third parties); and
- Shortage of competent resources within BSC to effectively deliver the Infraco works (key
  personnel recruitment, mobilisation and performance is being scrutinised and formally
  tracked to ensure BSC are addressing any areas of weakness).

### Communications

The team has been working closely with stakeholders throughout the route regarding all upcoming tram works through notifications, face to face engagement and website updates. Particular focus has been on the upcoming utility diversions at The Mound and city centre and the preparation for the tram works on Leith Walk.

The TRO design presentations will start on 23 September. The presentations are divided into four areas: Newhaven, Leith Walk, city centre and the West End and beyond. This process is being led by CEC with **tie** facilitating.

The closing date for applications for the Small Business Support Scheme was 31 August 08. Over £1.5 million has been paid out to local businesses and, following a meeting on 25 September, a decision will be made as to how best deploy the remaining resources available to the business community.

Progress Report Issue 1 Period 6 6 of 33

# 2 Progress

#### 2.1 General / overall

#### Land and Property

- NR Expected to conclude the Bridge Agreements drafting by the end of September and agree an Operating Agreement with NR by mid-October;
- The SRU agreement was executed by CEC during the period;
- Forth Ports SDS have been instructed to prepare the final agreement plans and tie are awaiting confirmation for pricing on enhanced finished for Ocean Terminal tramstop from BSC:
- Haymarket carpark compensation a value has been obtained from First ScotRail and discussions are ongoing with TS regarding the franchise extension; and
- Building fixings consent has been received (deemed consent or consent with agreement) from 364 owners for 92 fixings. There are 30 fixings (28 owners) where matters remain unresolved. Negotiations are underway with the owners of these and at least five are expected to be resolved shortly. However, there remains a possibility that all 28 owners may have to be referred to the Sheriff for resolution. CEC are leading the legal process, supported by the project team.

#### **Network Rail**

- The scope and programme for the NR immunisation work is being developed with Infraco. The preferred approach is to avoid invasive changes to NR infrastructure and this will be verified by means of a detailed simulation study by Infraco;
- Infraco will be developing the full assurance case for NR acceptance. NR has now
  assigned their approvals specialist to assist Infraco with their assurance case, which is
  expected to be completed by September 2008;
- The lift and shift project scope is complete. Additional works identified are
  - o Scottish Power cable mitigation is to work around the route of the cable; and
  - C&W cable at the Water of Leith bridge SDS has designed a diversion and the works will be transferred into Infraco scope although the apparatus will be moved by C&W;
- The pollution prevention project at Haymarket depot remains on NR's programme for completion in November 2008. A local agreement with First ScotRail has been reached to accommodate any potential overlap between completion of the pollution prevention activities and commencement of the Infraco works.

#### General

 Murrayfield pitches are currently progressing one week behind program due to bad weather. The contractor aims to recover this over the next two periods.

# 2.2 Critical path

- The critical path has remained largely unchanged during the period albeit a number of activities have moved onto the critical path and are being monitored;
- SDS, as part of the Infraco consortium, continue to work closely with BSC to mitigate any remaining design issues although the following remain as design critical activities:
  - Section 2A track and roads contract programme track gang logic forces on-street track installation into embargo periods thus delaying overall programme;
  - Section 5B track and roads contract programme track gang logic forces on-street track installation into embargo periods thus delaying overall programme;
  - W18 Murrayfield tramstop retaining wall approvals process delayed, awaiting change control estimate from BSC;
  - S26 South Gyle access bridge (IFC design issued but clash with sewer);
  - Section 5C track and roads; and
  - Depot roads;

Progress Report Issue 1 Period 6 7 of 33

- Revision 07 of the MUDFA Construction Programme is expected to be signed-off and issued during Period 7. This programme revision will take account of the more detailed information available from IFC designs, the traffic management / enabling works requirements and the potential interface with Infraco, but is expected to highlight potential conflicts in the following areas:
  - London Road roundabout south on Leith Walk chainage 0-375m to allow Infraco road works to proceed;
  - Edinburgh Park tramstop to Bankhead tramstop to allow Bankhead Drive retaining wall and South Gyle access bridge to progress;
  - Gogarburn tramstop to Edinburgh Park tramstop to allow Gyle tramstop retaining wall and track installation to progress; and
  - o Gogar depot 800mm water main delaying full access to earthworks; and

These are all being addressed by mitigation / treatment plans to minimise any impact;

- The Infraco construction programme is currently under review. The current Infraco critical activities are as follows:
  - Section 1b roads / track;
  - Section 2 track:
  - S23 Carricknowe bridge;
  - Section 5B track and roads;
  - S26 South Gyle access bridge (IFC design issued but clash with sewer);
  - W11 Bankhead drive retaining wall;
  - Section 5C track and roads;
  - W16 Gyle tramstop retaining wall;
  - A8 underpass;
  - Depot earthworks; and
  - S29 Gogarburn under-bridge.

#### 2.3 Procurement consultant

This phase is now complete.

#### 2.4 Design

 Awaiting copy of the latest design programme from BSC (V36). Design dates used in the programme remain at V35.

### 2.5 Financial / funding / procurement strategy

· This phase is now complete.

### 2.6 Parliamentary process / approvals

This phase is now complete.

### 2.7 Procurement construction works

· This phase is now complete.

#### 2.8 Construction works

#### <u>MUDFA</u>

- Constitution Street Works continued in period from Duke Street to Baltic Street and Tower Street in line with section programme;
- Leith Walk Intensity of work in Leith Walk, particularly from chainage 100-350 focusing on an end of September completion prior to Infraco commencing in this area in early October 2008;

Progress Report Issue 1 Period 6 8 of 33

- London Rd Works south of London Rd recommenced on 1<sup>st</sup> September 2008 and the Phase 3 traffic management to complete telecom element will be implemented earlier than previously planned. The construction of two BT chambers carried out over the embargo, adjacent to the Cathedral and Church, were completed within the period;
- Works within St. Andrew Street (north), Princes Street (east), George Street and South St David Street recommenced, as planned, on 1<sup>st</sup> September 2008;
- Utility diversion works commenced at Haymarket area on 18<sup>th</sup> August 2008. Currently reviewing de-scoping and alternative working methodology targeting a pre-Christmas 2008 completion;
- Awaiting confirmation from SGN that the proposals for de-scope section of works at Haymarket Yards are acceptable. Subject to satisfactory response, minor diversion required for SW main;
- Critical signalling works at South Gyle installed w/c 8<sup>th</sup> September 2008. Works ongoing completion of remaining elements anticipated by 26<sup>th</sup> September 2008;
- Utility diversion works have completed at Gogar roundabout;
- 800mm water main late delivery of two valves means that completion of water main (diversion of flows) is now 30<sup>th</sup> September 2008. This will enable the depot earthworks programme to continue through the existing water main area. Final tie-ins will be complete by 6<sup>th</sup> October 2008; and
- 1,500mm Sewer diversion works commenced in period. Works on programme for 23<sup>rd</sup>
  January 2008 transfer of flows.

#### Infraco

As stated in the Executive Summary, mobilisation is slower than expected, compared to the contract programme. Work is now being undertaken in line with the three-month detailed construction programme. Activities started, in progress and completed include:

- · Demolitions in progress at Roseburn Street/Russell Road.
- S19 Haymarket viaduct, S27 Edinburgh Park Station bridge and A8 underpass works have been started;
- S20 Russell Road bridge, S21E Water of Leith bridge and S23 Carricknowe bridge works are all at their early stage of mobilisation and clearance works. Main construction works are expected to start during Period 7 following pre construction activities approval (including WPP and Form C); and
- Road surveys that commenced during Period 5 with respect to the Infraco proposals for roads and drainage at Princes St and Shandwick Place are progressing with the identified reports being discussed with stakeholders.

