



# **Tram Project Board** Report on Period 01 (2011/12) Papers for meeting 11<sup>th</sup> May 2011

09:30am - 12:00pm

### Distribution:

### **Members and attendees**

Vic Emerv Richard Jeffrey Donald McGougan Bill Campbell Cllr Gordon Mackenzie Brian Cox Kenneth Hogg

Peter Strachan **Neil Scales** Cllr Phil Wheeler Cllr Allan Jackson Cllr Ian Perry Dave Anderson Marshall Poulton

Alan Coyle Andy Conway Steven Bell Mandy Haeburn-Little **Gregor Roberts** Alastair Richards Ian Craig Alasdair Sim (Minutes)

### In addition - for information only

Norman Strachan

Cllr Maggie Chapman Cllr Tom Buchanan Frank McFadden

Dennis Murray Ailie Wilson





Contents	Page
Agenda Tram Project Board	3
Tram Project Board Minutes 13/04/11	5
Project Directors' Report	13
Primary Risk Register	20
Papers for Consideration Period 01 2011/12	23
Period 01 Transport Scotland Report Sections 2-7	47



## **Agenda Tram Project Board**

## Brunel Suite – Citypoint, 2<sup>nd</sup> Floor

## 11<sup>th</sup> May 2011 – 09.30am to 12.00pm

	Agenda Item	Led by	Page Ref
1.0	Welcome & Opening Remarks		VE
2.0	Review of Previous Minute & Matters Arising	VE	p5
3.0	Rolling Actions List Review	VE	p11
4.0	5 Key Business Priorities		
	3.1 Building the Tram		
	<ul> <li>Period Update</li> </ul>	RJ	Verbal update
	<ul> <li>Project Director's Report</li> </ul>	SB	p13
	<ul> <li>HSQE</li> <li>Progress</li> <li>Finance</li> <li>Project Risk Register</li> <li>Papers for Consideration</li> </ul>	SB SB GR	p55 p31 p44 p21 p24
	<ul> <li>Period 01 Change Paper</li> </ul>	GR	p25
	3.2 Preparing for Operations	AR	p39
	3.3 Building the Brand/Communications	MHL	p58
5.0	Any Other Business		All
6.0	Close & Date of Next Meeting  Wednesday 8 <sup>th</sup> June 2011 commencing at 09:30		VE



## Tram Project Board Glossary of Terms

APA	Asset Protection Agreement	MUDFA	Multi Utilities Diversion Framework
AFR	Accident Frequency Rate		Agreement
BCR	Benefit to Cost Ratio	NPF	National Planning Framework
BROR	Benefits Realisation & Operational	NPV	Net Present Value
	Readiness Committee	NR	Network Rail
BSC	Bilfinger Berger, Siemens and CAF	NTS	National Transport Strategy
CCTV	Closed Circuit Television	OCIP	Owner Controlled Insurance
CEC	The City of Edinburgh Council		Programme
COCP	Code of Construction Practice	OGC	Office of Government Commerce
DFBC	Draft Final Business Case	OJEU	Official Journal of the European Union
DPOFA	Development Partnering &	OLE	Overhead Line Equipment
	Operating Franchise Agreement	PFI	Private Finance Initiative
DRP	Dispute Resolution Process	PIN	Preliminary Information Notice
DV	Valuation Office Agency	PMP	Project Management Plan
EARL	Edinburgh Airport Rail Link	QRA	Quantitative Risk Analysis
ER	Employers Requirements	RBS	Royal Bank of Scotland
ETL	Edinburgh Trams Limited	REV	Revision
ETN	Edinburgh Tram Network	RIDDOR	Reporting of Injuries, Diseases and
ETP	Edinburgh Tram Project	TUDDON	Dangerous Occurrences Regulations
FATS	Factory Acceptance Test	ROGS	Railway and Other Guided Transport
FBC	Final Business Case	nodo	Systems (Safety) Regulations
FOISA	Freedom of Information (Scotland)	RPI	Retail Price Index
FUISA	Act	RTS	
FoTW	Foot of the Walk	SATS	Regional Transport Strategy
	Guaranteed Maximum Price	SCADA	Site Acceptance Test
GMP		SCADA	Supervisory Control and Data
GVD	General Vesting Declaration	CDC	Acquisition
H&S	Health and Safety	SDS	Systems Design Services contractor
HSQE	Health, Safety, Quality &	SE	Scottish Executive
LIMBI	Environment	SESTRAN	South East of Scotland Transport
HMRI	Her Majesty's Rail Inspectorate	ONIL	Partnership
HR	Human Resources	SNH	Scottish Natural Heritage
IDC	Inter-Disciplinary Checks	SP	Scottish Power
ICP	Independent Competent Person	SPOKES	Lothian Cycle Campaign
Infraco	Infrastructure Contract	SRO	Senior Responsible Owner
ICT	Information Communications &	SRU	Scotland Rugby Union
	Technology	STAG	Scottish Transport Appraisal Guidance
INTC	Infraco Notice of Tie Change	SUCs	Statutory Utility Companies
ITN	Invitation to Negotiate	SW	Scottish Water
ITPs	Implementation Test Plans	TEL	Transport Edinburgh Limited
ITT	Invitation to Tender	TENS	Trans-European Transport Network
JRC	Joint Revenue Committee r		Executive Agency
KPI	Key Performance Indicator	TPB	Tram Project Board
LB	Lothian Buses	TRO	Traffic Regulation Order
LLAU	Limits of Land to be Acquired or	TTRO	Temporary Traffic Regulation Order
	Used	Tramco	Tram Vehicle Supply and Maintenance
LOD	Limits of Deviation		Contract
LRT	Light Rapid Transit	TS	Transport Scotland
LRV	Light Rail Vehicle	TSS	Technical Support Services contract
LTS	Local Transport Strategy	UTC	Urban Traffic Controls
MP	Member of Parliament	VAT	Value Added Tax
MSP	Member of Scottish Parliament	VFM	Value For Money



### **Edinburgh Tram Network Minutes**

### STRICTLY PRIVATE AND CONFIDENTIAL

## **Tram Project Board**

13<sup>th</sup> April 2011 (09:30 to 11:50)

### tie offices - Citypoint II, Brunel Suite

Members in Attendance:			
Vic Emery	VE	Bill Campbell	WWC
Donald McGougan	DMcG	Dave Anderson	DA
_			
In Attendance:			
Steven Bell	SB	Cllr Gordon MacKenzie	GMac
Brian Cox	BC	Cllr Phil Wheeler	PW
Alastair Richards	AR	Cllr lan Perry	IP.
Alan Coyle	AC	Cllr Allan Jackson	AJ
Marshall Poulton	MP	Mandy Haeburn-Little	MHL
Gregor Roberts	GR	Bob Cummins (part time)	BCu
		Alasdair Sim (minutes)	AS

**Apologies:** Cllr Tom Buchanan, Cllr Maggie Chapman, Richard Jeffrey, Peter Strachan, Neil Scales, Kenneth Hogg, Ian Craig

1.0	Introduction, Review of Previous Minutes and Matters Arising	
1.1	VE opened the meeting and welcomed the participants.	
1.2	Review of Previous Minutes The minutes from the previous TPB held on 16th March 2011 were approved as an accurate record.	
1.3	Matters Arising There were no matters arising.	
1.4	Rolling Actions List Review All actions set out in the rolling actions list dated 13 April 2011 have been discharged and are now closed.	
2.0	Update on Mediation	
2.1	It was acknowledged that the mediation is not yet concluded and that those involved in the process are bound by a confidentiality undertaking.  As a result VE was not able to provide the Board with a comprehensive update at this time. He was able to report however, that a number of workstreams are underway to support this process, noting in particular that significant progress	
	has been made on closing out outstanding consents and approvals and that	



	the decision to co-locate the CEC Team at Edinburgh Park has been a key factor in this.	
3.0	Building the Tram	
3.1	HSQE – Deliver a Tram Safely There were no reportable accidents during the period. The rolling 13 Period AFR is at 0.15.	
	CoCP compliance was recorded at 94% during Period 13. Non-compliance issues related to damaged fences, litter and potential trip hazards on temporary footpaths.	
	Negotiations are ongoing between <b>tie</b> /CEC regarding the adoption and maintenance accountabilities for semi-permanent TM installations across the City.	
3.2 a)	Princes Street Road Safety Audit (RSA) BCu referred the Board to the paper in the TPB pack. The independent RSA identified a number of issues, and this report has been forwarded to BSC for their review/comment. Following feedback from BSC, a formal response will be prepared by <b>tie</b> in consideration of this audit.	
b)	It was agreed that a mitigation/action plan and implementation timetable will be prepared for consideration and monitoring by the TEL Safety, Health and Environment (SHE) Sub-Committee.	BCu
c)	MP queried the durability of the temporary track /road interface repairs that have recently been undertaken on Princes Street. SB to provide a response in consultation with BSC.	SB
3.3	HSQE - Deliver a Safe Tram	
a)	BCu reported that all BSC Cases for Safety have now been reviewed and comments have been returned in Record of Review forms. BSC had previously stated that they were aiming to deliver to a draft Design Assurance Statement for Section 6 by the end of February 2011. This has not been delivered and is now expected during Period 1 2011/12. SB to write to BSC requesting this outstanding documentation.	SB
	The ORR interviewed Bob Cummins and Tony Glazebrook about the <b>tie</b> SVS and role of the competent person. This interview was part of an ongoing ORR national programme. Informal positive feedback has been received.	
	An SVS audit on the Tram vehicle design will take place in Zaragoza on the 11th May 2011.	
	<b>tie</b> assisted ETL with an independent audit of their Safety Management System (SMS) on the 17th March 2011. The audit went extremely well with no obvious gaps in the system identified. An audit of the BSC testing and Commissioning	



