



Transport Edinburgh

Edinburgh Trams

Lothian Buses

Tram Project Board Report on Period 5 Papers for meeting 27th August 2008

10:30am – 12:30pm

Distribution:

Members and attendees

David Mackay (Chair)	Neil Renilson	Donald McGougan
Willie Gallagher	Dave Anderson	Cllr Phil Wheeler
Bill Campbell	Steven Bell	Alastair Richards
Gregor Roberts (for S McG)	Graeme Bissett	Marshall Poulton
		Elliot Scott (minutes)

In addition – for information only

Cllr Maggie Chapman	Cllr Gordon Mackenzie	Brian Cox
Cllr Allan Jackson	Cllr Tom Buchanan	Neil Scales
Kenneth Hogg	Peter Strachan	Frank McFadden
Keith Rimmer	Duncan Fraser	Dennis Murray
Norman Strachan	Rebecca Andrew	Jim McEwan
Iain Coupar	Alan Coyle	Tony Glazebrook
Susan Clark	Stewart McGarrity	

TRAM PROJECT BOARD

Transport Edinburgh

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Lothian Buses

FOISA exempt
 Yes
 No

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Agenda Tram Project Board

Brunel Suite – Citypoint, 2nd Floor

27th August 2008 – 10.30am to 12.30pm

Attendees:

David Mackay (Chair)

Neil Renilson

Donald McGougan

Bill Campbell

Dave Anderson

Cllr Phil Wheeler

Gregor Roberts (for S McG)

Steven Bell

Alastair Richards

Marshall Poulton

Graeme Bissett

Elliot Scott (minutes)

Apologies: Willie Gallagher, Stewart McGarrity

- 1 Review of previous minutes and matters arising
- 2 Presentation
- 3 Project Director's progress report for Period 5
 - Traffic management paper to be circulated separately
- 4 Health and safety – update
- 5 Change requests / risk drawdown
 - A8 Sewer – update; and
 - Fastlink – update.
- 6 Phase 1b / Gogar interchange / Line 3
- 7 Risk
- 8 Stakeholder communications
- 9 Date of next meeting
- 10 AOB

Edinburgh Tram Network Minutes

Tram Project Board

30th July 2008

tie offices – Citypoint II, Brunel Suite

Members:			
David Mackay (Chair)	DJM	Bill Campbell	WWC
Willie Gallagher	WG	Donald McGougan	DMcG
Cllr Phil Wheeler	PW	Neil Renilson	NR
In Attendance:			
Susan Clark	SC	Graeme Bissett	GB
Frank McFadden	FMcF	Stewart McGarrity	SMcG
Marshall Poulton	MP	Alastair Richards	AR
Duncan Fraser	DF	Keith Rimmer (part)	KR
Colin McLauchlan (part)	CMcL	Elliot Scott (minutes)	ES

Apologies: Dave Anderson and Steven Bell

1.0	REVIEW OF PREVIOUS MINUTES	
1.1	1.1. The safety leadership initiative will be developed with Infraco on 10/11 July and SB will report back on the plan for implementation in August.	SB
1.2	1.4. This is now subject to final review and the contract details will be put onto the website during Period 5.	GB
1.3	1.6. A paper will be presented to the tie safety committee on 13 th August. Feedback will be provided to the following TPB.	SB
1.4	2.6. SB to report back to the Board in the September TPB regarding DMcG's query about when the project team would have a better view of the MUDFA risk allowance as this would aid in the decision making process for Phase 1b.	SB
1.5	2.14. The close out plan for aligning Infraco proposals with the SDS design (particularly roads and OLE) is being finalised and SB will report to the September TPB on the associated programme and costs.	SB
1.6	5.4. DMcG updated that discussions have been held regarding the traffic calming north of Haymarket Terrace. He stated that there is very limited funding within CEC for traffic calming and that it would be difficult to move this scheme up the priority list. However, he added that there is potential for a limited CEC contribution. MP and SC to continue discussions and report to the August TPB.	MP / SC
1.7	7.3. WG has since spoken with Gordon Drummond.	
2.0	Presentation and review of PD's report	
2.1	<u>Overview</u> WG gave an overview of his current areas of concern including MUDFA progress, Infraco mobilisation and initial progress and the TRO process.	
2.2	<u>Safety</u> SC outlined the current safety statistics, summarised the serious incident which	