# Advanced works

- Preparation for the removal of remaining 50,000m<sup>3</sup> of earthworks is now underway; and
- Invasive species 5<sup>th</sup> visit taking place in September.

# 2.9 Testing and commissioning

This phase has not yet commenced

#### 2.10 Hand over and service operations

This phase has not yet commenced

# 2.11 Network output programme interface (with Transport Scotland)

N/A

#### 2.12 Interface with other projects

Delivery Organisation Period Progress Report

Document Type: Issue: Progress Meeting Date: Page: Progress Report Issue 1 Period 6 9 of 33

A matrix of the risks associated with the interface with other external projects has been prepared and has identified the following:

- CEC St. Andrew Square Streetscape works integrated with MUDFA and enabling works;
- Invasive species eradication programme integrated with Infraco programme logic;
- Airdrie to Bathgate Integrated with Infraco for disruptive possessions;
- NR pollution prevention works Interfaces with Infraco works at Murrayfield and particularly S21A Roseburn St viaduct;
- St James centre development to be reviewed with CEC;
- Waverly re-roofing programme to be reviewed with TS;
- Waverley steps programme to be reviewed with TS;
- Gogar Surface station programme to be reviewed with TS;
- · National Portrait Gallery refurbishment;
- Murrayfield pitches relocation Programme has been incorporated into the master programme. Contractor has set up on site and site clearance has been completed. The drainage works have been started:
- Haymarket interchange Project (HISAM);
- Haymarket Station refurbishment;
- RBS tramstop at Gogarburn;
- Tiger Development new hotel at Haymarket junction.

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 is being sought with TS in Period 7.

Progress Report Issue 1 Period 6 10 of 33

# 3 Headline cost report

# 3.1 Current financial year

- Year to date COWD is £11.5m lower than 'budget' (Period 5 £6.5m) due to:
  - Delayed award of Infraco and Tramco and slow mobilisation £8.3m (Period 5 £4.0m)

     note that, although the contracts were awarded four weeks later than was anticipated, at the time the 'budget' profile was established, the key milestones in the contractual programme including the commencement of revenue service in July 2011 were unaffected:
  - o £1.6m of profiled Risk to P6 which has not been utilised to this point; and
  - Other timing differences £1.7 (as Period 5) include the completion of land acquisition costs which are now anticipated to be concluded in Q4 this financial year and have no consequential impact on any other element of the programme;
- Effective mitigation of programme slippages are being developed and agreed with both the MUDFA and Infraco contractors with a view to ensuring there are no conflicts between the utilities and infrastructure programmes and the scheduled opening date of the tram in July 2011 is not delayed; and
- The full year FY08/09 expenditure has been reduced by £11.8m to £138.8m, as profiled in the table below. This position includes a reduction in the Infraco forecast of £12.4m. The current 12-week look ahead of the Infraco programme has established a revised position to the end of December 2008, which incorporates a realistic forecast linked to the completion of key milestone activities. Further detailed analysis of the programme, including discussion with the Infraco contractor is in progress to confirm the full year programme up to the end of March 2009. The completion of this exercise in Period 7, together with the finalising of the MUDFA Rev07 programme, will provide better confidence of the new full year forecast. However, early indications are that the current year end figure of £138.8m should be treated as an interim position, with the understanding that it may be further reduced next period.
- Payment applications submitted by CEC to TS have been adjusted to reflect the cumulative cash requirements of the 12-week look ahead.

Reforecast profile for FY08/09

£m	YTD	P7-9	P10-13	Total FY08/09
Infrastructure and vehicles	14.3	28.0	34.3	76.6
Utilities diversions	21.4	7.4	2.8	31.5
Design	3.0	0.7	0.2	3.9
Land and compensation	1.1	1.4	1.0	3.5
Resources and insurance	7.6	3.4	4.2	15.2
Base costs	47.4	40.9	42.6	130.8
Risk allowance	0.0	0.0	8.0	8.0
Total Phase 1a	47.4	40.9	50.5	138.8
Phase 1b	0.0	0.0	3.7	3.7

- The Phase1b costs are provided for information only and reflect the commencement of Phase 1b utility diversions in late 2008 if there is a resolution to the additional funding requirements for Phase 1b to the satisfaction of CEC and Transport Scotland at that time;
- The proportion of the overall risk allowance allocated to the year, proportionate to the level of forecast base costs, is £8.0m, which is considered conservative;
- Based on the revised outturn above, the TS share of Phase 1a costs in FY08/09 at 91.7% (500/545) would be between £120m of Base Costs excluding risk allowance or £127m of

Progress Report Issue 1 Period 6 11 of 33

the total costs, including Risk Allowance. This is being kept under review in the context of FY0809 funding allocated to the project by TS of £120m; and

As previously reported and agreed with CEC and TS, initial milestones under the Infraco
and Tramco contracts, in respect of advance material purchases, will be classified as
prepayments. The aggregate amount of these payments for advance material purchases
is £24.2m. These prepayments will be reclassified as expenditure against funding in the
periods in future years when the related materials are delivered to site and incorporated
in the works.

### 3.2 Next financial year

- The forecast COWD for FY09/10 is shown in the table at 3.3 below. The significance of reducing the current year forecast by £11.9m has resulted in a reported increase of £10.4m for FY09/10 (including risk); and
- The sensitivities of this amount are the same as for FY08/09 above; changes to the
  programme, significant variations to the works and the extent to which there will be call on
  the risk allowance profiled to that year of £13.0m. Note that all utility diversions costs are
  currently anticipated to be spent by the end of FY08/09.

## 3.3 Total project anticipated forecast cost

#### Phase 1a AFC and profiling

£m	Cum FY0708	FY0809	FY0910	Balance	AFC
Infrastructure and vehicles	30.7	76.6	127.1	70.5	304.9
Utilities diversions	18.4	31.5	0.0	0.0	49.9
Design	21.4	3.9	0.6	0.8	26.8
Land and compensation	16.8	3.5	0.2	0.0	20.6
Resources and insurance	42.7	15.2	10.1	12.8	80.9
Base costs	130.0	130.8	138.0	84.2	483.1
Risk Allowance	0.0	8.0	13.0	8.0	28.9
Total Phase 1a	130.0	138.8	151.0	92.2	512.0
Phase 1b	3.0	3.7	29.3	51.3	87.3

- As previously agreed, cumulative costs incurred to the end of FY07/08 also include £3m incurred on Phase 1b design, meaning that total costs to the end of FY07/08 were £133m; and
- The estimate for Phase1b is based upon unit costs in the Infraco and Tramco contracts and is subject to finalisation in accordance with a value engineered and approved / consented design and programme. The finalised price will be valid if an option under the Infraco contract is exercised in sufficient time to allow construction of Phase 1b to commence in July 2009. Infraco have commenced formally estimating this finalised price to inform the current update of the Phase 1b Business case and capital expenditure.

### 3.4 Change control

The current change control position is summarised in the table below:

Progress Report Issue 1 Period 6 12 of 33

BASE ESTIMATE	498.10	87.30	585.40
APPROVED CHANGES - to Financial Close	13.91	0.00	13.91
CONTROL BUDGET - Baseline	512.02	87.30	599.32
APPROVED CHANGES - post Financial Close	0.00	0.00	0.00
REVISED CONTROL BUDGET	512.02	87.30	599.32
ANTICIPATED CHANGES	0.00	0.00	0.00
CURRENT AFC	512.02	87.30	599.32
PREVIOUS AFC	512.02	87.30	599.32

- Base estimate The position at Final Business Case (Oct 2007);
- Approved changes to Financial Close The financial impact of the project control budget having been reset to reflect final Infraco and Tramco Contract Award levels and a consequential reappraisal of the risk allowance. This was approved at the Tram Project Board on 4<sup>th</sup> June;
- Control budget baseline (New Project Control Budget) The baseline within which all future project change control will be reported against;
- Approved changes post Financial Close Tram Project Board approved changes from this point on. There are none to report with financial effect on the Control Budget at this point. The funding for the utility (sewer) diversionary work at Gogar and the Infraco main site office rental costs have been met from a drawdown of funds from the project risk allowance; and
- Anticipated changes Future potential changes that are work in progress prior to formal approval. There are none to report at this point.