	Plan and BSC's readiness for operation is to be carried out; details will be determined during period 1.	
	BCu presented an overview of the Project Safety Certification Committee (PSCC) framework and the various roles and responsibilities of <b>tie</b> , the independent competent person (ICP), BSC and the operator (ETL/Lothian Buses).	
	It was noted that the PSCC processes encompass the legal responsibilities set out under CDM and under ROGS.	
b)	It was agreed that the Chair of the TEL SHE Sub-Committee will formally invite Lothian Buses to be represented in this forum and to play an integral role in the SVS process. It was also agreed that CEC as highway authority should also be included in these activities.	BCu
c)	This highlighted the need to formalise the governance arrangements between CEC, Lothian Buses and ETL. DA to raise the matter with CEC Head of Legal Services.	DA
d)	BCu to re-issue the presentation to the TPB members replacing responsibilities of named individuals, with the job/post title.	BCu
e)	WWC to discuss the opportunity for BCu to undertake the PSCC presentation to the LB Board with Ian Craig.	BCu
3.4	Progress Overall SB reported that progress achieved was 0.1% in the period, with works limited to the Depot Access Bridge and the building fit out.	
3.5	Project Risk Register SB presented the Top 12 project risks to the Board, noting that the status of some of these risks may incumbent upon the mediation outcome.	
a)	VE requested that the RAG presentation format be modified (post mediation) to reflect the relative probability of each of these risks becoming a reality.	SB
3.6	Financial Position at end of Period 13 GR presented the detailed project financial position at Period 13. Key points arising from this were:	
	<ul> <li>Spend in the Period 13 was £2.6m – in-line with the P12 forecast</li> <li>Period 13 – High Costs due to Mediation activity commercial/legal advice &amp; City Point Floor One dilapidation costs.</li> <li>Full Year spend for 2010/11 was £63.7m</li> <li>Project commitment to date is £411.5m</li> </ul>	
0)	Cash spent to date £393.7m (plus GVD land £16.3m)	C.D.
a)	GR to arrange a separate session with VE on finance and budget	GR



	accountability.					
.7	Change Requests and Risk Drawdown  GR summarised the change and risk allowance status at Period 13. This is shown below:					
	Description	Base	cost	Risk	Total	
	Position at Financial Close (PCB)	481,68	0,811	30,336,196	512,017,007	
	Increase in Approved Budget	-		32,982,993		
	Total Risk			63,319,189	545,000,000	
	Changes to end Period 12	58,50	3,863	-58,503,863		
	Position at end Period 12	540,18	4,674	4,815,326	545,000,000	
	Period 13 Changes	51	6,882	-516,882		
	Position at end Period 13 (CAB)	540,70	1,556	4,298,444	545,000,000	
	The Board reviewed a number of taken are summarised below:  Paper		B Deci		THE GEOISIONS	
	Project Change Control Update Period 13, 2010/11, dated 13/04/10 prepared by Gregor Roberts. Change Paper – Project Co	11, cor	trol sta		13. drawdown of	
	Budget, dated 14/04/11, prepared Gregor Roberts.	cos	costs			
	Section 1A: 300mm Connection Assembly Street, dated 13/04/ prepared by Phil Dobbin.	11, awa and Cha cor the bet	ard the d pres ange ofirmati provis termer	approved the contract for sent the cha Panel, on from Scottsion of informat assessment.	these works ange to the subject to tish Water of lation for the	
	Princes Street Road Safety Audit dated 13/04/11, prepared by B Cummins.	ob in t folk SH	b in the paper and requested that the follow up actions be reported to the SHE sub-committee.			
	Betterment/Deferment Update, dated 13/04/11, prepared by Fiona Dunn.		d requ cussed o-comn		he issue be ail at the FCL	
	Procurement of Revenue Collecti Equipment, dated 13/04/11, prepare	N. 100100N		TPB appr ndation to	oved the proceed to	



	commitment at this stage pending							
	conclusion to the mediation process.							
2.0	Funding Position at End of Poriod 12							
3.9	Funding Position at End of Period 13  GR confirmed that there is currently £1.82m of non-committed funding available within the £545m funding envelope.							
	With an underlying £900k-£1m project costs run-rat, this will put budget under pressure, and this does not account for other genuine changes not yet 'drawn-down'.							
	It was recommended that the TPB seek authority from the TEL Board to permit expenditure beyond £545m. It was noted that under the operating agreement conditions, a further £1m of funds are available to be drawn down.							
	Funding matters were debated in detail by the Board, and the following was agreed:							
a)	<ul> <li>Costs should be minimised as far as is practically possible until additional funding is confirmed;</li> </ul>	SB						
b)	<ul> <li>VE to call a TEL Board Meeting and follow this up with a formal request to CEC on the availability of additional funding beyond £546m.</li> </ul>							
4.0	Preparing for Operations							
4.1	Tram Progress  AR reported that all 27 trams now completed or in production with 24 trams now completed factory testing and stored for delivery. 89% of CAF's programmed tasks have now been completed.							
	It was noted that an Invitation to Negotiate (ITN) submission is being prepared by CEC (as asset owner) for potential tram lease opportunities.							
4.2								
4.2	by CEC (as asset owner) for potential tram lease opportunities.  Operational Readiness AR reported Construction works at the depot are now 79% complete, noting							
4.2	by CEC (as asset owner) for potential tram lease opportunities.  Operational Readiness AR reported Construction works at the depot are now 79% complete, noting that:  Main Workshop and store rooms almost complete with plant being installed; The Siemens Servers have been installed in the Equipment Room; Control Room fit out due to start within the next 4 weeks; External track works are ongoing again;							
<b>4.2</b>	by CEC (as asset owner) for potential tram lease opportunities.  Operational Readiness AR reported Construction works at the depot are now 79% complete, noting that:  Main Workshop and store rooms almost complete with plant being installed; The Siemens Servers have been installed in the Equipment Room; Control Room fit out due to start within the next 4 weeks; External track works are ongoing again; Mini Test Track definition (approx 550m track) and preparation is							



	from the involved parties in the mediation process have been maintained, and no leaked stories have been reported in the media.  MHL noted that Edinburgh's festival season is approaching, and Edinburgh Trams are involved as part of a multi agency partnership to promote various events and initiatives across the City.	
6.0	AOB	
6.1	GR notified the Board <b>tie</b> Ltd are about to embark upon the year end statutory audit. As part of the enhanced disclosure requirements when producing accounts under the IFRS (International Financial Reporting Standards), the auditors require a list from each shareholder, director and senior management team member of known affiliates, associated companies and connected companies; including details of the relationship and any transactions during the year to date, whether or not any price was charged. The documents are to be sent out to the relevant individuals for completion.	GR
7.0	Date of Next Meeting	
7.1	VE thanked the Board for their participation and confirmed that the date of the next meeting will be <b>Wednesday 11<sup>th</sup> May 2011</b> commencing at <b>09:30hrs</b> .	
7.2	The meeting closed at 11:50.	

Prepared by Alasdair Sim, 15<sup>th</sup> April 2011





## TRAM PROJECT BOARD 2011/12 - ROLLING ACTIONS LIST

Action ref No.	Actionee	Date Action Opened	Action	Expected Date of Closure	Actual Date of Completion	Status	Comment/Commentary
16/03/11- 5.1	Bob Cummins		BCu to prepare a summary of the Safety Verification System (SVS) for review at the next TPB.	2	13/04/11	Closed	Presentation being made to TPB on 13/04/11
16/03/11- 5.2	Bob Cummins	16/03/11	BCu to present the findings of the Stage 3 Road Safety Audit for Princes Street to the next TPB.	13/04/11	13/04/11	Closed	Paper in 13/04/11 TPB pack
16/03/11- 5.5	Steven Bell	16/03/11	SB to prepare a paper on Utilities Betterment progress for the next TPB	13/04/11	13/04/11	Closed	Paper in 13/04/11 TPB pack
16/03/11- 5.9	Steven Bell	16/03/11	The Top 10 Risks to be presented to the TPB for review at each meeting going forward	13/04/11	13/04/11	Closed	Presentation being made to TPB on 13/04/11
16/03/11- 8.2	Mandy Haeburn- Little	16/03/11	Staff briefings on Freedom of Information to be arranged during Period 13	13/04/11	13/04/11	Closed	Dates programme in for briefings and presentation
Tram Pro	ject Board	d Meeting	– 13 April 2011				
Action ref No.	Actionee	Date Action Opened	Action	Expected Date of Closure	Date of Completion	Status	Comment/Commentary
3.2 (a)	Bob Cummins	13/04/11	tie to prepare a formal response to the Princes Street RSA when BSC comments are received.	TBC		Open	BSC have yet to provide a response to the Princ Street RSA findings. Meeting planned for 27 Apr was cancelled & to be rearranged.
		13/04/11	SHE Sub-Committee to review the proposed timetable			Open	See above.
3.2 (b)	Bob Cummins	13/0 1/11	to implement the measures arising from the Stage 3 RSA for Princes Street. This is currently under review by BSC.				

