

Edinburgh Tram Network Progress Report No. 9

Period 9 – May 2006



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1.0 Progress Summary

Progress Summary

The overall progress for whole Project is 26.13% against the baseline 19th April of 29.92%.

Requirements Definition Phase

All Requirements Definition Deliverables have been confirmed by **tie**, accepted with comments. SDS are now proceeding with Preliminary Design on the basis of the confirmed Requirements Definition Deliverables.

The Requirements Definition Phase overall progress is 100% against a baseline on 19th April of 100%.

Preliminary Design Phase

The Preliminary Design Phase overall progress is 64.6% against the baseline of 19th April of 72.25%. The Preliminary Design Progress for the month of May is 16.86%.

Resources and Man hours

The Preliminary and Detailed Design actual cumulative man-hours to the end of May are 56,648 hours against the planned of 66,612 hours.

Outstanding Issues

SDS have provided to **tie** Procurement Assistance, confirmation of the period of commission is required from **tie**.

A closed door workshop with CEC was held on 13th May 2006, various ideas were presented but as yet, no direction has been given. Change Requests 18 and 19 Roadway Sections were not discussed, but SDS have attempted to get written confirmation from **tie** to disregard the Change Requests.

SDS would like to thank **tie** for the direction given on the National Gallery Portrait section as well as the interchanges. SDS has been instructed to delete the National Gallery Portrait and raise a Change Request for the Interchanges.

SDS awaits confirmation of issue dates for the ItN packages from **tie**.

The Structures Change Request have been rejected by **tie**. SDS disagrees with the decision and will formally respond to **tie** as soon as practicable.

The appointment of a new contract representative from **tie** has not yet been formalised to SDS. We request that **tie** inform and formalise whom **tie's** new contract representative is.

Modelling Issues

PB presented a compliant tender submission including a full modelling suite / scope during the tender stages. **tie** removed the cost and scope from the compliant tender and replaced it with **tie's** preferred subconsultant; SDG, as a result of a cost saving exercise. This was accepted by PB on the basis of that SDG would execute the full scope as priced in PB's tender submission.

It is now evident that SDG is not executing the TRANSYT/LINSIG Modelling work for local junction evaluation. SDG believes that it has made this clear to **tie** during the tender stages.

No interaction between PB and SDG took place during the tender stages. The scope reallocation and financials were entirely handled by **tie**.

PB does not take responsibility for the omitted scope, nor does it take responsibility for any impact on the Design and Master Programmes.

PB is making every effort on behalf of **tie** to mitigate the impact on the programme by resourcing and mobilising resources to execute the (**tie**) omitted scope.

Four Week Look Ahead and Critical Activities

Please refer to Appendix A for a 4 week look ahead extracted from the P3e programme. The Submittal Programme and Approvals Matrix is currently being updated and will be uploaded to the tie Extranet on Thursday 1st June.

Changes in Scope

SDS has received no response from tie on the new layout for the Monthly Progress Report. SDS has received 8 Change Notices to our agreement since elective date. These are summarised below:

Change Notice No. 1 – Re-phasing of the Edinburgh Tram Network

SDS re-submitted the estimate to tie on the 15th May 06. The action is with tie to review and advice. Now being implemented into programme.

Change Notice No. 2 – Office Lease

SDS has formally responded to Change Notice CNS002 in letterform. tie has subsequently superseded change notice CNS 002 with CNS008. Therefore, SDS has cancelled CNS002.

Change Notice No. 3 - Traffic Regulation Orders

SDS has formally responded to Change Notice CNS003 in letter issued 3rd April 2005, stating its position. The action is with tie to review and respond.

Change Notice No. 4 - Temporary Traffic Regulation Orders

SDS has formally responded to Change Notice CNS003 in letter issued 3rd April 2005, stating its position. The action is with tie to review and respond.

Change Notice No. 5 - Omission of Provisional Additional Work

SDS has formally provided an SDS Change Estimate to tie the 14th March. SDS has not received the official Change Order yet.

Change Notice No. 6 - Decrease in Utility Scope / Earl

SDS has formally provided an SDS Change Estimate to tie on the 5th May 06. SDS has not received the official Change Order yet.

Change Notice No. 7 - Increase in Utility Scope / Earl

SDS has formally provided an SDS Change Estimate to tie on the 5th May 06. SDS has not received the official Change Order yet.

Change Notice No. 8 - Office Lease

SDS has formally provided an SDS Change Estimate to tie on the 4th May 06. SDS has not received the official Change Order yet.

SDS Change Request 05 CRT – High Level Option at Baird Street

SDS has formally submitted a Change Request 06 on the 16th May 06. The Change Request has been rejected by tie. SDS disagrees with the rejection and will respond to tie as soon as practicable.

SDS Change Request 06 CRT– New Bridge over Tramway at Depot

SDS has formally submitted a Change Request 06 on the 16th May 06. SDS has not yet received a formal response. The Change Request has been rejected by tie. SDS disagrees with the rejection and will respond to tie as soon as practicable.