Progress Report Issue 1 Period 6 13 of 33

# Time schedule report

4.1 Report against key milestones
The agreed baseline programme reference for this project is that at Financial Close leading to revenue service in July 2011.

Milestones	Baseline programme date	Actual / current forecast date
Approval of DFBC by CEC	21 Dec 06A	21 Dec 06A
TRO process commences	14Dec07A	
MUDFA – commencement of utility diversions	02 Apr 07A	02 Apr 07A
Approval of FBC by TS – approval and funding for Infraco /	09 Jan 08	Dec 07A
Tramco		
Tramco / Infraco – award following CEC / TS approval and cooling off period and SDS novation.	28 Jan 08	14 May 08A
Construction commences	14-Apr-08	14-May-08A
Haymarket viaduct commences	08-May-08	01-Sep-08A
Edinburgh Park viaduct commences	06-Aug-08	01-Sep-08A
A8 underpass commences	08-Aug-08	28-Aug-08A
Carricknowe Bridge commences	21-Aug-08	21-Oct-08
All demolition work complete	22-Aug-08	25-Nov-08
Tram mock-up delivered	Oct 2008	Oct 2008
First track installation commences – on street	03-Nov-08	03-Nov-08
MUDFA works complete	Nov 2008	Mar 2009
Haymarket viaduct complete	08-Dec-08	24-Mar-09
Roseburn viaduct commences	20-Jan-09	20-Jan-09
Design assurance complete	20-Jan-09	15-May-09
All Issue for Construction (IFC) drawings delivered	21-Jan-09	21-Jan-09
Princes Street closed	03-Feb-09	03-Feb-09
Roseburn viaduct complete	20-Apr-10	20-Apr-10
Carricknowe bridge complete	11-May-09	14-Jul-09
All consents and approvals granted	18-May-09	18-May-09
Edinburgh Park viaduct complete	24-May-09	24-May-09
A8 underpass complete	14-Jul-09	04-Aug-09
Princes Street re-opened	01-Aug-09	01-Aug-09
NR immunisation complete	Nov 2009	Nov 2009
TRO process complete	01-Dec-09	01-Dec-09
1 <sup>st</sup> OHL installed	11-Dec-09	11-Dec-09
Commission Section 2 (Haymarket to Roseburn junction)	11-Jan-10	11-Jan-10
Commission Section 6 (depot)	25-Mar-10	25-Mar-10
1st Tram delivered	09-Apr-10	09-Apr-10
Test track complete	23-Apr-10	
1 <sup>st</sup> section (other than depot) complete ready for energisation	25-June-10	23-Apr-10 25-June-10
Commission Section 7 (Gogar to Edinburgh Airport)	25-June-10	25-June-10
Driver recruitment commences	July 2010	July 2010
Commission Section 5 (Roseburn junction to Gogar)	09-Nov-10	09-Nov-10
Driver training commences	Nov 2010	Nov 2010
System testing complete off street	09-Dec-10	09-Dec-10
Final tram delivered	17-Jan-11	17-Jan-11
Construction Line 1a complete	17-Jan-11	17-Jan-11
System testing complete on street	16-Feb-11	16-Feb-11
Commission Section 1 (Newhaven to Haymarket)	11-Mar-11	11-Mar-11
Letter of "no objection" from Independent Competent Person to commence tram running	17-Apr-11	17-Apr-11
Shadow running starts	18-Apr-11	18-Apr-11

**Delivery Organisation Period Progress Report** 

Document Type: Issue: Progress Meeting Date: Page:

Progress Report Issue 1 Period 6 14 of 33

Shadow running complete	July 2011	July 2011
Letter of "no objection" from Independent Competent Person to commence revenue service	July 2011	July 2011
Open for revenue service	July 2011	July 2011

Guidance for Completion: Legend for colouring of Actual / forecast date text

Actual / forecast date is ahead or in line with baseline Yellow: Slight slippage - readily recoverable with action

Red: Notable / significant slippage - difficult to recover, even with action.

#### 4.2 Key issues affecting schedule

Mitigation for all of the issues noted below is underway to maintain and protect the contract programme. Each area is being managed with full visibility and ownership by tie's project management team. Full integration of the issues and the proposed solutions continue to be carried out during September with Infraco. A more settled integrated programme, with attendant contingency recovery plan has been set out, agreed and implemented for the next four periods to the end of 2008. It is anticipated that the full integrated programme will be developed and agreed by the end of the calendar year.

#### General

- Telecoms service providers programme impact on Infraco construction programme continues to be monitored with emphasis in the following areas
  - BT cabling and chamber at Foot of the Walk;
  - o BT and Easynet cabling adjacent South Gyle tramstop retaining wall;
  - o BT and Easynet cabling at Bankhead Drive retaining wall; and
  - o BT cabling at South Gyle access bridge.

# Design

- W3 / W4 Russell Road bridge design for wingwall to be modified to avoid clash with existing sewer, this is being investigated at the moment;
- S26 South Gyle access bridge design for west abutment to be modified to avoid clash with existing sewer;
- Section 7B utility design and build programme is included within Revision 07;
- On-street roads / drainage design;
- SGN medium pressure main in Section 1B (protection option now agreed);
- SGN medium pressure main at IPR;
- Sewer / irrigation drain Murrayfield pitches / S21E Water of Leith bridge;
- Power cable Murrayfield pitches / S21C Underpass / S21D retaining wall; and
- Sewer at S29 Gogarburn bridge.

The approvals taskforce, comprising SDS, CEC and tie, is operating effectively to mitigate the design issues above.

#### **MUDFA**

- Balfour Street to Foot of the Walk the completion of utility diversions and telecoms to allow access for Infraco road works at chainage 100-350;
- London Rd roundabout south on Leith Walk chainage 0-375m to allow Infraco road works to proceed;
- Haymarket to east end of Shandwick Place to allow Infraco roadworks to commence in January 2009;
- Edinburgh Park tramstop to Bankhead tramstop to allow Bankhead Drive retaining wall and South Gyle access bridge to progress;
- Gogarburn tramstop to Edinburgh Park tramstop to allow Gyle tramstop retaining wall and track installation to progress; and
- Gogar depot 800mm water main completion to allow full access to earthworks.

Progress Report Issue 1 Period 6 15 of 33

#### Infraco

- Slow mobilisation of Infraco package contractors; and
- Installation of bridge beams at Edinburgh Park viaduct and Carricknowe dependant of pre-booked disruptive possessions.

### 4.3 12 week look ahead

Will be included as a separate file via CD.

The table below shows the key milestones over next 3 months to reflect the MUDFA Rev07 and the 12-week programme agreed with BSC.