011110							□ No
3.3 (a)	Steven Bell	13/04/11	Write to BSC over non delivery of outstanding DAS (Safety Verification System related) documentation for Section 6.		18/04/11	Closed	BSC responded quoting agreements being made as post mediation actions.
3.3 (b)	Bob Cummins	13/04/11	Draft a letter on behalf of the Chairman of the Safety, Health and Environment (SHE) Sub-Committee to invite Lothian Buses to be formally represented on that Committee.			Open	
3.3 (c)	Dave Anderson	13/04/11	DA to discuss formalisation of the governance arrangements between ETL and LB with CEC Head of Legal Services, and report to next TPB.			Open	
3.3 (d)	Bob Cummins	13/04/11	BCu to re-issue the PSCC Presentation to the TPB replacing named individuals with job title.	22/04/11		Open	
3.3 (e)	Bob Cummins	13/04/11	PSCC Presentation to be given to Lothian Buses Senior Management/Board.	TBC		Open	BC has approached Lothian Buses with an offer to present to senior management. Date TBC.
3.5 (a)	Steven Bell	13/04/11	SB to review the RAG priority of the identified top 12 Project Risks in order of probability of occurrence.	11/05/11	4/5/11	Closed	Revised presentation format for May TPB
3.6 (a)	Gregor Roberts	13/04/11	SB and GR to arrange a briefing session with VE on budgets and accountability of budget holders.	22/04/11		Open	Arrange a suitable date post 4/5/11
3.8 (a)	Steven Bell	13/04/11	SB to press Scottish Water for the provision of outstanding information as input to the betterment calculations; confirmation of this being required prior to approval of the SW Abandonments tender.	1		Closed	Information being provided to agreed programme.
3.8 (b)	Steven Bell	13/04/11	Utilities Betterment paper to be raised for discussion at the next FCL Sub-Committee.	19/04/11		Closed	FCL postponed, but item remains on the agenda.
3.9 (a)	Steven Bell	13/04/11	Costs to be minimised as far as is practicable until additional funding is confirmed.	11/05/11	29/4/11	Closed	Actions continue in line with reducing such costs
3.9 (b)	Vic Emery	13/04/11	VE to call a TEL Board Meeting to review the short term funding availability. Following the TEL Board, VE to formally write to CEC seeking the Council's position on the matter.			Open	Letter has been drafted and content agreed. Expected to be issued by 9/5/11.
6.1	Gregor Roberts	13/04/11	GR to issue enhanced disclosure and conflict of interest documentation to tie Ltd Directors and Senior Management.		14/04/11	Closed	





## Building The Tram Project Director Report - Period 01 [11/12]

On Friday 1<sup>st</sup> October 2010, BSC began to demobilise and cease works on certain sites across the route (over Sections 2A, 5A, 5B and 5C), this reflecting an escalation in the contractual dispute between BSC and tie. In response to this action, tie has entered into formal correspondence with the contractor regarding contractual obligations. tie continue to undertake site monitoring on both active and inactive worksites.

During March, positive mediation discussions were held between the parties. Transport Scotland were party to these discussions.

From mid April, some initial remobilisation has commenced at the Depot as part of the post mediation workstreams.

Edinburgh Gateway is now reported in a standalone report.

#### H&S Accidents and Incidents, Near Misses or Other

HS&E ACCIDENTS and INCIDENTS SUMMARY												
Total	Total Hours	>3 day	Major	Injury	NM/Unsafe Condition	Service Damage	ENV	RTA	МОР	AFR	SFR	
Period	23,761	0	0	0	9	1	1	0	0	0.00	4.21	
13 period rolling	1,102,411	0	1	9	133	11	12	5	16	0.09	1.00	



There were no reportable accidents during the period. The rolling 13 Period AFR is at 0.14. CoCP compliance was recorded at 100% during Period 01.

A Stage 3 Road Safety Audit was carried out on behalf of the project by Scott Wilson. A final report has been submitted dated 31 March 2011. Progress on closing out the report findings are being tracked by the Board SHE Committee.

A report was received of a cyclist allegedly suffering a broken wrist after falling from his bicycle when the wheels became caught in the tram tracks on Princes Street. Occurred 30<sup>th</sup> March 2011. Meeting arranged between BSC, **tie** and CEC on the 27<sup>th</sup> April to discuss further.

A joint inspection was carried out following notification of a cyclist incident outside Boots the Chemist on Princes Street. This highlighted that the repairs being carried out by BSC are not in line with the road rail interface. This issue has been escalated to BSC and **tie** Directors. An outcome of this exercise is awaited and a report will follow.

#### **Environment**

Infraco received from BAA, through **tie**, the formal permission to relocate the Otter Holt within their land ownership. This letter has been sent to the Scottish Natural Heritage (SNH) as part of the Otter Destruction Licence Application package.

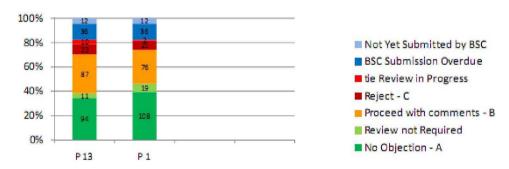
Further results received from BSC for contaminated land. Meeting arranged 21/04/2011 to discuss the matter further.



#### **Deliver a Safe Tram**

			I	ata Check	ed	
Section	Activity	DQ.	ΠP's	Design Variation/ Change	As Builts	Asset Register
Section 6 - Depot Access Bridge	ITP Update - Structural Concrete, Bridge Bearings, Earthworks & Waterproofing	0.5	1	1	1	0.5
	Total (y)	0.5	1	-1	1	0.5
PD	Max Possible Total (y)	1	1	1	1	1
	Percentage P1 (figures adjusted to show last 13 periods only)	57%	89%	97%	86%	33%

#### Overview of review of BSC design submissions



#### Summary

New report format combining DaST Report and Engineering Report. Figures have been adjusted to show metrics inspections for last 13 periods only. 1 metrics inspection carried out during Period 1 – Depot Access Bridge review of updated ITP's including Structural Concrete, Bridge Bearings, Earthworks and Waterproofing.

Audits - SVS audit TSA/10/003 - Track & Civils was held on the 29th March 2011. SVS audit TSA/10/004 on the Tram Vehicle - formal checklist has been issued to BSC (12/4/2011). BSC have still not provided a response to the Haymarket Audit carried out on the 14th Jan 2011.

All handover information for completed utility works has been issued to the SUC's with the exception of Frontline Construction. DWG's for Section 1C are still outstanding.

A 'Simple SVS' presentation given by B Cummins to the Board and Project Safety Certification Committee (PSCC) A formal review and revamp and refocus of the PSCC currently taking place.

Independent Competent Person RFI and RFO status - 5 open RFI's (2 on hold); 1 open RFO and 1 open ANC.





### **Progress**

The progress achieved in Period 01 for INFRACO works was 0.1% against a plan of 0.0% as against the contractual Rev.1 programme all construction activities both On and Off-street should now be complete with the route in total planned to be 100.0% complete.

As BSC have now demobilised from previously active on-street worksites in the Leith Docks area at Lindsay Road and Tower Bridge, the only progress achieved in the period has been at the Depot Access Bridge and in the Depot itself.

The total cumulative completion for Infraco Works is 28.3% at end of Period 1.

Progress Comparison Period 13 vs Period 1 - Infraco

Period	Cumulative Progress (Actual)	Rev 1 Target
2010/11 Period 13	28.2%	100%
2011/12 Period 1	28.3%	100%

BSC continue to report progress against the agreed Rev.1 contractual programme, although for information only they also include an update against the "Updated Programme".

This shows for progress up to and including 15<sup>th</sup> April 2011 an OFRS date of 02 August 2014 which has slipped against the contractual Rev.1 programme date of 06 Sep 11 and a period 13 OFRS date of 25 February 2014 resulting in a <u>158 calendar day slippage during the period.</u>

This appears to be primarily attributable to the issue of IFC drawings for road/track works in Section 1C2 Picardy Place to St Andrew Square which are forecast in the period to be issued on 06-Dec-11 slipping from the 18-Apr-11 reported in Period 13, <u>a slippage of 33 weeks</u>. tie have formally corresponded on both matters with BSC. There has been no explanation of this slippage and this is being picked up as part of the post mediation workstreams.