	resulted in a serious service disruption to water supplies, and updated on the recommendations from the RIDDOR incident.	
2.3	<u>MUDFA</u> SC gave an update on the progress on the MUDFA works outlining areas that had been done well and those where there were issues.	
2.4	WG raised an issue regarding the state the pavements are in after works had been completed in Shandwick Place. DJM also recounted his experience over the past weekend with visitors to the city and their impression of the impact of the tram works on the city. MP and PW both agreed to take up the issue with Services for Communities. WG stated that tie would co-ordinate with CEC to be proactive to avoid such issues in the future.	MP / PW
2.5	SC stated that the team was working to get MUDFA finished by the end of 2008 and that any conflicts with Infraco are being managed at a detailed level. WG added that, rather than being design driven, the MUDFA delay is driven by poor logistics and management and that the Board should not be unduly worried about progress. He followed by stating that by closing out Shandwick Place, Leith Walk and Constitution St the MUDFA team would be able to focus on Haymarket (which he still hoped to get finished before a potentially relaxed Christmas embargo) and at the A8. MP agreed with the potential strategy of relaxing the embargo at Haymarket to get the works completely finished. DMcG stated that it was important to ensure that any lessons learned around management of the embargo are carried forward to future embargos.	
2.6	WWC echoed WGs concern over management, especially last minute TRO issues. He also stated that there are a lot of unforeseen complexities when dismantling major traffic management. NR also highlighted the existence of the old tram cable chambers and their potential impact on the Infraco programme.	
2.7	DMcG queried the cohesiveness of the traders at Haymarket and whether it was in the interest of the tram to be proactive in talking to a group of people about the work. WG stated that he had contact from a few individual traders, but that he was unaware of an organised group akin to the West end retailers or the Leith Walk traders.	
2.8	<u>Tramco</u> NR and AR gave an update on Tramco progress, especially in relation to the mock-up and their recent visit.	
2.9	<u>Design and consents</u> SC gave an update on the current status of design and consents and the issues being faced. DF added that there are practicality issues being added by the design teams working in multiple locations. WG added that the process wasn't ideal, but that the focus was on the areas that affect programme.	
2.10	<u>Infraco</u> SC summarised the positive and negative points of Infraco progress to date. FMcF outlined the current status of package contractor appointment by BSC. He added that there was no risk to tie of sub-contractors (Barrs and Farrans) working under a letter of intent as their contracts were being finalised. However, he did see a risk if RJ McLeod could not come to an agreement with BSC regarding price indexing as it could lead to BB being required to take on more of the physical works.	
2.11	FMcF added that there is an opportunity to integrate some key activities in the	

	programme to get BB and S to work together and that his challenge is to get a quality build with the least amount of impact on the city.	
2.12	<p><u>Programme</u> SC outlined the current measures to bring the programme back into line with the contract. PW queried whether the current delay was due to the delay in signing the Infraco contract. WG replied that both parties had signed up to the dates, but that Infraco was now claiming that the current delay is due to poor IFC drawings and that they want to be paid to accelerate the programme. The counter to that argument is that tie has delivered and BSC has not been ready to mobilise. WG is holding further talks at a senior level.</p>	WG
2.13	<p><u>Berlin</u> Colin McLauchlan joined the meeting to provide commentary to the video of the visit to Berlin, instigated by Siemens, to view construction of an extension to the tram network there. Key points to come from the trip are the productivity being achieved due to good management and logistics, albeit under a different safety regime in wider streets, excellent real-time information and common integrated ticketing. WG added that the people from S on the trip are the ones who will be working on laying the track for the Edinburgh tram, although the road excavation and reinstatement will be completed by BB who have not done this work for trams before.</p>	
2.14	<p><u>Montpellier</u> NR provided an overview of his trip to Montpellier accompanied by a handout of photos. Key points of note included that there was no method for capex repayment to the Government, it had an operating subsidy of 50%, there were no accurate passenger numbers (complex ticketing structure, ~24% passengers don't validate tickets) and there was a strong brand being promoted.</p>	
2.15	<p><u>Finance</u> SMcG outlined the current financial position – no change in the AFC (£512M) but slippage in the current year spend (delayed contract award, MUDFA progress and ScotRail carpark compensation) that he expected to increase before catching up by March 2009. He added that TS were continuing to approve drawdown requests although they did have concerns over the reporting process. A revised reporting procedure has been agreed to align progress to be aligned with payment milestones.</p>	
2.16	<p>DMcG again expressed his concern that the spend for the full year does not meet the current target of £151M. He added that the Council was confident it could manage the shortfall in funding for the current year (in the context of the current £120M TS funding cap). SMG stated that a review of the outturn will be completed by the end of Period 6.</p>	SMcG
3.0	TRO	
3.1	<p>KR joined the meeting to present the updated TRO strategy. This is now intended to commence with an informal consultation with 90% complete roads design. He stressed the difference between core and consequential measures and the importance of setting the public expectations of what can be altered as a result of consultation and what is a core part of the tram business case and cannot be changed.</p>	