12	MUDFA	INFRACO
September-08	Baltic St	
202	Forth Ports	S19 Haymarket viaduct –
		commencement of excavations
	Continue Leith Walk south	Complete consortium office
	Continue Leith Walk close-out	Continue Murrayfield pitches-
	CONTRACTOR STANDARD CONTRACTOR STANDARD CONTRACTOR STANDARD STANDARD CONTRACTOR STANDA	Souters
	Finalise enabling on George St /	Demolitions on Roseburn Street
	St. Andrew Square	buildings
	Finalise Princes St (South St.	S23 Carricknowe Viaduct – fencing
	Davids - South St Andrews)	and haul roads
	St Andrews Square	S20 Russell Road Bridge - TM and
	Superiority design of the control of	site clearance
	York Place / Picardy Place	Haymarket - Roseburn - track
		excavation
	West End junction	Bankhead to Edinburgh Park South
	5.	track excavation
	The Mound	S26 South Gyle Access Bridge -
		fencing and site clearance
	Haymarket	S27 Edinburgh Park Viaduct –
		Establishment and haul roads
	Continue Edinburgh TS to	A8 underpass - Phase 1 (North
	Gogarburn roundabout	side)
	A8 sewer	Depot – Building foundations,
	pon-menoscoporous de la constantina della consta	Access roads, earthworks
	Complete depot	S21B Murrayfield RW – Site
		clearance
	Airport	
October-08	Baltic St	Commence Leith Walk roads
		chainage 100-350 (Cassel bank
		Street up to the Walk)
	Forth Ports	W3 / W4 Russell Road
	Continue Leith Walk South	Haymarket Viaduct – foundations
		and sub-structure
	Continue Leith Walk Close-out	S29 Gogarbridge surcharge and
		piling for abutments
	St Andrews Sq	Haymarket to Roseburn Junction
	1 95	track excavation
	York Place / Picardy Place	W3 / W4 Russell Road RW's -
	The second secon	foundations
	The Mound	Murrayfield pitches
	Haymarket	S21B Murrayfield retaining wall piling
	Continue Edinburgh TS to	S21C Murrayfield stadium
	Gogarburn Roundabout	underpass – sire clearance

Delivery Organisation Period Progress Report

Document Type: Issue: Progress Meeting Date: Page: Progress Report Issue 1 Period 6 16 of 33

	A8 sewer	S23 Carricknowe viaduct – excavation
	Airport	S20 Russell Road bridge – piling and abutments
		S26 South Gyle Access Bridge – piling and abutments
		Balgreen – Saughton track excavation
		W11 Bankhead drive retaining wall- site clearance and piling
		S27 Edinburgh Park viaduct – Approach ramps
		A8 underpass – Phase 1 (North side)
		Depot – Building foundations, Access roads, earthworks
November-08	Forth Ports	Leith Walk Roads chainage FOW junction
	Tower Street and Constitution Street	Continue all the above structures
	Complete Leith Walk south	1A roads and tracks
	Complete London Rd to Picardy Place	1B roads and Tracks
	Continue Picardy Place to York Place	Lindsay Road retaining wall
	Continue St. Andrew Square	Depot access roads
	Continue The Mound	Depot building ground beams
	Continue Haymarket	16 244
	Continue A8 sewer	
	Continue airport	

Progress Report Issue 1 Period 6 17 of 33

# 5 Risk and opportunity

# 5.1 Summary

### Infraco Risk Review

The detailed development of the Infraco element of the Project Risk Register and associated treatment plans has progressed well in Period 6 and the QRA will be updated in Period 7. Four broader risks with potential to impact the Infraco works have been highlighted and are being treated:

- Infraco unable to commence works or work is delayed or disrupted (includes mobilisation by Infraco, conflicts with utilities work completion and traffic management interface requirements);
- Changes to the final design during approvals / final design completion (the design and consents task force provides focus and control for identifying and addressing any such items):
- "Partnership" approach between tie and BSC is not effective with the potential to impact
  third party relationships (tie continue to lead and engage with the Consortium Directors
  and their parent companies in addition to effectively measuring and reviewing BSC
  engagement with third parties); and
- Shortage of competent resources within BSC to effectively deliver the Infraco works (key
  personnel recruitment, mobilisation and performance is being scrutinised and formally
  tracked to ensure BSC are addressing any areas of weakness).

#### MUDFA

The MUDFA Risk Register was reviewed with the MUDFA Construction Director. Risk Id 342 (A8 sewer) has been closed following the drawdown of this risk. The Construction Director has identified a potential drawdown on Risk Id 139 to deal with the diversion of a 800mm gas main at Ingliston. This is being reviewed with SGN to minimise any diversion requirement.

#### **Guided Busway**

In the Period 5 report it was stated that £0.6m of contingency was to be drawn down to fund additional traffic management requirements which will arise when Infraco assume control of the Guided Busway in November 2008. Subsequently, it was determined that this work will now be funded from the Infraco provisional sum for wide area network measures.

#### Risks closed

There were four risks closed in the period. These were minor in terms of risk allowance and the value of these risks was transferred to contingency (£45k).

#### QRA

The QRA was updated to reflect the drawdown for the A8 sewer diversion, the reduction of risk within MUDFA and the closure of the four risks previously mentioned. The total risk and contingency for the project is now £28.9M.

### 5.2 Review project risk register

#### Top risks

The top risks in the Primary Risk Register are:

- Risk Id 918: CEC are unable to honour their funding commitments:
  - Two of the mitigating actions are complete and one will be ongoing as the project progresses. Effective action is in place here from CEC and good visibility is provided to the project team;
- Risk Id 139: Uncertainty of utilities location and consequent required diversion work / unforeseen utility services within LoD, and Risk Id 164: Unknown or abandoned assets or unforeseen / contaminated ground conditions affect scope of MUDFA work:

Progress Report Issue 1 Period 6 18 of 33

- These risks pertain to the MUDFA contract and are being mitigated by trial excavations in order to confirm the location of utilities. This information is then passed to the designer. This process will continue until the design is complete;
- Risk Id 31: Bankhead Drive retaining wall: BT and Easynet diversion work not due to be completed till the end of January 2009. However, work on the structure was due to start mid-June 2008, and Risk Id 30: South Gyle access bridge: BT diversion work not due to be completed till the end of September 2008. However, work on the bridge was due to start mid-June 2008:
  - Both risks 30 and 31 are caused by a delay in the MUDFA diversion works. The Infraco and MUDFA project managers have met on site to try and find a resolution to this issue although additional resources will be required to complete the BT diversion works to mitigate impact on the Infraco programme.
- Risk Id 1033: Failure of Infraco to mobilise in time to commence work in line with programme.
  - This risk was added in Period 3 to reflect tie's concern at Infraco's slow mobilisation.
     Mitigation includes the programme integration review currently underway.

## 5.3 Risk action plan for next period

Risk mitigations are identified in the Primary Risk Register and treatment plans are under further development.

## 5.4 Review project opportunity register

On Contract Award, a number of value engineering initiatives were instructed and will be progress in line with the contract. Future VE opportunities have been identified and a team is being set up to specifically target realisation of such initiatives. This will be reported on in greater detail in Period 7.

# 6 Health, safety, quality and environment

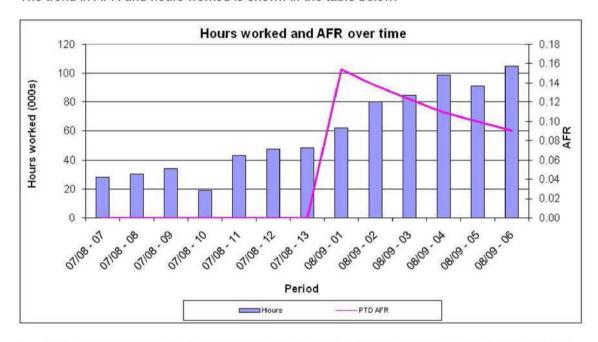
# 6.1 H and S accidents and incidents, near misses, other or initiatives

- · There were no RIDDOR incidents in the period; and
- The AFR for the project continues to reduce and is now 0.09 (106,600 hours in the period) which is a strong industry performance (see table below).