It should be noted that as a result of the current rates of BSC progress and cessation of works across the site, that it is likely that slippage will continue to be reported on a period by period basis, until such time as a re-baselined programme can be agreed with the Contractor.

#### **Dispute Resolution**

In total, 30 items have now been referred to the formal dispute resolution process – 20 by **tie** and 10 by Infraco. Of the 30 disputes raised 7 still remain to be resolved. However following the Mediation discussions with BSC both parties agreed that the Dispute Resolution Procedures set out in the Contract should be 'frozen' until early September 2011. As a result of the agreement to suspend the DRP process no new decisions have been received during the period.

#### Design

#### **IFC Design**

Following the mediation talks, a fast-track approach to reviewing and closing out CEC consents has been implemented. **tie** are still to see the outcome of this exercise in the SDS programme, as **tie** have yet to receive V69 from BSC.

As **tie** are unable to provide a robust analysis of SDS V69, for the purpose of the below analysis, tie have maintained the use of v68 information (submitted to **tie** on 17 March 2011 with a progress date of 14 February 11.



☐ Yes ☐ No

#### V68 design approval count at Period 1 2011/12:

phase 1a only												er i		
only	Numbers F	required										Number		Number
	V26	V31	V58	V59	V60	V61	V62	V63	V64	V66	V67	Granted	V68	Granted
Prior Approvals	44	49	56	56	56	56	60	60	60	60	62	56	60	57
Technical Approvals	53	71	92	92	92	92	63	63	63	63	63	55	63	56
IFC	71	81	233	230	227	230	230	229	229*	234	238	192	240*	201

v68 data has been used to inform the programme updates. However, where possible, tie have included Draft V69 information from BSC programme into the live programme.

- IFCs Phase 1a: 201 issued out of 240 (84%)
- 60 Prior Approvals are included in v68 57 of which have been granted those remaining include Canopy & Boundary Treatment at Edinburgh Airport and Roseburn Viaduct Value Engineering option
- 56 Technical Approvals out of 63 have been granted in V67
- Roads approvals One area remains outstanding from the V31 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 1A1, 1A2, 1A4, 1B, 1D, 5A, 5B, 5C & 6 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.

All technical informatives have been closed. Only 32 technical approval comments remain open.

#### **Utility & Cabling Works**

Clancy Dowcra are due to commence Water Abandonment works in various locations in 1A1 & 1B in Period 2.

Telecoms continue to progress their re-cabling activities on-street – with works in St Andrews Square to complete Q3 and York Place & Torphichen St due to complete in Q2 2011. Cabling in Torphichen St could be protected to allow tramworks to commence as crossings are perpendicular to Tram route. The pulling of remaining BT cables on the northbound carriageway between MacDonald Rd – Jane St has been achieved and works are now nearing completion with the intermediate jointing of the cables now progressing.

#### Tramworks (INFRACO)

The progress achieved in Period 1 for INFRACO works was 0.1% although it should be noted that against the contractual Rev.1 programme Off-street construction should now be complete with the route in total planned to be 100% complete.



#### (%) Infraco Construction Progress Period 01

Period 01 2011-12	Pe	riod	Delta	Cumu	lative	Delta	Project
INFRACO PERIOD 01 PROGRESS (Contract Rev.01 Programme)		Actual		Plan	Actual		Wtg
Section 1a Newhaven to Foot of the Walk	0.0%	0.0%	0.0%	100.0%	8.6%	-91.4%	16.2%
Section 1b Foot of the Walk to McDonald Road		0.0%	0.0%	100.0%	1.3%	-98.7%	7.4%
Section 1c McDonald Road to Princes Street West	0.0%	0.0%	0.0%	100.0%	0.0%	-100.0%	10.8%
Section 1d Princes Street West to Haymarket Combined Sections 1A-1B-1C-1D (On-Street) Newhaven	0.0%	0.0%	0.0%	100.0%	42.1%	-57.9%	7.6%
Road to Haymarket	0.0%	0.0%	0.0%	100.0%	11.2%	-88.8%	42.0%
Section 2 Haymarket to Roseburn Junction	0.0%	0.0%	0.0%	100.0%	35.1%	-64.9%	4.2%
Section 5a Roseburn Junction to Balgreen Road	0.0%	0.0%	0.0%	100.0%	10.0%	-90.0%	13.9%
Section 5b Balgreen Road to Edinburgh Park Central	0.0%	0.0%	0.0%	100.0%	43.4%	-56.6%	13.2%
Section 5c Edinburgh Park Central to Gogarburn	0.0%	0.3%	0.3%	100.0%	27.2%	-72.8%	7.2%
Section 6 Gogar Depot	0.0%	0.2%	0.2%	100.0%	79.2%	-20.8%	11.9%
Section 7a Gogarburn to Edinburgh Airport	0.0%	0.0%	0.0%	100.0%	47.3%	-52.7%	7.6%
Combined Sections 2A-5A-5B-5C-6A-7A (Off-Street) Haymarket to Edinburgh Airport	0.0%	0.1%	0.1%	100.0%	40.6%	-59.4%	58.0%
FULL ROUTE PHASE 1A NEWHAVEN ROAD TO EDINBURGH AIRPORT	0.0%	0.0%	0.0%	100.0%	28.3%	-71.7%	100.0%

#### Progress Points to note in Period 01:

- BSC completed rail interface remedial works westbound from South St David Street to the Mound, across the Mound junction and across part of the Frederick Street junction.
- BSC completed rail interface remedial works east and westbound between South Charlotte Street and Lothian Road.
- SGN temporary diversion in 2A remains to be completed. tie have requested a programme from SGN for completing works. Temp diversion works were paid in advance in full in September 2010. Further email correspondence and telephone conversations with SGN during w/c 18th April 2011, updated price expected in early May 2011.
- Depot Access Bridge 100% of planned progress achieved in Period.
- Depot Building Accommodation area fit out and finishes planned progress achieved in Period.
   Siemens track installation continues with planned progress achieved in Period within Workshop and tram wash areas.
- Manhole Works SW have written to confirm their position re IFA to IFC progression tie to review in Period 02.
- 250 water main at Depot works commenced.
- Assembly Street Water Connection works planned to commence 08/05/11.
- Water Abandonment works in various locations on street due to commence in Period 2.
- 800 Water main Valve Chamber IFA drawings is with SW for approval. Expected to be received 29/04/11.

#### Issues in the Period

- Infraco lack of progress and subsequent delay at Tower Place Bridge and RW1A particularly on panels A3-A6.
- Works on the Princes Street snagging list yet to be programmed and carried out by BSC, along with the reinstatement of the water supply for Princes Street East Gardens.
- Final proposal for remedial works / design change for Princes Street still not approved.
- Still no progress being made from Haymarket Viaduct through to the A8 Underpass due to the ongoing dispute over change although A8 underpass works due to recommence in early Period 02, along with works at Haymarket Yards.



#### **TRAMCO**

The CAF contract programme is incorporated in the Master Tram project Programme. We receive electronic submission of the CAF programme to allow analysis of the programme.

CAF is progressing well to deliver trams to Edinburgh according with its contractual programme but there is currently no access available to the depot to receive the trams. Tram 252 is stored in Broxburn and is checked on a regular basis; trams 251 and 253 to 274 are stored at the factory in Irun.

#### Period 01 Summary - Tramco

No	Planned	Activities in current Period
1	Fabrication of the trams	Fabrication and painting is completed on all the body-shells
		for the twenty-seventh tram. Internal fit-out and wiring of the
		modules of the twenty-fifth, twenty-sixth and twenty-seventh
		trams are continuing in the finishing area. The first 24 trams
		are completed and tram 25 is completing testing.
2	Enhanced passenger	Plan to fit additional latest equipment (if required) when trams
	information upgrade	arrive in Edinburgh.
3	Review of Test	Dynamic testing in Edinburgh under discussion and
	Protocols and test	finalisation of the protocols now that the scope of the test
	results	track infrastructure has been agreed.
4	Depot Equipment	CAF are continuing progress, delivery schedule under
		discussion in conjunction with civil works programme for
		depot, Siemens have started installation of their plant after
		which the CAF supplied equipment will be delivered and fitted
		on site subject to detailed sequencing with construction plan.
5	Finalisation of external	Application of final branding to be applied whilst trams are
	branding	stored at the factory prior to shipping to Edinburgh.
6	Tram O&M Manuals	Update (if required) after experience of the trams in the field.
7	Key sub-contract	Collateral warranties - 3 signed warranties have been
	placement	received, remaining continue to be progressed.
8	Factory Based	First 24 trams have successfully completed factory testing to
	Acceptance Testing	date. 89% of trams now completed and tested.
н	complete	
9	Testing regime	Factory Static Testing completed on Trams 1 through 24
		tested and 25 is completing factory testing, dynamic Factory
		and Dynamic Test Track Testing programme completed on
		Trams 1 & 2.
10	Programme progress	89% of scheduled activities completed.