3.2	WG added that the Leader of the Council and the leaders of parties should be briefed on the issues surrounding core and consequential measures and DMcG added that a tie representative should also be present.	
3.3	The paper was noted by the Board.	
4.0	Risk	
4.1	SC gave a brief summary on the current position and the work done during the period to develop the Infraco risks.	
4.2	WG updated that, although the authority delegated to approve the works to divert the A8 sewer had not yet been used, it was not expected to be outwith the previously agreed envelope.	
5.0	Fastlink paper	
5.1	WWC apologised for the late introduction of the paper. He outlined the bus priority measures that require to be implemented as a result of Infraco taking over the guided busway in November to maintain journey times.	
5.2	Management of the works to be discussed outside the meeting.	SC
5.3	The Board approved the paper.	
6.0	Phase 1b	
6.1	SMcG outlined progress on patronage modelling since the last TPB. The outputs of the model are not yet at a stage to present to the board, but they will be presented, along with revenue and cost estimates, at the August TPB.	SMcG
6.2	BSC will be instructed by 1 August to update their capex estimate.	
6.3	SMG stated that the procurement strategy for Phase 1b can only be determined when it is decided at what time it will be built.	
6.4	Discussion centred on the options and strategy for acquiring funding for Phase 1b. DMcG stated that CEC were working on potential funding options at the moment, including reviewing the developer contributions along both the Phase 1a and 1b routes, and borrowing options based on the TEL business plan. SMG added that the working assumption was that the circa £60M additional funding would be split 50/50 between CEC and TS. It was agreed that WG / DA / DMcG / and NR and / or DJM would meet to try to advance this.	DMcG to lead
7.0	AOB	
7.1	DF raised an issue regarding high rates being quoted by BSC for Public Realm works. FMF agreed to follow this up.	FMcF
7.2	DF agreed to follow up NRs request for enforcement on Shandwick Place as cars were using what is now a bus / taxi / cycle route.	DF
7.3	Time of meeting on 27 August 08 – to be shifted to 10.30am start with the venue confirmed as CityPoint.	

Prepared by Elliot Scott, 31st July 2008

Project Directors report

Health, safety, quality and environment

There were no RIDDOR incidents in the Period and the AFR for the project is continuing to reduce and is now 0.10 with 91,000 hours worked in the period.

This current good performance is being enforced by safety surveillance between both the contractors and **ties** safety management team. A benefit of this is an increasing focus on assurance and hand-back.

There were four minor accidents, ten minor incidents and seven near misses reported, significantly less than in previous periods.

Eleven of the 21 accidents, incidents and near misses this period have been investigated, actions agreed and implemented and closed with ten mitigations in progress. There are a further 27 open incidents which are awaiting investigation reports and closure. These are being progressed and there has been a further reduction in historical investigations during the period.

The RIDDOR Investigation report has been revised and re-submitted to **tie** with eight out of 10 recommendations now closed.

As learnt from previous incidents there is a paper to the TPB addressing enhanced Traffic Management and response arrangements throughout the city.

Three audits were rescheduled for Period 6 due to annual leave overlaps between auditors and auditees. A two day audit was completed by **tie** on Carillion during the period focusing on quality procedures, inspection and test plans and reinstatement / hand-back processes. There were issues / deficiencies identified within the systems audited and an action plan is now being discussed and agreed with Carillion to address these. A summary of the findings and corrective actions will be available for the Period 6 report.

Eleven NCRs were raised in the period and corrective actions are being agreed. There are four outstanding NCRs from previous periods being closed out.