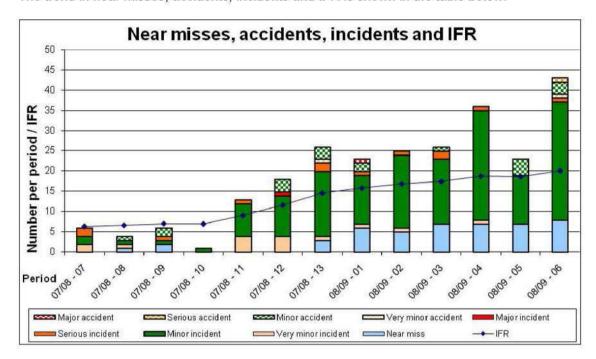
Comparison with Tram Project AFR with industry performance is shown in the table below.

Organisation	YTD AFR
Scottish Water Solutions	0.28
May Gurney Integrated Services	0.16
Carillion Civils	0.22
Carillion Infrastructure	0.26

The trend in AFR and hours worked is shown in the table below.



 There were six minor accidents, 1 serious incident, 29 minor incidents and 8 near misses reported in the period. The trend in near misses, accidents, incidents and IFR is shown in the table below.



- All incidents are under investigation and 22 of the 44 accidents, incidents and near misses this period have been investigated, actions agreed, implemented and closed;
- There are a further 32 open incidents which are awaiting investigation reports and closure. These are being progressed and there has been a further reduction in the backlog during the period;
- The RIDDOR investigation report has been revised and re-submitted to tie with 9 out of 10 recommendations now closed; and
- The incident classed as serious related to a report of a pedestrian falling into an
  excavation outside a pub in Leith Walk. Interim reports suggest that edge protection was
  in order. However, the member of the public appeared to be incapacitated prior to
  stumbling.

#### 6.2 Environment

- · There were no environmental incidents reported in the period; and
- An area of contaminated land was identified in the area of the A8 sewer diversion in Period 5. Arrangements are underway for the disposal of the material by a specialist contractor.

### 6.3 Quality

- Three audits were scheduled for Period 6 due to annual leave overlaps between auditors and auditees; 1 was completed (BSC Project Management Plan), no findings were raised.
- A two day audit was completed by tie on Carillion during Period 5 focusing on quality procedures, inspection and test plans and reinstatement / hand-back processes. There were two issues identified within the systems audited, management control and comprehensive nature of inspection and test plans. An action plan is agreed with Carillion to address these. Management arrangements and controls have been reinforced by Carillion and additional senior staff are now deployed onto the project. Reinstatement assurance arrangements have also been addressed with proposals being finalised for closing out necessary assurance and testing. This includes an updated

Delivery Organisation Period Progress Report

Document Type: Issue: Progress Meeting Date: Page: Progress Report Issue 1 Period 6 21 of 33

regime that has now been instigated with additional documented evidence of inspections;

- 6 NCRs were raised and 7 closed in the period; and
- There are 10 outstanding NCRs from previous periods. Close-out of these is being continued and should be completed by the end of Period 7.

Progress Report Issue 1 Period 6 22 of 33

### 7 Stakeholder and communication

### 7.1 Stakeholder / communication strategy / plan

The structure and responsibilities of the Communications and Stakeholder team are under review and changes will be made in the next period. The Communications and Stakeholder Strategy will be refreshed for the next stage of the project. This revision will include members of the tie Communications and Stakeholder team and key members of the CEC's communications team.

# 7.2 Stakeholder / communication update

Throughout the last period, the team has engaged, informed and consulted through the following methodologies:

As part of the media strategy a statement on The Mound was released for the upcoming utility diversions at the end of September. Other media enquiries included Granton and Line 1b. Willie Gallagher was interviewed at the Scottish Transport Conference on 16 September for a special feature in The Scotsman.

The team has been working closely with stakeholders throughout the route regarding all upcoming tram works through notifications, face to face engagement and website updates. Particular focus has been on the upcoming utility diversions at The Mound and city centre and the preparation for the tram works on Leith Walk.

44,000 invitations for the Traffic Regulation Order (TRO) Design presentations were distributed this period to businesses and residents throughout the route. The events are taking place in September and October.

The closing date for applications for the Small Business Support Scheme was 31 August 08. Over £1.5 million has been paid out to local businesses and a decision will be made in the next period as to how best deploy the remaining resources available to the business community.

The first meeting was held to discuss the Tram School's Programme. This programme is being led by CEC and tie.

#### 7.3 Communication and stakeholder action plan for next period

Media activity next period will be focused on utility diversions at The Mound, London Road and infrastructure works on Leith Walk and the A8 underpass. Notifications and stakeholder engagement will also take place to support these works.

Updates will be produced for utility works on The Mound, Leith Walk and London Road / Elm Row, plus an update on the upcoming infrastructure works on Leith Walk. The September fact sheet will also be distributed.

The TRO design presentations will start on 23 September. The presentations are divided into four areas: Newhaven, Leith Walk, city centre and the West End and beyond. This process is being led by CEC with **tie** facilitating.

A meeting will be held on 25 September to discuss the remaining resources available from the Small Business Support Scheme.

Delivery Organisation Period Progress Report

Document Type: Issue: Progress Meeting Date: Page: Progress Report Issue 1 Period 6 23 of 33

# Appendix 'A' Detailed cost report

# FY 08/09: Demand on TS

120.000

1: HEADLINE FINANCIAL COMMENTARY

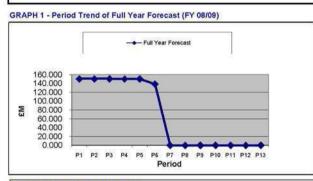
PERIOD RESULTS:
Period is for Phase 1a only

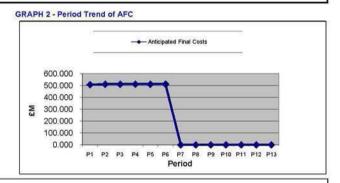
YTD RESULTS: YTD is for Phase 1a only

FULL YEAR FORECAST: FY 0809 is for Phase 1a only

AFC: AFC is for Phase 1a only

	FY 08/09 COWD Period			FY 08/09 COWD Year To Date			COWD	FY 08/09 Full Year Fo	orecast	COWD To Date	Costs To Go	Total AFC
	Actual	Budget	Variance	Actual	Budget	Variance	Forecast	Budget	Variance	Actual	Forecast	Forecast
Total Project COWD	3.744	8.763	-5.018	47.382	58.926	-11,544	138.760	150.851	-12.091	177.422	334.594	512.017
Other Funding	0.309	0.724	-0.414	3.344	4.297	-0.953	18.760	30.852	-12.091	14.649	24.865	39.515
Demand on TS	3.435	8.039	-4.604	44.038	54.629	-10.591	120.000	120.000	0.000	162.773	309.729	472.502





3: RISK AND OPPORTUNITIES TO:

FULL YEAR FORECAST:

AFC:

4: ACCRUALS COMMENTARY

5: TOTAL PROJECT ELEMENT SPEND BREAKDOWN (TS & 3rd Party Costs)  PLANNED/EMERGING/FORECAST	E	stimated Co	est	Act	cast	Variance	
Allocated in accordance with standard WBS. Values relevant to		Escalated	Escalated	Cost Of	Forecast	Anticipated	AFC v
business case or other agreed baseline date to be known as original estimate.	Original	Original	Latest	Work Done	to	Final	ELE
Relevant Baseline date : FBC 20/12/2007	Estimate	Estimate	Estimate	(COWD)	Completion	Costs (AFC)	
General Overall	28.233	28.233	28.847	22.436	6.411	28.847	0.000
Procurement Consultant	68.126	68.126	69.646	43.399	26.247	69.646	0.000
Design	23.683	23.683	26.828	24.442	2.386	26.828	0.000
Financial Issues/Funding/Procurement Strategy	2.258	2.258	2.626	2.089	0.537	2.626	0.000
Parliamentary Process/Approvals	0.329	0.329	0.319	0.319	0.000	0.319	0.000
Procurement Construction Works	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Construction Works	273.102	273.102	296.649	81.246	215.402	296.649	0.000
Testing & Commissioning	1.984	1.984	0.000	0.000	0.000	0.000	0.000
Handing Over & Service Operations	0.000	0.000	0.000	0.000	0.000	0.000	0.000
NOP/Rail Projects Interface (Promoters View)	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Interfacing Developments	0.000	0.000	0.000	0.000	0.000	0.000	0.000
TRAMS, Vehicles (Edinburgh TRAMS Use Only)	51.370	51.370	58.152	3.491	54.661	58.152	0.000
Risk	48.974	48.974	28.950	0.000	28.950	28.950	0.000
Opportunity (Negative Value)	0.000	0.000	0.000	0.000	0.000	0.000	0.000
OB/Contingency	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total	498.060	498.060	512.017	177.422	334.594	512.017	0.000