### **Preparing for Operations**

The Operational Readiness team are continuing to work closely with the tie and BSC programme teams to coordinate progress at the Depot, good progress in this area has started to be made again by the Contractor and in particular the drainage and hard standing areas are now underway. In the period the wheel lathe has been installed along with other plant and equipment, as well as work has continued to fit out the control room equipment.





Notification has been given to the preferred bidder for the supply of ticketing equipment for the tram system, to integrate with the existing Lothian Buses ticketing system and the team are progressing preparation of the contract documentation.

With the support of CAF, TEL are assisting CEC with an Invitation to Negotiate (ITN) to lease some tram vehicles to Croydon. Tender documentation is being developed with CEC.

#### Cost

The 'AFC' (£545m) in this report does not reflect an approved and reliable Anticipated Final Cost for the Edinburgh Tram Project. Rather, the forecast presented reflects the best view of the spend profile of the funding currently available for the delivery of phase 1a. Given the continuing commercial uncertainties with the Infraco and continuing delays to the project it is considered unlikely that the full scope of Phase 1a will be completed within the available funding envelope of £545m. It is not however possible at the present time to accurately forecast a reliable outturn cost until the key commercial issues are resolved through the contractual and legal process. It should also be flagged that the profile of the forecast for 2011/12 is likely to change dependent upon the outcome of mediation.

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

Key cost related items to note in Period 1 are:

- COWD to date is £413.0m, with funding to date split to TS (£378.9m) and CEC (£34.1m).
- The budget for ETP in 2011/12, established in Period 1 2011/12 was £133.5m (£142.2m 09/10). Transport Scotland funding for 2011/12 was £122.5m for ETP, with £11.0m funding available from CEC. Given the continuing commercial uncertainties, the current year budget is likely to change upon the outcome of mediation.
- Key sensitivities to the reforecast are identified in the main report.

tie spend for 2010/11 fell within the range presented to TS on 4<sup>th</sup> November 2010.

#### Actual YTD P1 & forecast P2-13 FY11/12

£m	COWD to P1	COWD F'cast P2-P13	FY 2011/12
Infrastructure and vehicles	0.4	112.5	112.9
Utilities diversions	0.0	-4.7	-4.7
Design	0.1	1.1	1.2
Land and compensation	0.0	0.0	0.0
Resources and insurance	1.1	23.0	24.1
Total Phase 1a	1.6	131.9	133.5

As previously reported and agreed with CEC and TS, initial milestones under the Infraco and Tramco contracts in the aggregate amount of £14.3m, 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 2011/12 and future years.





### **Risk & Opportunity**

Drawdowns on risk and contingency to the end of Period 1 11/12 now total £72.3m. The remaining risk balance based on the approved QRA plus the additional funding is £3.8m, including uncommitted budgets put on-hold of -£12.69.

#### Stakeholder & Communications

#### Media / Press Activity

Media coverage of the project has been consistent over the last four weeks of Period 1, however due to the ongoing mediation process the overall level of media enquiries has dropped substantially. The Pre Election Period has also influenced the amount of engagement with the media as most of their focus has been given to following the political debate in the run up to the 5<sup>th</sup> May.

#### Partner and Stakeholder Communications

One notification was delivered to stakeholders and key partners during Period 1 regarding on street work which was due to be carried out in their area:

- Cable ducting York Place x 97
- Princes Street Remedial works x 100
- Side Entry Manhole Inspections Constitution Street x 68

In addition to the above notifications distributed during Period 1, notices are due to be issued regarding an upcoming programme of works on Leith Walk to abandon elements of old Scottish Water mains in May. This will be localised to areas around Elm Row, Casselbank Street, and a number of sites near the Foot of the Walk. Abandonment work is usually very low key with minimal impact to traffic or pedestrians. A further notification will be distributed locally for any businesses or residents who may experience water shut offs during this time.

#### **Website / Internet Communications**

With 874 facebook page members (+11) and 1488 twitter followers (+86), social media has seen further growth this period. Trending tram chatter has largely been linked to the election and stories about the potential leasing of vehicles, while a images of workman on Haymarket Viaduct provoked interest.

### Freedom of Information Requests

Freedoms of Information (FOI) Requests for Period 1 have continued to decrease from Period 13 with a total of nine requests being carried over. During Period 1, one request was completed along with two reviews of information released previously, leaving six requests open.

#### **Customer Service Correspondence**

Period 1 correspondence figures have fallen substantially over the last four weeks from a peak of 252 in Period 13, to 132. This represents a drop of 120, just short of half the overall correspondence received during Period 13. Weekly totals remained consistently low for each week, especially the week ending 17/04/11 which only recorded 23 contacts from the public.

### 1112 Period 1 Top 12 Primary Risk Register

#### Risk Description

ARM Risk II	) Cause	Event	Effect	Risk Owner	Significance	Treatment Strategy	Previous Status	Current Status	Due Date	Action Owner
343	General delay to programme with various causes e.g. failure to obtain approvals on time; contractor issues,	Delay to completion of project	Increased out-turn cost due to delay plus revenue loss	S Clark	High - 25.00	Access maps showing areas available	On Programme	On Programme	28-May-11	F McFadden
	access after completion of utility diversions					Contractually assertive workstreams to progress programme	Complete	Complete	29-May-10	S Bell
						DRP Mudfa Rev 8 response	Complete	Complete	31-Aug-10	S Bell
						DRP on programme management (EOT1)	Complete	Complete	30-Oct-09	S Bell
						Issue UWN on programme	Complete	Complete	15-Sep-10	S Clark
						Liason between tie/BSC programme managers	On Programme	On Programme	30-Dec-11	T Hickman
						Programme Management Panel process	Complete	Complete	30-Dec-11	F McFadden
						Use of Clause 34 / 80.15 - addressed via DRP	Complete	Complete	30-Aug-10	S Bell
						Weekly tie/BSC commercial meetings	On Programme	On Programme	30-Dec-11	M Paterson
1078	Lack of effective engagement from BSC leaders towards tie.	Failure of partnership approach between tie and BSC.	Lack of progress of works and increased costs	S Bell	High - 25.00	Engagement between tie and BSC at different levels. Regular review of BSC management of third parties as per Employers Requirements.	Complete	Complete	31-Dec-09	C Neil
1101	Unreasonable behaviour of BSC commercial management	Unrealistic estimates being submitted for	Programme delay while disputes regarding	Dennis Murray	High - 25.00	Additional resource from T&T	Complete	Complete	29-Jul-09	M Paterson
	commercial management	potential changes	estimates are resolved	wunay		Agreed with BSC for independant evalutation 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 and other commercial resources on there areas	Complete	Complete	31-Dec-10	M Paterson
						Clause 34/80 issues using DRP for disputed values	Complete	Complete	31-Aug-10	S Bell
						Legal challenge to Clause 80 and BSCs interpretation thereof	Complete	Complete	30-Sep-10	S Bell

### 1112 Period 1 Top 12 Primary Risk Register

			1112 Pello	u i iop iz	2 Pilliary n	isk negister				
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	All party buy in - application of appendix 7(1)	On Programme	On Programme	31-Dec-11	C Neil
			(PA 12) Also affects (PA 14)			Carry out surveys to confirm extent of roads requiring full depth reconstruction	Complete	Complete	30-Jun-09	C Neil
						Intensive engagement with CEC, pallette of options, methodology being agreed	Complete	Complete	31-Jan-11	C Neil
						Resolution of trackform at trackform workshop	On Programme	On Programme	31-Aug-11	C Neil
						Suite of options from surveys to be reviewed and agreement reached	Complete	Complete	30-Jul-10	C Neil
						tie developed on-street proposal with scott wilson - complete and under review	Complete	Complete	31-Jan-11	S Bell
1079	Failure of BSC to effectively resource up for project	Lack of competent resources within BSC to safely and effectively	Delay to programme and additional cost	F McFadden	High - 23.00	Apply contract re personnel	On Programme	On Programme	21-May-11	F McFadden
		deliver Tram project				List of staff and competencies to be provided	On Programme	On Programme	21-May-11	F McFadden
						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.	Complete	Complete	31-May-09	C Neil
						Resource led programmes	On Programme	On Programme	21-May-11	F McFadden
						Sub contractor order approval	On Programme	On Programme	31-Jul-11	F Dunn
						Where appropriate tie can request removal of resources.	On Programme	On Programme	21-May-11	F McFadden
352	Increase in land values	Higher land compensation claims than anticipated	Additional uplift on compensation claims	A Sim	High - 22.00	Close out initiate early negotiations between V and landowners	Complete	Complete	28-Mar-08	A Sim
						Initiate early negotiations between DV and landowners	Complete	Complete	28-Mar-08	A Rintoul
						Liaise with CEC Planning	Complete	Complete	28-Mar-08	R McMaster
888	Design, construction and/or testing does not meet operator requirements and gain approval from the ROGS Competent Person (ICP)	Lack of evidence from the tie SVS to allow handover of ETN to operator.	Delay to comencement of service, additional cost both for delay and rectification of the issue	B Cummins	High - 21.00	Ensure Infraco Agreement requires Operator to be consulted on appropriate issues	Complete	Complete	28-Dec-07	B Dawson
						Involve ETL fully in design, construction and testing/review process.	On Programme	On Programme	30-Jun-11	A Richards