Progress overview

Overall progress remains behind the master programme. As outlined in Period 4, the management of the recovery of design delays, mitigation of any potential utility diversion conflicts via Revision 07 of the MUDFA programme and Infracore slow mobilisation and unlocking of Infracore more effectively is being addressed across the Project.

Full integration of the issues and the proposed solutions is being carried out during August with Infracore and a more settled integrated programme, with attendant contingency recovery plan will be set out, agreed and implemented. It is expected to be developed for the Period 6 report and the September Tram Project Board.

Progress – Design

Although Prior Approvals and structures approvals have progressed well, the slippage against v31 has slightly increased in the period. There are only five Prior Approvals remaining to be submitted. Roads and drainage Technical Approvals have required more work to resolve outstanding issues with the submissions and CEC comments but this is now starting to unblock with concerted actions from **tie**, CEC and SDS and a number of sections have been given conditional approval.

The slippage against v31 for IFC drawing delivery has reduced in the period. Where necessary and appropriate, actions and instructions are being implemented to mitigate any potential delay to the

construction critical path. The figures below show the progress against v31 for Phase 1a (prioritised) and the combined Phase 1a and 1b design deliverables.

Phase 1a only	Submitted to CEC		Granted by CEC		% complete
	v31	Actual	v31	Actual	
Prior approvals (51)	47	46	35	37	73%
Technical approvals (60)	53	50	33	31	52%
IFC (submitted to tie) (84)			49	39	46%

Phase 1a and 1b	Submitted to CEC		Granted by CEC		% complete
	v31	Actual	v31	Actual	
Prior approvals (70)	70	65	63	55	79%
Technical approvals (82)	88	72	62	50	61%
IFC (submitted to tie) (115)			78	65	57%

Progress – MUDFA

Utility diversions completed were in line with the planned output for Period 5. Further improvement is still required to avoid material risk of impacting the Infraco construction and this is being progressed assertively at very senior levels with Carillion. Detailed enhanced proposals have now been agreed with Carillion and implementation of these will be well underway by mid Period 6.

Close-out programmes prior to the August city centre embargo (including St Andrews Square and Shandwick place) were completed successfully. The Haymarket enabling was completed to allow commencement of the traffic management and main diversion works on the 18th August. Leith Walk works north of McDonald Road and at Constitution Street are expected to be substantially completed by the end of August.

Work at Gogar depot and in Section 5B and 5C (The Gyle and Edinburgh Park) is slowing telecom diversions and this is being managed with Infraco to mitigate any impact on the main construction programme.

Progress – Infraco (including Tramco)

The slow mobilisation of Infraco is continuing to impact planned progress.

Whilst the demolition of the Caledonian Ale House is completed, preparations are underway to commence civils structures works and site clearance and roads survey coring and testing has progressed, concern remains at the slower than programmed progress with mobilisation. Infraco have continued to significantly increase their direct staff numbers and momentum is building.

However, it will take a number of periods to recover the slow initial progress. The plan to review this is outlined in the programme section below. Short-term targets to bring forward work including:

- Agreed with Infraco to bring forward building warrant approval for demolitions around Murrayfield area (supported by CEC – now starting 1st September c.f. 13th); and
- Reviewed 12 week look-ahead and further potential areas where works can commence by unblocking minor issues.

Infraco Proposals / SDS design alignment programme

A consolidated programme to complete this work, including the more significant elements of roads and OLE design was validated during Period 5. The impact and opportunity of this work will be incorporated into the Period 6 report.

Progress – Other

Pollution Prevention Works at Scotrail Haymarket depot are reported to be on programme for completion in November 2008. This requires continued monitoring and **tie** continue to seek improvements in programme from Network Rail to avoid potential impact to the Infraco programme.

Compensation negotiations for Haymarket car park have been slowed as a result of slow response from Network Rail which has been escalated with Network Rail's Director. It is likely to be Period 7 before this is concluded. First Scotrail have engaged on this issue and this can be resolved subject to resolution of responsibility for the impact of Franchise Extension.

Invasive species and badger works are on programme. Construction works commenced for the relocation of the Murrayfield training pitches in line with programme requirements.

Cost

The AFC for Phase 1a of the project remains unchanged from last period at £512m, including a revised risk allowance of £28.4m (down £2.0m from Period 4). The reduction in risk allowance is required to fund an alternative to Fastlink (a consequence of Tram utilising the existing guided busway) and the necessary A8 sewer utility diversionary works at Gogar. Funding available remains at £545m.