etailed Financial Information	Edinburgh tram	S						A	FY 08/09		Period N	ir:	£
Current Year 08/09 - Baseline Budget  1 Total Project COWD - Budget	P1 P2 6.457 13.085	P3	P4 7.667	P5 8.688	P6 8.763	P7	P8 15.222	P9 23.863	P10 6.198	P11 13.563	P12 12.195	P13	Tota
2 Other Funding - Budget	-0.036 1.080	1.178	0.633	0.717	0.724	0.858	1.257	1.970	0.512	1.120	10.348	10.490	30.8
3 Demand on TS - Budget	6.493 12.005	13.088	7.034	7.971	8.039	9.537	13.965	21.893	5.686	12.443	1.847	0.000	120.0
Current Year 08/09 - Actuals (Updated 4 weekly)	3												
4 Total Project COWD + Revised Forecast	6.457 11.287	-	8.162	7,371	3.744	6,367	11.860	22.637	10,291	13.711	14.225	12.287	138.7
7 Other Funding + Revised Forecast	-0.036 0.932	25 5500000	0.674	0.609	0.309	0.526	0.979	1.869	0.850	1,132	1.175	8.886	
10 Total Demand on TS	6.493 10.355	9.505	7.488	6.762	3.435	5.841	10.881	20.768	9.442	12.579	13.051	3.400	120.0
Variance tracker 12 Variance Line 1 to Line 4 - Project Actual vs Budget 13 Variance Line 2 to Line 7 - Oth Funding Actual vs Budget 14 Variance Line 3 to Line 10 - Demand on TS vs Budget	0.000 -1.798 0.000 -0.148 0.000 -1.650	-0.322	0.495 0.041 0.454	-1.318 -0.109 -1.209	-5.018 -0.414 -4.604	-4.028 -0.333 -3.696	-3.362 -0.278 -3.084	-1.226 -0.101 -1.125	4.094 0.338 3.756	0.148 0.012 0.136	2.030 -9.173 11.204	1.797 -1.604 3.400	-12.0 -12.0 -0.0
Next Year 09/10 - Forecast (Updated 4 weekly)	Q1 Q2 34.664 29.123	Q3	40.400				tary - FY 09		rds				
16 Total Project COWD  19 Other Funding	34.664 29.123 -7.771 2.405	38.132	49.102	1.836	All costs	are for Pri	ase 1a only	Si .					
22 Total Demand on TS	42.436 26.719			149.186									
: All Years (Escalated) (Updated 4 weekly)		Tavasas		WW 47/04	EV ANDA T	#W 44/44	T ev . su . T		PU 4040	PV 48144			LTOT
All Years (Escalated) (Updated 4 weekly) 4 Total Project COWD	0.000 3.093	FY 05/06 10,664	30.431	85.852	FY 08/09 138,760	151.022	76.581	15.614	0.000	0.000	FY 14/15	FUTURE	TOT 512.
7 Other Funding	0.000 0.000	1.000	0.019	10.287	18.760	1.836	6.323	1.289	0.000	0.000		APP A APP A	39.
O Total Demand on TS	0.000 3.093	9.664	30.412	75.565	120.000	149.186	70.258	14.325	0.000	0.000	0.000	0.000	472.
APH 3 - Demand on TS: Actual/Budget Run Rate - Current Ye	ar FY 08/09			GRAPH 4	- Year To	Date/ Cos	ts To Go -	% Comple	ete - Curre	ent Year F	Y 08/09		
Demand on T     Total Demand	CONTRACTOR OF THE PROPERTY OF							DYTD	пстс				
	d Demand on TS												
23.000	<b>X</b> 1			T-	otal Proje	ect	47.382			91.378			
20.000	<b>/</b>				COMD								
20.000	<b>\</b>				COMD								
15.000	1			Oth	COWD ner Fundi	ng 3	.344		0.5	5.417			
		V.		977.434.5	ner Fundi		.344		7,6	5.417			
15.000		<u> </u>		977.434.5			44.038		. 1	5.417 75.96	1		
15.000 10.000 5.000	P9 P10 P11 P12			977.434.5	ner Fundi			40	WALK S	75.96 60%	80%	1009	<b>%</b>
15.000 10.000 5.000 P1 P2 P3 P4 P5 P6 P7 P8 Period	P9 P10 P11 P12			977.434.5	ner Fundi	тѕ	44.038		%	75.96 60%		1009	
15.000 10.000 P1 P2 P3 P4 P5 P6 P7 P8 Period  Other Funding Budget (Current Year 08/09)	P1 P2	P13	P4 0.633	Der	mand on	0%	44,038 20%	P9	% % Comple	75.96 60% ote	80%	P13	Tot
15.000 10.000 10.000 P1 P2 P3 P4 P5 P6 P7 P8 Period  Other Funding Budget (Current Year 08/09) CEC Other Funding Stream	20	P13	P4 0.633	Der	ner Fundi	TS 0%	44.038	2	% % Comple	75.96 60% ote	80%		Tot 30.
15.000 10.000 P1 P2 P3 P4 P5 P6 P7 P8 Period  Other Funding Budget (Current Year 08/09) CEC	P1 P2	P13		Der	mand on	0%	44,038 20%	P9	% % Comple	75.96 60% ote	80%	P13	Tot 30. 0.
15.000 10.000 10.000 P1 P2 P3 P4 P5 P6 P7 P8 Period  Other Funding Budget (Current Year 08/09) CEC Other Funding Stream	P1 P2 -0.036 1.080	P3 1.178	0.633	P5 0.717	mand on P6 0.724	0% P7 0.858	20% P8 1.257	P9 1,970	% Comple P10 0.512	75.96 60% site	80% P12 10.348	P13 10,490	To 30.
15.000 10.000 10.000 P1 P2 P3 P4 P5 P6 P7 P8 Period  Other Funding Budget (Current Year 08/09) CEC Other Funding Stream Total Budget Other Funding	P1 P2 -0.036 1.080	P13 P3 1.178	0.633	P5 0.717 0.717	P6 0.724	0% P7 0.858	20% P8 1.257	P9 1,970	% Comple P10 0.512	75.96 60% ote P11 1.120	80% P12 10.348	P13 10.490	To 30. 0. 0. 0. 0. 30.
15.000 10.000 P1 P2 P3 P4 P5 P6 P7 P8 Period  Other Funding Budget (Current Year 08/09) CEC Other Funding Stream Other Funding Stream Other Funding Stream Other Funding Stream Total Budget Other Funding Actual (Current Year 08/09) CEC	P1 P2 -0.036 1.080	P3 1.178 1.178 P3	0.633	P5 0.717	mand on P6 0.724	0% P7 0.858	20% P8 1.257	P9 1,970	% Comple P10 0.512	75.96 60% site	80% P12 10.348	P13 10.490	Tot 30. 0. 0. 0. 0. 30. Tot 18.
15.000 10.000 P1 P2 P3 P4 P5 P6 P7 P8 Period  Other Funding Budget (Current Year 08/09) CEC Other Funding Stream Other Funding Stream Other Funding Stream Other Funding Stream Total Budget Other Funding Actual (Current Year 08/09)	P1 P2 -0.036 1.080 -0.036 1.080 P1 P2	P3 1.178 1.178 P3	0.633 0.633	Ps 0.717 0.717 P5	P6 0.724 0.724 P6	0% P7 0.858 0.858	20% P8 1.257 1.257	1.970 1.970	% Comple P10 0.512 0.512	75.96 60% hte P11 1.120 1.120 P11	80% P12 10.348 10.348	P13 10.490 10.490 P13	To 30. 0. 0. 0. 0. 30. To 18. 0.
15.000 10.000 P1 P2 P3 P4 P5 P6 P7 P8 Period  Other Funding Budget (Current Year 08/09) CEC Other Funding Stream	P1 P2 -0.036 1.080 -0.036 1.080 P1 P2	P3 1.178 1.178 P3	0.633 0.633	Ps 0.717 0.717 P5	P6 0.724 0.724 P6	0% P7 0.858 0.858	20% P8 1.257 1.257	1.970 1.970	% Comple P10 0.512 0.512	75.96 60% hte P11 1.120 1.120 P11	80% P12 10.348 10.348	P13 10.490 10.490 P13	To 30. 0. 0. 0. 30. 18. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
15.000 10.000 P1 P2 P3 P4 P5 P6 P7 P8 Period  Other Funding Budget (Current Year 08/09) CEC Other Funding Stream Other Funding Stream Other Funding Stream Total Budget Other Funding Actual (Current Year 08/09) CEC Other Funding Stream Total Budget Other Funding Actual (Current Year 08/09) CEC Other Funding Stream Other Funding Stream Total Budget Other Funding	P1 P2 -0.036 1.080 -0.036 1.080 P1 P2	P3 1.178 1.178 P3 0.856	0.633 0.633	Ps 0.717 0.717 P5	P6 0.724 0.724 P6	0% P7 0.858 0.858	20% P8 1.257 1.257	1.970 1.970	% Comple P10 0.512 0.512	75.96 60% hte P11 1.120 1.120 P11	80% P12 10.348 10.348	P13 10.490 10.490 P13	To 30. 0. 0. 0. 30. 18. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
15.000 10.000 P1 P2 P3 P4 P5 P6 P7 P8 Period  Other Funding Budget (Current Year 08/09) CEC Other Funding Stream	-0.036 1.080 -0.036 1.080 P1 P2 -0.036 0.932	P3 1.178 1.178 P3 0.856	0.633 0.633 P4 0.674	P5 0.717 0.717 P5 0.609	P6 0.724 P6 0.309	0%  P7 0.858  0.858  P7 0.526	20% P8 1.257 1.257 P8 0.979	1.970 1.869	% Comple 9.0.512 0.512 P10 0.850	75.96 60% bite P11 1.120 P11 1.132	80% P12 10.348 10.348 P12 1.175	P13 10.490 10.490 P13 8.886	Tot 30. 0. 0. 0. 30. Tot 18. 0. 0. 0. 0. 0. 0. 0. 0.
15.000 10.000 P1 P2 P3 P4 P5 P6 P7 P8 Period  Other Funding Budget (Current Year 08/09) CEC Other Funding Stream	-0.036 1.080 -0.036 1.080 P1 P2 -0.036 0.932	P3 1.178 1.178 P3 0.855 0.855	0.633 0.633 P4 0.674	P5 0.717 0.717 P5 0.609	P6 0.724 P6 0.309	0%  P7 0.858  0.858  P7 0.526	20% P8 1.257 1.257 P8 0.979	1.970 1.869	% Comple 9.0.512 0.512 P10 0.850	75.96 60% bite P11 1.120 P11 1.132	80% P12 10.348 10.348 P12 1.175	P13 10.490 10.490 P13 8.886	To 30. 0. 0. 0. 30. 18. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.
15.000 10.000 10.000 P1 P2 P3 P4 P5 P6 P7 P8 Period  Other Funding Budget (Current Year 08/09) CEC Other Funding Stream Other Funding Stream Other Funding Stream Total Budget Other Funding Actual (Current Year 08/09) CEC Other Funding Stream Other Funding Stream Total Budget Other Funding Actual (Current Year 08/09) CEC Other Funding Stream Total Actual Other Funding  Promoter Full Year Forecast Run Rate Period Trend of Full Year Forecast (Current Year 08/09) Full Year Forecast	P1 P2 -0.036 1.080 -0.036 1.080 P1 P2 -0.036 0.932 -0.036 0.932	P3 1.178 1.178 P3 0.855 0.855	0.633 0.633 P4 0.674	P5 0.717 0.717 P5 0.609 0.609	P6 0.724 0.309 0.309	0%  P7 0.858  0.858  P7 0.526	20% P8 1.257 1.257 P8 0.979	1.970 1.970 1.869	% Comple 9.512 0.512 P10 0.850	75.96 60% pte P11 1.120 1.120 P11 1.132	80% P12 10.348 10.348 P12 1.175	P13 10.490 10.490 P13 8.886	Tot 30. 0. 0. 0. 30. Tot 18. 0. 0.
15.000 10.000 P1 P2 P3 P4 P5 P6 P7 P8 Period  Other Funding Budget (Current Year 08/09) CEC Other Funding Stream Other Funding Stream Other Funding Stream Other Funding Stream Total Budget Other Funding Actual (Current Year 08/09) CEC Other Funding Stream Total Actual Other Funding  Promoter Full Year Forecast Run Rate Period Trend of Full Year Forecast (Current Year 08/09)	P1 P2 -0.036 1.080 -0.036 1.080 P1 P2 -0.036 0.932 -0.036 0.932	P3 1.178 1.178 P3 0.855 0.855	0.633 0.633 P4 0.674	P5 0.717 0.717 P5 0.609 0.609	P6 0.724 0.309 0.309	0%  P7 0.858  0.858  P7 0.526	20% P8 1.257 1.257 P8 0.979	1.970 1.970 1.869	% Comple 9.512 0.512 P10 0.850	75.96 60% pte P11 1.120 1.120 P11 1.132	80% P12 10.348 10.348 P12 1.175	P13 10.490 10.490 P13 8.886	Tot 30. 0. 0. 0. 30. Tot 18. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.