### 1112 Period 1 Top 12 Primary Risk Register

			TITE PENO	u 1 100 12	Pilliary ni	isk negister				
928	Major single safety and/or environmental incident (including a dangerous occurrence) during	Safety incident/injury 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	30-Apr-11	B Cummins
	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	30-Apr-11	B Cummins
						Incident management process regularly updated and revisited	On Programme	On Programme	31-Dec-12	B Cummins
						Safety Induction to be carried out for all site staff	On Programme	On Programme	30-Apr-11	B Cummins
						Site Supervisors to be appointed by tie	Complete	Complete	28-Feb-07	S Clark
						TEL HSE committee overview appliced	On Programme	On Programme	30-Apr-11	B Cummins
						The tie "Safety" bus is being used to deliver safety talks & culture surveys to the contractors workforce. Build the tram safely Drugs & Alcohol policy	Complete	Complete	31-Dec-09	B Cummins
931	Utilities assets uncovered during construction that were not previously accounted for; unidentified abandoned utilities assets; known redudant		Re-design and delay as investigation takes place and solution implemented; Increase in Capex cost as a	C Neil	High - 20.00	Conflicts Register - all on-street sections appart from York Plc and Broughton St	Complete	Complete	31-Aug-10	C Neil
	utilities; unknown live utilities; unknown redundant utilities.		result of additional works.			GPR surveys in areas where there are likey 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-Jan-12	C Neil
						Undertake starnet surveys	N/A	Undefined	30-Jun-11	C Neil
1076	Utilities do not finish diversion works prior to Tramworks commencing work		Delay and disruption claims from BSC.	F McFadden	High - 20.00	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	Complete	Complete	31-Mar-10	C Neil
1106	Failure of SDS to provide IFC drawings in line with the V31 programme	Programme delay with dispute over accountability.	Delay to programme and additional costs	F McFadden	High - 20.00	Production of concurrency information using Accutus and internal production of PITA database	On Programme	On Programme	25-Jun-11	S Clark
						Use of additional resources to apportion accountability for delay in issuing of IFC	On Programme	On Programme	30-Jun-11	D Sharp
1160	Lack of signed, forma agreement between CEC and Forth Ports regarding Forth Ports contribution to Tram wors	Forth Ports contribution does not materialise or does not equal value of works carried out	CEC reuired to fund difference between Forth Ports contribution and value of works	S Bell	High - 20.00	Liase with Dave Anderson and Donald McGuigan to ensure awareness of issue and agreement of current strategy	Complete	Complete	31-Jan-11	S Bell
		TOTAL STATE OF THE	V. 10/10			Meet with TS and ensure they are aware that costs are being allocated	Complete	Complete	5-Nov-10	S McGarrity





## Period 01 2011/12 - Papers for Consideration



## **Tram Project Board – Board Paper Pro Forma Summary**

Subject:	Project Change Control Update - Period 01, 2011/12
Source/Author:	Gregor Roberts
Primary Contact:	Gregor Roberts
Date of paper:	11 <sup>th</sup> May 2011
Status/Approval of paper:	Noting
Date of Board meeting:	11 <sup>th</sup> May 2011
Action requested by Board	
The Board is asked to:	
<ul> <li>Note the Project Chang</li> </ul>	e control status at Period 01.





Paper to: TPB Meeting date: 11<sup>th</sup> May 2011

Subject: Project Change Control Update – Period 1, 2011/12

Preparer: Gregor Roberts

### Summary

This paper is to update the Tram Project Board with the current status regarding approved project change orders and their implications on the overall Tram Project Budget. To the end of Period 13, 2010/11, £59.0m has been drawn down from the project risk allowance.

In Period 1, 2011/12, an additional £0.5m has been drawn down, leaving a risk allowance of £3.8m.

Any changes which are approved are in relation to either actual expenditure, a commitment to future expenditure or based upon an anticipated future commitment.

Following the delegated authority from TEL to the TPB authorising the use of the £545m funding envelope and the subsequent approval to increase the budget to £545m in Period 9 2010/11, the approved budget now stands at £545m.

tie will continue to report on, and ensure that the Board have clear visibility of, all changes which have been authorised and recommended and to seek Board approval for all changes greater than £1m, in line with the Delegated Authority Rules.

The table below summarises the approved changes that have impacted the Project Risk Allowance in Period 1.

Description	Base cost	Risk	Total
Position at Financial Close (PCB)	481,680,811	30,336,196	512,017,007
Increase in Approved Budget		32,982,993	
Total Risk		63,319,189	545,000,000
Changes to end Period 13*	59,015,584	-59,015,584	
Position at end Period 13	540,696,395	4,303,605	545,000,000
Period 1 Changes	548,981	-548,981	
Position at end Period 1 (CAB)	541,245,376	3,754,624	545,000,000

<sup>\*</sup> updated from last period's reported position following a correction to COP501, which should have been a budget transfer, not a drawdown from Contingency

### **Changes Approved in Period 1**

Balgreen - Network Rail Bridge and Tram Bridge (COP392 -£84,000)

Design changes associated with Balgreen Network Rail Access Bridge (INTC 148) and Balgreen Tram Bridge (INTC 199). This is a change due to changes in design relating to Clause 3.4.1 of the Pricing Assumptions resulting in a reduction in scope.

### <u>CEC Costs for 2010/11 – Update (COP405 +£108,752)</u>

Total net increase of £108,752 to previously approved CEC staffing budgets for 2010-11 (as approved by change COP254) for: CEC Additional staff -£3.8k, Finance +£2.2k, Legal



+£28k, Planning +£12.2k, CEC Core tram team +£53.5k (All of the above to be funded from Contingency); Property +£16.7k (To be funded from Risk, as this resource is required to mitigate against the risk of CAAD claims)

This change will align the budget with the actual amounts billed to tie Ltd by CEC during the FY 2010/11.

### Roseburn Street Garage Clearance (COP419 +£9,638)

The change is for the costs associated with the clearance and storage of materials and equipment from Roseburn Garage (33 Roseburn Street) to create the space required to faciliate the deconstruction of the existing portal frame structure. This structure requires modification in order to faciliate access for BSC to construct the Russell Road Retaining Wall. The cost estimates also include works necessary to relocate a spray painting booth elsewhere within the existing garage site. This is a change because Plot 96 was not made available to BSC at contract close, and is now deemed necessary in order to construct the works.

### TRO additional legal and administration costs (COP442 +£40,000)

TRO 1 was approved by the TIE Committee on 23 November 2010, which now enables the tram to operate. Additionally TRO 1 was required, as a tie deliverable, to ensure that the design approval sign-off was not delayed. TRO 2 is also now required so as to take account of re-phasing of the tram works and also to vary TRO 1 to take account of design changes, subsequent to the promotion of TRO 1. The provision for TRO 2 is not optional, but is necessary to comply with the Council's legal obligations and to allow the operation and enforcement of the ETN road network. This is a change because of additional legal and administrative costs arising from design and phasing changes, which have occurred subsequent to TRO 1 commencing consultation in September 2009 and these now require to be varied.

### 250mm Water main at Gogar depot (COP473 +£160,993)

To ensure access was available to BSC for Depot construction the 250 diameter water main was diverted prior to finalisation of the earthworks design. When the earthworks profile was established on site it was discovered that the pipe was located within the south embankment. This resulted in insufficient cover to the pipe and unacceptable access restrictions for Scottish Water. As a result a 295m section of the main requires to be relayed.

### Sewer Manhole Surveys (COP490 +£1,262)

6 no. Scottish Water sewer manholes worked on by Carillion require to be surveyed (with Scottish Water) to determine what, if any, works are required to complete the manhole works and allow for completion sign off by Scottish Water. The manhole surveys will require TM be installed to allow for safe working areas to be created.

#### Russell Road – Protection of Gas Mains (Investigation Works Only) (COP495 +£28,985)

Employ SGN-approved specialist subcontractor to investigate impact of tram works on existing gas apparatus at Russell Road in the vicinity of the proposed bridge and report back with recommendations to ensure pipe integrity, to be agreed with SGN.

tie highlighted the existence of the gas mains and instructed BSC to agree methodology with SGN prior to commencement of the tram works. This is a change because it is necessary to produce a report to satisfy SGN that the integrity of the existing gas



apparatus will be maintained throughout the adjacent tram works. The recommendations resulting from the report are to be agreed with SGN. Please note that these works have been carried out.

#### 2A Traffic Management at Verity House Access Road (COP516 +£10,842)

The works covered by this change involved the installation of two way temporary traffic lights at the Verity House access road between the period 25th May 2009 and 20th November 2009 (inclusive). The temporary two way traffic lights were instructed such that the Scotrail Car Park at Haymarket Train Station could be returned to Scot Rail. The temporary two way traffic lights allowed access into the Scotrail Car Park and as such tie could then return the car park to Scotrail management. Prior to the temporary traffic lights being installed tie were liable to pay Scotrail maximum compenstion of £2,352 per week for lost car parking revenue, taxis for Scotrail staff etc. The installation of the temporary traffic lights meant that the compensation payments to Scotrail were stopped.