Cumulative expenditure to date (end of P5 08/09) on Phase 1a is £173.6m. COWD year to date, at £43.6m, is £6.5m 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 marginally increased by £0.1m (rounding) and now stands at £150.6m including a revised conservative risk allowance of £7.4m. A detailed 12-week look ahead on the main construction contracts is being undertaken and will inform the forecast each period. However, the current forecast anticipates that, in the case of both Infraco and MUDFA, any current slippage is recovered by the end of the FY08/09. Any movement in the current year outturn will be reflected in this report at the appropriate time when agreement is reached on a revised programme for the main construction contracts (expected to be concluded in September).

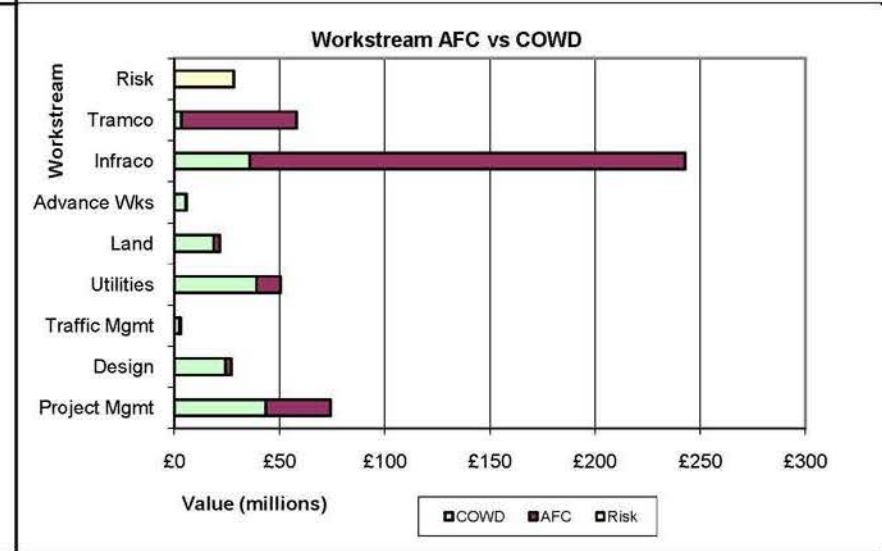
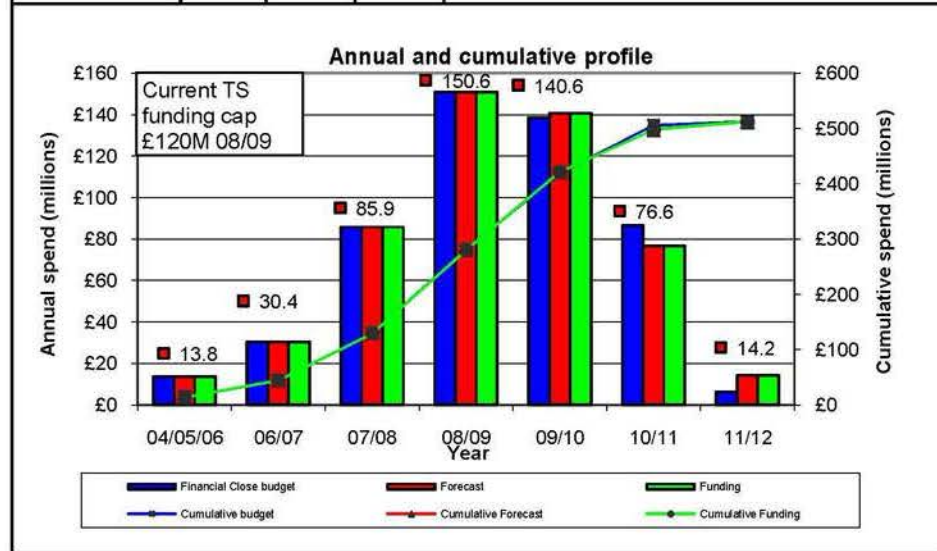
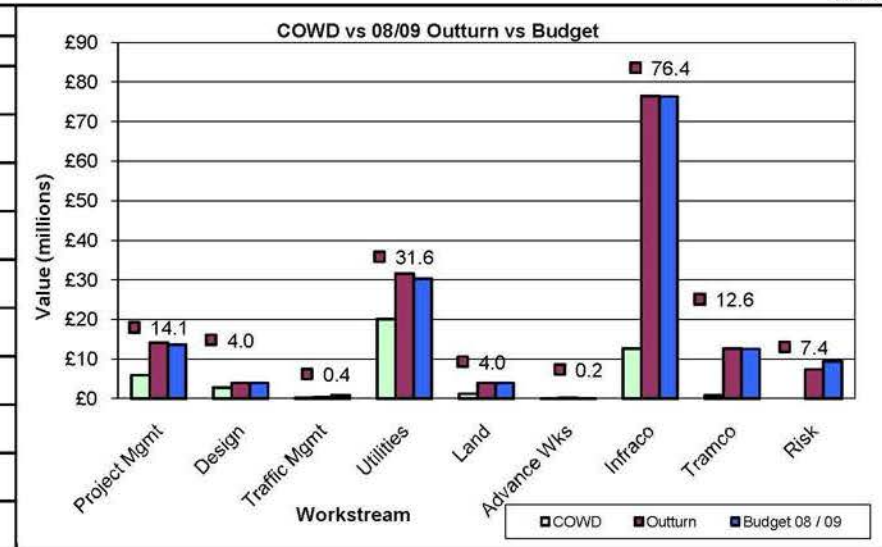
The TS share of Phase 1a costs in FY08/09 at 91.7% (500/545) would be between £131m of Base Costs or £138m of the total costs including Risk Allowance. This is being kept under review in the context of a current cap on FY0809 funding from TS of £120m. If necessary, CEC would temporarily "fund" the shortfall of between £11m and £18m until the start of the FY09/10, although **tie**'s view is that at these levels the time lag between certification of work done and payment will ensure that CEC is unlikely to be required to find significant additional cash to meet a shortfall due to the current TS funding cap.