2.0 Capital Cost

General

The Rough Order of Magnitude (ROM) estimate was submitted on 30th November 2005. Submission made based upon the Stag5 drawings and/or Parliamentary drawings for both Lines 1 and 2 and after consultation with Tie. Further issues have been made of the ROM Estimate after consultation and direction from the client, culminating in Revision 2 being issued on the 20th March 2006, Revision 4 being issued on the 10th April 2006 and revision 6 being issued on the 2nd May 2006.

The object of the report and the cost estimates submitted is to set a base line estimate against which reliable Project Cost Estimates can be produced and measured during the Preliminary Design phase. Once the Preliminary Design is substantially completed and sufficient technical and commercial information is generated to define properly, the scope of the work a project cost estimate within an acceptable accuracy range will be established. It is anticipated that these project cost estimates shall be considered as a target to be achieved as an end cost within an acceptable range, and shall be used as a yardstick for cost control purposes during the balance of the design, the tendering and the construction phases.

Current Activities:

At present work has commenced on the preparation of the pricing document framework for issue with the Infraco ITN. The draft framework originally issued on the 30th March 2006, as directed by tie, incorporated the WBS and program geographical structure. The exact requirement, in terms of summary levels, is still under discussion.

Agreement had been reached in respect of the Method of Measurement to be used. The Method being employed was to be CESMM3 with appropriate preambles and amendments.

After issue of the draft tie expressed concern as to whether the size of the document and content thereof was appropriate at this stage of the tender process. This mirrored the concern raised by SDS in early march 2006.

A meeting was held on the 13th April 2006 with tie's representatives in Edinburgh to discuss the aforementioned issue and concerns. The outcome of the meeting was that TSS would approach tie with a revised format which was deemed more appropriate in view of the current tendering strategy. It has now been agreed that a pricing document will be issued based on structural and discipline elements and that bespoke measurement coverage rules will be drafted and inserted within the preambles to the pricing document.

Discussion is still on going as to the final format of the aforementioned pricing document as well as the adoption of an appropriate mechanism (schedule of rates etc.) for pricing variations and provisional sums.

Achieved milestones for the period:

Not applicable in this period.

Planned work for next period:

Work on production of the revised high level format pricing document to be issued as part of the ITN on 28th April 2006 has been abandoned due to the revised issue date being moved back to end of July 2006.

Work has instead commenced on the production of an elemental based pricing document which is to be issued as part of the ITN at the end of July 2006.

Capex/Cost Estimate Status:

As stated in above, the Cost/Capex Estimate has undergone a number of revisions over the past several months. It is SDS's opinion that the last revision issued on the 2nd May 2006 - Rev. 6 should now be treated as the baseline estimate against which the Preliminary Design works should be measured. With this in mind it is anticipated that the next major issue of the cost estimate will be shortly after completion and issue of the pricing document to the Infraco tenderers.

During the course of the Preliminary Design, should any design changes take place as a result of Value Engineering or design development and it becomes evident that there is a change +/- to the Capex/Cost Estimate baseline cost tie will be notified. In the case of minor cost changes this will be done by means of an interim report detailing the change and cost effect associated with the change and the issue of a revised cost estimate summary. Where a major cost change occurs a full revised Capex/Cost Estimate will be issued detailing the change and cost effect associated with the change. In either case the documentation outlining the change and cost effect will be issued formally to tie. There is no change to current Rev 6 estimate.

Current Capex/Cost Estimate Summary Table:

The table below details the main areas of cost change to date. Cost change being a result of the reduced scope arising from the issue of Change Notice 001 issued on 16th February 2006 - Ref: 40.11.10 GR/IK/CN and the development and better understanding of the design issues and assumptions being made.

AC	Code of Account Headings	Construction Estimate Value @ 2 May 2006 (£)	Construction Estimate Value @ 10 Apr 2006 (£)	Construction Estimate Value @ 18 Mar 2006 (£)	Construction Estimate Value @ 28 Nov 2005 (£)	Delta 28th Nov 2005 to 25th April 2006 (£)	
A	Trams	51,165,000	51,165,000	51,165,000	51,165,000	0	
B1(1)	Track	36,787,208	36,787,208	45,984,010	49,142,530	-12,355,322	
B1(2)	Points & Points Machines	7,409,600	7,409,600	9,262,000	6,227,000	1,182,600	
B1(3) - B1(5)	Drainage, Cable Routes & Fencing and Track Barriers	12,801,280	12,801,280	16,001,600	14,442,170	-1,640,890	
B2	Tramstops	3,384,924	3,696,560	6,485,100	5,825,550	2,440,626	
B3	Depots - Building and Site	12,671,600	12,671,600	16,169,800	13,638,000	-966,400	
B3	Depots - Equipment	1,700,000	1,700,000	2,125,000	2,125,000	-425,000	
B4	Highways	24,509,289	24,509,289	54,533,480	64,897,876	-40,388,587	
B5	Buildings	1,927,600	1,938,600	3,103,250	2,847,750	-920,150	
B6	Structures	37,439,840	37,727,840	58,927,300	46,909,800	-9,469,960	
C	Supervisory and Control System	7,206,792	7,446,792	14,453,540	13,096,050	-5,889,258	
D	E&P	19,894,272	19,894,272	27,867,840	30,005,110	-10,110,838	
	T1 Prime Cost Total	£216,897,405	£217,748,041	£306,077,920	£300,321,836	-£83,424,431	
	Other Costs						
	Prelims and General Items	18%	29,831,833	29,984,947	included	included	29,831,833
	Traffic Management (% against B4 only)	5%	1,225,464	1,225,464	included	included	1,225,464
	Training		200,000	200,000	200,000	200,000	0
	Spares		150,000	150,000	included	included	150,000
	T2 On Costs		£31,407,297	31,560,411	200,000	200,000	31,207,297
	Total Construction Costs (T1 + T2)	£248,304,702	£249,308,452	£306,277,920	£300,521,836	-£52,217,134	