### 2A Street Lighting at Haymarket Terrace (COP517 +£1,155)

Change Order 155 was issued for redeisgn work related to the relocation of Heritage street lighting column. Subsequent to the issue of the Change Order it was decided that the requested design work was not required. Therefore this tie change covers the costs of abortive work associate with preparing the original estimate.

### 2A SWCN 3 (COP518 +£7,312)

The change paper covers two no. works activities:

- 1) Provide/monitor access to BSC CDM site during night shift works. Works carried out were the transfer of the Scottish Power supply to Haymarket Train Station carried out by Babcock Rail on behalf of tie ltd
- 2) Amend location of bus stop and TM arrangements due to Six Nations games at Murrayfield and buses using the Scotrail Haymarket car park

### 5A – IFC Drawing Haymarket Depot Car Park (COP525 +£40,000)

Design changes associated with Haymarket Depot car park. This is a change because of changes in design relating to Clause 3.4.1 of the Pricing Assumptions, specifically drainage, site clearance, kerbing, sub-base surfacing/pavements and street lighting. The value was agreed as a "without prejudice agreement".

### 5A - Topographical survey at Scotrail Depot (COP526 +£1,811)

Carry out a topographical survey at Scotrail Depot. This is a change because an accurate topographical survey for the new apron road layout at the west end of the Scotrail depot was required in order to complete the design at this location.

#### Dilapidations for First Floor Citypoint (COP537 +£81,000)

Dilapidation costs for the moving out of the First Floor Citypoint. Break clause exercised, resulting in a saving to the project of circa £300k per year. However, Dilapidations of £81k were incurred.

#### Section 2A – Miscellaneous Historical Budget Corrections (COP538 -£43,066)



Miscellaneous budget corrections to Section 2A. This is a change because 2 No. items have been wrongly coded to Section 2A, 2 No. items already had additional budget allocated previously and 1 No. item had other sections wrongly coded to Section 2A.

### Scottish Water main abandonments (COP458 +£157,658)

The conclusion of the water main replacement should have included the disconnection of the existing redundant supply/distribution pipes from the new system. There remain 10 locations where the connection between new and existing requires to be severed and the redundant main capped. The locations are: Castlebank Street, Crown Street, Steads Place, Springfield Street, Jameson Place, Albert Street, Brunswick Place, Elm Row, Baxter's Place and Palmerston Place. This change has arisen because Scottish Water are concerned a risk to public health exists as currently disused sections of the pre-Mudfa network have not yet been isolated from the active supply.

### Section 5B Scottish Water Manhole completion work (COP460 +£26,639)

5 no. Scottish Water manholes require minor works to allow them to be completed and accepted as complete by Scottish Water. This change paper requests funding to carry out such completion works as agreed between tie and Scottish Water.

### Decision(s) / support required

The TPB is requested to:

a. Note the Project Change Control status at Period 1

Approved	Vic Emery on behalf of the Ti	Date: ram Project Board
Recommended	Name: Steven Bell	Date: 11 May 2011 Title: Tram Project Director
Proposed	Name: Gregor Roberts	Date: 11 May 2011 Title: Finance Director





## Period 01 Transport Scotland report Sections 2-7

On following pages are Sections 2-7 of the Transport Scotland report (Section 1 is the Project Directors report).



## 2 Progress

On Friday 1<sup>st</sup> October 2010, BSC began to demobilise and cease works on certain sites across the route (over Sections 2A, 5A, 5B and 5C), this reflecting an escalation in the contractual dispute between BSC and tie. In response to this action, tie has entered into formal correspondence with the contractor regarding contractual obligations. tie continue to undertake site monitoring on both active and inactive worksites.

During March, positive mediation discussions were held between the parties. Transport Scotland were party to these discussions.

From mid April, some initial remobilisation has commenced at the Depot as part of the post mediation workstreams.

Edinburgh Gateway is now reported in a standalone report.

The progress achieved in Period 01 for INFRACO works was 0.1% against a plan of 0.0% as against the contractual Rev.1 programme all construction activities both On and Off-street should now be complete with the route in total planned to be 100.0% complete.

As BSC have now demobilised from previously active on-street worksites in the Leith Docks area at Lindsay Road and Tower Bridge, the only progress achieved in the period has been at the Depot Access Bridge and in the Depot itself.

The total cumulative completion for Infraco Works is 28.3% at end of Period 01. A summary of progress on various project elements can be found below:

Utilities The % complete is a physical measure of the progress against the forecast final volume of diversions across the route. It does not take cognisance of cabling, testing and transfers from the Telecom Providers (BT etc.)  ■ ~50,000m of diversions; ~48,300m completed to date.  ■ Airport - Haymarket complete  ■ Haymarket − Newhaven complete save for:  ■ Some telecoms cabling and transfers  ■ Testing / commissioning / abandonments of transferred services (underway)  ■ Baltic Street Diversions (1500m)  ■ 250mm water mainextension at the Depot Commenced	97%
Tram Project Ancillary Works Equal weighting is applied to the physical progress % complete for all six work	100%
packages, irrespective of value.	
■ Ingliston Park & Ride Phase 2 100%	
complete  Burnside Road Bridge relocation at Edinburgh Airport 100%	
complete  Murrayfield Training Pitches relocation 100%	
complete  Murrayfield Wanderers Club House 100%	
complete  Murrayfield Turnstiles relocation 100% complete	
South Gyle sewer tunnel: (Site Contract works 100% completed) 100%	



complete Additional works -TM switchover completed November 10	
Tram Vehicles Weighting is applied to the physical completion of trams with a Factory Acceptance Test (FAT) signed off and accepted. All others are under manufacture so this is a conservative measure of progress.  24 out of 27 completed and factory tested with 3 manufacturing process. On programme Tram 252 relocated to secure compound in Broxburn	89%
Construction Off Street  The % complete is a physical measure of the proportion of the section from Haymarket to Edinburgh Airport. Some typical elements of sections provide a more granular view.  As has been reported, the on street work is subject to significant dispute and this is excluded in the summary table. Current % complete for the on street Infrastructure construction works is ~11%.	40%
Stabling area Phase 1 & 2 under construction, completion May '11  Structures Bridges 8 out of 16 under construction ~44% complete Culverts 3 out of 3 completed 100% complete Retaining Walls 6 out of 17 under construction ~24% complete	
Systems  Track 1400m installed & now starting in depot ~12% complete  Substations 2 out of 4 under construction ~20% complete  Overhead Line Work has commenced at the depot with 100 out of 124 poles in depot erected.	
Overall Progress as a Financial Metric  This is a summary financial metric, aggregating the current expenditure on the whole project as a % of the currently authorised funding (£545m).	76%

The cost, programme and risk information in this Period 01 report continues to be based upon an <u>unapproved</u> forecast on the information reported in May 2009. This will be updated once agreement is reached with BSC on a new revised programme.

BSC continue to report progress against the agreed Rev.1 contractual programme, although for information only they also include an update against the "Updated Programme". This shows for progress upto and including 15<sup>th</sup> April 2011 an OFRS date of 02 August 2014 which

This shows for progress upto and including 15<sup>th</sup> April 2011 an OFRS date of 02 August 2014 which has slipped against the contractual Rev.1 programme date of 06 Sep 11 and a period 13 OFRS date of 25 February 2014 resulting in a <u>158 calendar day slippage during the period.</u>

This appears to be primarily attributable to the issue of IFC drawings for road/track works in Section 1C2 Picardy Place to St Andrew Square which are forecast in the period to be issued on 06-Dec-11 slipping from the 18-Apr-11 reported in Period 13, <u>a slippage of 33 weeks.</u>

(Note that BSC reported SDS v67 information for both periods 12 and 13 and are now using SDS v69 Design Programme.





tie has formally corresponded with BSC in relation to both of these programme matters. There has been no explanation of this slippage and this is being picked up as part of the post mediation workstreams.

It should be noted that as a result of the current rates of BSC progress and cessation of works across the site, that it is likely that slippage will continue to be reported on a period by period basis, until such time as a re-baselined programme can be agreed with the Contractor.

Overall the relationship with BSC continues to suffer in a number of key areas and progress remains behind the master programme:

- Contractual obligations not met to allow works to commence on street;
- Design slippage since novation of design to INFRACO (now recorded in v68 of the design programme) - BSC have used draft information from SDS v69 but this programme has not yet been shared with tie.
- Consortium integrated design programme, assured and validation;
- Finalisation of the agreement of change delaying the commencement of work even though instructed to progress by tie;
- Remaining small pockets of incomplete utility diversions in the On-Street sections, and
- Slow mobilisation of INFRACO, including lack of formal sub-contracts being in place.