Transport Edinburgh
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FOISA exempt

Yes
 No

Period 5 - 08/09 COWD (£000s)				
Workstream	F/cast	Act	Var	Comments
Project Mgmt	1,137	1,163	26	Accrual reconciliation from previous years
Design	521	540	18	Minor progress increase on changes
Traffic Mgmt	33	33	0	
Utilities	3,255	3,079	(175)	Scottish Water progress down on forecast
Land	2,402	175	(2,227)	Protracted negotiations with Forth prts, Network Rail and First ScotRail. Expected to be closed out in Pd6
Advance Wks	36	25	(11)	Invasive Species - Weather impact pushed out site visits
Infraco	2,973	1,251	(1,722)	Slow progress in mobilisation and initial activities
Tramco	1,108	1,108	0	
Risk	0	0	0	
Total	11,465	7,374	(4,092)	As above



CEC01053601_0012

Risk

£1.6m has been transferred from specified MUDFA risks to project contingency. As described above, £0.6m of this was subsequently drawn down for work needed to mitigate the effect of Infraco taking over the guided busway in November and a risk drawdown of £1.4m was completed to address the A8 Sewer diversion. Any risk associated with the programme recovery works identified will be addressed in Period 6.

Programme

Detailed discussions with Infraco will continue during Period 6 to complete the review of the programme, especially relating to:

- The difference between v26 and v31 of the design and consents programme;
- Management and mitigation of areas where works overlap with MUDFA;
- Slower than expected mobilisation; and
- Integration opportunities in the programme to recover early slippage.

The following table shows the contract programme key dates:

Section	Description	Contract
Section A	Depot completion	25 March 2010
Section B	Test track available	23 April 2010
Section C	All Phase 1a construction complete	17 Jan 2011
Section D	Open for revenue service	16 July 2011

tie is confident that this revised programme which maintains the contract end date can be achieved.

Work will continue with Infraco during the next period with the aim of having a revised contract programme agreed by end of September. This may result in early milestones being re-sequenced with a view to catching up on overall programme. Specific initiatives and actions for programme improvements include use of additional track / OLE gangs, re-sequencing of activities to be more efficient and use of technology to improve productivity.

Communications

With the continued mobilisation of Infraco there is a full media plan and engagement process with all our key business and political stakeholders to reflect the increased activity and the ongoing MUDFA utilities work. The Stakeholder and Communications Team continue to prepare for the construction of the infrastructure and this includes a full revamp of the Edinburgh Trams web-site and a review of the Customer Service delivery operations. Both of these are scheduled for implementation in October.