Progress Report Issue 1 Period 6 26 of 33

# 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)

Progress Report Issue 1 Period 6 27 of 33

# Appendix 'C' Programme information

To be sent separately by CD:

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

Delivery Organisation Period Progress Report

Document Type:

Issue:

Progress Meeting Date: Page: Progress Report Issue 1 Period 6 28 of 33

# Appendix 'D' Primary risk register

							100				
ARM Risk ID		Risk Description		2000	35 - 32	Tan Was	Treatment Strategy	Previous Status	Current Status	Due Date	Action Owner
	Cause	Event	Effect	Risk Owner	Significance	Black Flag		Status	Status	Date	
916	CEC do not achieve capability to deliver	CEC are unable to honour their funding commitment	Potential showstopper to project if contribution not reached; Line 1B may depend on incremental funding from CEC	S McGarrity		Project	CEC has formed a multi discipline Tram Contributions Group to monitor identified sources of £45m contribution including critically developers contributions. tie are invited to that group. (see add info)	Complete	Complete	28-Sep-07	CEC
							CEC to deliver necessary contributions for 1a	Complete	Complete	28-Aug-07	CEC
							Tram Project Board to monitor progress towards gaining contributions	Ongoing	Ongoing	Ongoing	D Mackay
139	Utilities diversion outline specification only from	Uncertainty of Utilities location and consequently	Increase in MUDFA costs or delays as a result of	G Barclay	High - 25,00		Carry out GPR Adien survey	Complete	Complete	31-Oct-07	J Casserly
	plans	required diversion work/ unforeseen utility services within LoD	carrying out more				Identify increase in services diversions. MUDFA to resource/re- programme to meet required timescales.	Complete	Complete	23-Nov-07	J McAloon
							In conjunction with MUDFA, undertake trial excavations to confirm locations of Utilities and inform designer	On Programme	On Programme	Ongoing	A Hill
164	Utilities assets uncovered	Unknown or abandoned	Re-design and delay as	I Clark	High - 25,06		Carry out GPR Adien	Complete	Complete	31-Oct-07	J Casserly
	during construction that were not previously accounted for, unidentified abandoned utilities assets; asbestos found in excavation for utilities diversion; unknown cellars	[1] # (1) [1] [1] [1] [1] [2] [2] [2] [2] [2] [3] [3] [4] [4] [4] [4] [4] [4] [4] [4] [4] [4	investigation takes place and solution implemented; Increase in Capex cost as a result of additional works.				survey Identify increase in services diversions. MUDFA to resource/re- programme to meet required timescales.	Complete	Complete	23-Nov-07	J McAloon
	and basements intrude into works area; other physical obstructions; other contaminated land						In conjunction with MUDFA, undertake trial excavations to confirm locations of Utilities and inform designer	On Programme	On Programme	Ongoing	A Hill

ARM Risk ID		Risk Description					Treatment Strategy	Previous	Current	Due	Action Owner
AKINI KISKID	Cause	Event	Effect	Risk Owner	Significance	Black Flag	rreatment strategy	Status	Status	Date	Action Owner
31	Mudfa delay in diversion works due to lack of BT resources	Bankhead Drive Retaining Wall: BT and Easynet diversion work not completed till end Jan 09 - work was due to start mid-June 08		T Cotter	High - 25.00		Site visit with Infraco PMs and Mudfa to assess interface issues between services and structure		On Programme	01-Aug-08	T Cotter
30	Mudfa delay in diversion works due to lack of BT resources	South Gyle Access Bridge: BT diversion work not completed till end Sept 08 - work was due to start mid-June 08	Delay and disruption to programme.	T Cotter	High = 25,00		Site visit with Infraco PMs and Mudfa to assess interface issues between services and structure		On Programme	01-Aug-08	T Cotter
173	Uncertainty over extent of contaminated land on route	Tramway runs through area of previously unidentified contamination	remove material to special	B Bell	Hgh - 23 00	at a second	Issue contamination and gi (report to Infraco bidders	Complete	Complete	2-Mar-07	B Dawson
		and material requires to be removed and replaced (dig and dump).	A				tie to obtain ground investigation and contamination reports from SDS	Complete	Complete	30-Mar-07	A McGregor

ARM Risk ID		Risk Description					T	Previous	Current	Due	A-tiO
ARW RISK ID	Cause	Event	Effect	Risk Owner	Significance	Black Flag	Treatment Strategy	Status	Status	Date	Action Owner
44	SDS contractor does not deliver the required prior approval consents in line	Late prior approval consents	Delay to programme with additional resource costs and delay to infraco.	D Sharp	High - 25:00		Evaluation of prior approval programme	On Programme	On Programme	31-Oct-08	D Sharp
	with SDS v31	v31 Impact upon risk balance.				Hold fortnightly Roads Design Group	On Programme	On Programme	Ongoing	T Glazebrook	
							Twice-weekly meetings of Approvals Task Force	On Programme	On Programme	31-Oct-08	D Sharp
							Informal consultation prior to statutory consultation	On Programme	On Programme	31-Jul-08	T Glazebrook
							Integrate CEC into tie organisation/accommodati on (office move)	Complete	Complete	4-Jun-07	T Glazebrook
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	W Biggins	High - 22.00		tie needs to identify critical possessions tied into Infraco's programme and then highlight them to NR		On Programme	01-Sep-08	W Biggins
928	Major single safety incident (including a dangerous occurrence) during	Safety incident during construction	Delay (potentially critical) due to HSE investigation and rework. PR risk to tie	F McFadden	High - 21 00		All Site Staff to get CSCS or equivalent	On Programme	On Programme	Ongoing	C McLauchlan
	construction		and stakeholders.				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	T Condie	
							Safety Induction to be carried out for all site staff	On Programme	On Programme	31-Dec-10	T Condie
S.							Site Supervisors to be appointed by tie	Complete	Complete	28-Feb-07	S Clark

ARM Risk ID		Risk Description					Treatment Strategy	Previous	Current	Due	Action Owner
AKINIKISKID	Cause	Event	Effect	Risk Owner	Significance	Black Flag	Treatment Strategy	Status	Status	Date	Action Owner
1033		Failure of Infraco to mobilise in time to commence work in line with programme.	Delay to programme. Cost overruns. Negative publicity. Criticism from stakeholders	S Bell	High - 19.00		Continued focus at Infraco progress meetings as well as programme workshops to mitigate the impacts of any delay	N/A	On Programme	1-Oct-08	S Bell
							Implementation of Advanced Works programme in order to mitigate potential future issues during construction	On Programme	On Programme	1-Aug-08	R Bell
							Infraco given instructions to proceed at risk	On Programme	On Programme	1-Aug-08	R Bell
							Pressure from Approvals Task Force to ensure Technical and Prior Approvals are delivered	On Programme	On Programme	1-Oct-08	D Sharp
48	Mudfa do not finish diversion works prior to Infraco commencing work	Infraco are unable to commence work or work is delayed/disrupted	. "[[m] iii] ([[5] [[5] [[5] [[5] [[5] [[5] [[5] [[	F McFadden	18		Infraco attendance at Traffic Management meetings. Weekly meetings between tie Infraco and Mudfa PMs. 4 weekly tie Infraco/Mudfa management meetings. Identification of programme clashes between Infraco and Mudfa works tracked by tie planner.		On Programme	1-Dec-08	F McFadden
50	Lack of effective engagement from BSC leaders towards tie and third parties (NR, BAA, Forth Ports)	Failure of 'partnership' approach between tie and BSC. Failure to maintain effective third party relationships with key third parties.	understanding from key third parties causes delay and disruption.	F McFadden	18		Engagement between tie and BSC at different levels. Regular review of BSC management of third parties as per Employers Requirements	N/A	On Programme	1-Dec-08	F McFadden
51	Failure of BSC to effectively 'resource up' for project	Lack of competent resources within BSC to safely and effectively deliver Tram project	Delay to programme and additional cost	F McFadden	48.		Ongoing review of BSC resources and formal review at 4-weekly meeting. Objectives to be set for BSC at monthly meetings in order to monitor progress.	N/A	On Programme	1-Dec-08	F McFadden

Progress Report Issue 1 Period 6 33 of 33

# Appendix 'E' Resource information

(Updated Organisation Charts, Notifying Changes of Key Personnel - N/A)