Section	Description	Contract Programme Rev.01	BSC Forecast (P13) Rev.01	BSC Forecast (P01) Rev.01	BSC Movement in Period Cal Days (c) – (b)	tie Live Forecast (P13) Rev.01**	tie Live Forecast (P01) Rev.01**	tie Movement in Period Cal Days (f) – (e)
		(a)	(b)	(c)	(d)	(e)	(f)	(g)
Section A	Depot completion	01-Jun-10	10-Oct-11	28-Oct-11	-18	18-Jan-12	22-Mar-12	-61
Section B*	Test Track Available	01-Jul-10	11-Jan-13	19-Apr-13	-98	24-May-12	25-Jun-12	-32
Section C	All Phase 1a Construction complete	10-Mar-11	29-Aug-13	03-Feb-14	-158	25-Apr-13	11-May-13	-16
Section D	Open for Revenue Service	06-Sep-11	25-Feb-14	02-Aug-14	-158	22-Oct-13	05-Nov-13	-16

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

tie continue to monitor progress against their "*live*" programme which is based on the contractual Rev.1 Programme logic, although progress recorded against this programme considers the currently known work-scopes including approved changes with recognised programme impact. This indicates a Sectional D completion of 05-Nov-13, which represents a 16 calendar day slippage from Period 13.

### **Contractual Strategy & Dispute Resolution**

In total, 30 items have now been referred to the formal dispute resolution process – 20 by **tie** and 10 by Infraco. Of the 30 disputes raised 7 still remain to be resolved. However following the Mediation discussions with BSC both parties agreed that the dispute Resolution Procedures set out in the Contract should be 'frozen' until early September 2011. Letters and emails between the parties have been exchanged confirming this position. Therefore on each of the live disputes the current position is as follows;-

- Payment for Princes Street Works Adjudication Hearing cisted,
- Lindsay Road Mediation cisted
- Extension of Time due to Utility Works (Mudfa 2) referral to mediation deferred
- Notified departures (4No) re Highways/street lighting Chief Executive's meetings deferred.

<sup>\*\*</sup> v68 SDS Programme information used, alongside draft SDS v69 data from BSC construction programme although SDS v69 not yet issued to tie.





As a result of the agreement to suspend the DRP process no new decisions have been received during the period. It is important to note that the application of DRP to disputed matters has reduced BSC's claims for additional payment from £25.0m to £11.4m in relation to those DRPs which have actually reached a financial settlement.

### Summary of Live DRP @ Period 1 2011/12

DRP No	Subject	Nature of Dispute	Launched or planned	PD Mtg	Position Papers	CEO Meeting	Referral	Decision
22	Princes St	Payment	1	1	1	V	On hold	
26	Delay due to Mudfa works	Extend contact period & costs	<b>√</b>	1	1	1	On hold	
23	Lindsay Road	Costs	√	1	√	1	On hold	
27 - 30	Street Lighting/ highways x 4	BBDI / IFC	<b>V</b>	1	1	1	On hold	
Launched	by tie							

Launched by BSC

### Design

#### **IFC Design**

Following the mediation talks, a fast–track approach to reviewing and closing out CEC consents has been implemented. **tie** are still to see the outcome of this exercise in the SDS programme, as **tie** have yet to receive V69 from BSC. Although, BSC have used **Draft** v69 information in their Period report 4-1. This information shows considerable change to the IFC for 1C2 roads (Picardy place) which is forecasting an issue date of 06/12/11 compared to 18/04/11 last period – BSC are claiming that the delay to this IFC has led to a 158 day delay to the completion of Sections C & D.

As **tie** are unable to provide a robust analysis of SDS V69, for the purpose of the below analysis, tie have maintained the use of v68 information (submitted to **tie** on 17 March 2011 with a progress date of 14 February 11.

#### V68 design approval count:

phase la only	Numbers F	equired										Number		Number
	V26	V31	V58	V59	V60	V61	V62	V63	V64	V66	V67	Granted	V68	Granted
Prior Approvals	44	49	56	56	56	56	60	60	60	60	62	56	60	57
Technical Approvals	53	71	92	92	92	92	63	63	63	63	63	55	63	56
IFC	71	81	233	230	227	230	230	229	229*	234	238	192	240*	201

v68 data has been used to inform the programme updates. However, where possible, **tie** have included Draft V69 information from BSC programme into the live programme.

- IFCs Phase 1a: 201 issued out of 240 (84%)
- 60 Prior Approvals are included in v68 57 of which have been granted those remaining include Canopy & Boundary Treatment at Edinburgh Airport and Roseburn Viaduct Value Engineering option
- 56 Technical Approvals out of 63 have been granted in V67
- Roads approvals One area remains outstanding from the V31 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 1A1, 1A2, 1A4, 1B, 1D, 5A, 5B, 5C & 6 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.

All technical informatives have been closed. Only 32 technical approval comments remain open.

**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. Design and consents reviews are being progressed as a post mediation escalated workstream.

### **Utility & Cabling Works**

Utility work – The tender process for Utility work at Baltic street remains on hold until **tie** receive the required IFC drawings from SDS - which remain outstanding with no delivery schedule in place from SDS.

Clancy Dowcra are due to commence Water Abandonment works in various locations in 1A1 & 1B in Period 2.

Telecoms continue to progress their re-cabling activities on-street — with works in St Andrews Square to complete Q3 and York Place & Torphichen St due to complete in Q2 2011. Cabling in Torphichen St could be protected to allow tramworks to commence as crossings are perpendicular to Tram route. The pulling of remaining BT cables on the northbound carriageway between MacDonald Rd — Jane St has been achieved and works are now nearing completion with the intermediate jointing of the cables now progressing.

### **Tramworks (INFRACO)**

The progress achieved in Period 01 for INFRACO works was 0.1% against a plan of 0.0% as against the contractual Rev.1 programme all construction activities both On and Off-street should now be complete with the route in total planned to be 100.0% complete.

As BSC have now demobilised from previously active on-street worksites in the Leith Docks area at Lindsay Road and Tower Bridge, the only progress achieved in the period has been at the Depot Access Bridge and in the Depot itself.

	Peri	od 01	Cumulative (Achieved to date)	Contract
Milestone	Planned	Actual	Actual	Planned to P01
Prelims	0	0	69	96
Construction	0	0	170	1229

#### **Contract Milestones**

Works are currently not being carried out in line with the original Contract Programme and subsequently cannot be achieved as originally forecast.

### **Prelim Milestones**

Prelim Milestones are no longer being forecast as BSC are not applying for these milestones in accordance with the Infraco Contract. It is also the case that a number of BSC's key subcontractors have not commenced in certain areas of the site therefore the milestones are not being achieved in full at this stage.



(%) Infraco Construction Progress Period 01

Period 01 2011-12	Pe	riod	Delta	Cumulative		Delta	Project
INFRACO PERIOD 01 PROGRESS (Contract Rev.01 Programme)	Plan	Actual		Plan	Actual		Wtg
Section 1a Newhaven to Foot of the Walk	0.0%	0.0%	0.0%	100.0%	8.6%	-91.4%	16.2%
Section 1b Foot of the Walk to McDonald Road	0.0%	0.0%	0.0%	100.0%	1.3%	-98.7%	7.4%
Section 1c McDonald Road to Princes Street West	0.0%	0.0%	0.0%	100.0%	0.0%	-100.0%	10.8%
Section 1d Princes Street West to Haymarket Combined Sections 1A-1B-1C-1D (On-Street) Newhaven Road to Haymarket	0.0%	0.0%	0.0%	100.0%	42.1% 11.2%	-57.9% -88.8%	7.6% 42.0%
Section 2 Haymarket to Roseburn Junction	0.0%	0.0%	0.0%	100.0%	35.1%	-64.9%	4.2%
Section 5a Roseburn Junction to Balgreen Road	0.0%	0.0%	0.0%	100.0%	10.0%	-90.0%	13.9%
Section 5b Balgreen Road to Edinburgh Park Central	0.0%	0.0%	0.0%	100.0%	43.4%	-56.6%	13.2%
Section 5c Edinburgh Park Central to Gogarburn	0.0%	0.3%	0.3%	100.0%	27.2%	-72.8%	7.2%
Section 6 Gogar Depot	0.0%	0.2%	0.2%	100.0%	79.2%	-20.8%	11.9%
Section 7a Gogarburn to Edinburgh Airport	0.0%	0.0%	0.0%	100.0%	47.3%	-52.7%	7.6%
Combined Sections 2A-5A-5B-5C-6A-7A (Off-Street) Haymarket to Edinburgh Airport	0.0%	0.1%	0.1%	100.0%	40.6%	-59.4%	58.0%
FULL ROUTE PHASE 1A NEWHAVEN ROAD TO EDINBURGH AIRPORT	0.0%	0.0%	0.0%	100.0%	28.3%	-71.7%	100.0%

### **ON-STREET**

Item	Period 12 9		
	Comp	Comp	Comp
Section 1 Newhaven Road to Haymarket			
Lindsay Rd RW's	66.0%	66.0%	66.0%
S17 Tower Place bridge	73.0%	73.0%	73.0%
1B Leith Walk (Foot of the Walk – McDonald Rd)	1.3%	1.3%	1.3%
1D Princes Street to Haymarket	42.1%	42.1%	42.1%

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