Period 5 - 2008/09 Primary Risk Register

ARM Risk ID	Risk Description			Risk Owner	Significance	Black Flag	Treatment Strategy	Previous Status	Current Status	Due Date	Action Owner
	Cause	Event	Effect								
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 plans	Uncertainty of Utilities location and consequently required diversion work/ unforeseen utility services within LoD	Increase in MUDFA costs or delays as a result of carrying out more diversions than estimated	G Barclay	High - 25.00		Carry out GPR Adien survey	Complete	Complete	31-Oct-07	J Casserly
							Identify increase in services diversions. MUDFA to resource/re-programme to meet required timescales.	Complete	Complete	23-Nov-07	J McAloon
							In conjunction with MUDFA, undertake trial excavations to confirm locations of Utilities and inform designer	On Programme	On Programme	Ongoing	A Hill
164	Utilities assets uncovered during construction that were not previously accounted for; unidentified abandoned utilities assets; asbestos found in excavation for utilities diversion; unknown cellars and basements intrude into works area; other physical obstructions; other contaminated land	Unknown or abandoned assets or unforeseen/contaminated ground conditions affect scope of MUDFA work.	Re-design and delay as investigation takes place and solution implemented; Increase in Capex cost as a result of additional works.	I Clark	High - 25.00		Carry out GPR Adien survey	Complete	Complete	31-Oct-07	J Casserly
							Identify increase in services diversions. MUDFA to resource/re-programme to meet required timescales.	Complete	Complete	23-Nov-07	J McAloon
							In conjunction with MUDFA, undertake trial excavations to confirm locations of Utilities and inform designer	On Programme	On Programme	Ongoing	A Hill

ARM Risk ID	Risk Description			Risk Owner	Significance	Black Flag	Treatment Strategy	Previous Status	Current Status	Due Date	Action Owner
	Cause	Event	Effect								
6	SDS non performance and lack of interface between SDS and Siemens	SDS have not provided loadings for Electrical Network	Delay to procurement of supplies. Siemens need to determine loadings based on information at hand and if this is incorrect then potentially insufficient power available.	J Monk	High - 25.00		tie to push SDS to ensure they provide information to SP		On Programme	01-Sep-08	J Monk
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	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
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 and material requires to be removed and replaced (dig and dump).	Increase in costs to remove material to special and other tip.	B Bell	High - 23.00		Issue contamination and geotechnical report to Infraco bidders tie to obtain ground investigation and contamination reports from SDS	Complete	Complete	2-Mar-07	B Dawson
								Complete	Complete	30-Mar-07	A McGregor

ARM Risk ID	Risk Description			Risk Owner	Significance	Black Flag	Treatment Strategy	Previous Status	Current Status	Due Date	Action Owner
	Cause	Event	Effect								
44	SDS contractor does not deliver the required prior approval consents in line with SDS v31	Late prior approval consents	Delay to programme with additional resource costs and delay to infraco. Impact upon risk balance.	D Sharp	High - 23.00		Evaluation of prior approval programme	On Programme	On Programme	31-Oct-08	D Sharp
							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/accommodation (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 construction	Safety incident during construction	Delay (potentially critical) due to HSE investigation and rework. PR risk to tie and stakeholders.	F McFadden	High - 21.00		All Site Staff to get CSCS or equivalent	On Programme	On Programme	Ongoing	C McLauchlan
							Develop and Implement Incident Management Processes	Complete	Complete	27-Apr-07	T Condie
							HSQE Audits, site inspections and Management Safety Tours to be carried out	On Programme	On Programme	31-Dec-10	T Condie
							Safety Induction to be carried out for all site staff	On Programme	On Programme	31-Dec-10	T Condie
							Site Supervisors to be appointed by tie	Complete	Complete	28-Feb-07	S Clark

ARM Risk ID	Risk Description			Risk Owner	Significance	Black Flag	Treatment Strategy	Previous Status	Current Status	Due Date	Action Owner
	Cause	Event	Effect								
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, 13.00		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	N/A	On Programme	1-Aug-08	R Bell
							Infraco given instructions to proceed at risk	N/A	On Programme	1-Aug-08	R Bell
							Pressure from Approvals Task Force to ensure Technical and Prior Approvals are delivered	N/A	On Programme	1-Oct-08	D Sharp