3.0 Health and Safety

General

The co-location of the tie/PB office is now more or less complete, there are still some minor Health and Safety Management issues to be addressed. CDM Health and Safety activities are being developed as appropriate, tie have identified the requirement for CDM workshop to be held in the near future. The objective of this workshop is to identify and discuss Health and Safety issues and that could potentially present risks during the construction phase.

The weekly look ahead meeting for planned SDS site activities is proving a valuable interface forum between tie and SDS, particularly because it identifies potential stakeholder issues, land access arrangements etc, at an early stage, thus ensuring that there is a co-ordinated approach taken by tie and SDS to attaining acceptable solutions.



Achieved Milestones in the Period:

- Construction Phase Health & Safety Plan for intrusive surveys is now undergoing internal review, and has also been issued to **tie** for comment.
- Standard formatting for all future method statements based on SDS Method Statement template is complete.
- Noise and vibration survey residential locations have now been identified and issued to **tie**.
- Method statement for Network Rail Asset survey works has been approved by **tie** and accepted by Network Rail.

Planned Milestones for Next Period:

- Construction Health & Safety Plan for Intrusive Surveys to be approved by **tie** for appropriateness with respect to CDM Regulation 15(4)
- Approval and issue of Method Statement for Noise and Vibration Surveys at 33 No properties (residential).
- Approve and issue method statement for Coltbridge Viaduct survey works.
- Review of Preliminary Design Risk Assessment for the depot.
- Liaise with appointed contractor for Site the Investigation survey works, regarding management of Health and Safety and access arrangements.
- Develop induction for Site Investigation works.

4.0 Risk Management

General:

This report contains a tabular report summary of the critical risks, separated in to risks owned by **tie** and risks owned by SDS.

Achieved Milestones in the Period:

- The SDS Risk Register continues to be developed. 123 new risks have been identified and added to the register since the last detailed report for March including 37 risks identified by the JRC.
- Workshops were held on 12 April for Approvals and Third Party Interfaces, 27 April for Programme, 10 May for the JRC and 22 May for Structures.
- The SDS Risk Register has been fully transferred to ARM.

Planned Milestones for Next Period:

- Development of reports from ARM.
- Continued development of the SDS Risk Register.
- A workshop on Roads, Track and Utilities is scheduled for the 14th June.

The SDS Risk Register.

The SDS Risk Register now contains a total of 359 risks, of which 293 are active, 20 are closed (mitigated) and 46 have been rejected (mainly because they were duplicates of other risks). 55 are significant based on current pre-mitigation assessment.

For the purpose of this report the significant risks have been summarised where appropriate. For example only one summary risk for Gogar depot is included in the attached report which summarises seven risks related to depot construction and operation.

Please refer to appendix B for the top level risks taken from the SDS Risk Register

5.0 Quality Management

General

An internal Quality Review of the Roads and Track design team took place although not a full scale internal audit, it was geared towards the application of current PB procedures and project specific procedures, ensuring that their requirements are being adhered too, also to make sure project quality controls are robust enough to ensure consistency and support **tie's** quality expectations. Some minor non conformances were identified; an action plan has been developed to close out the non conformances in a timely manner.

Achieved Milestones in the Period:

- Review of roads and track processes with draft report and action plan issued to the appropriate personnel.
- Plans and procedures document issued.
- **tie** conducted monitoring of roads design accompanied by PB.

Planned Milestones for Next Period:

- Review of project management plans to reflect changes in the project organisation for the preliminary design phase.
- Issue of quality report for track and roads.
- Review of Halcrow Quality Management Plan
- Accompany **tie** on planned process monitoring.

6.0 Engineering

6.1 Tram System Engineering

General

Focus on the Preliminary Design submission material to be delivered to **tie** has continued during this period and a “freeze in time” snapshot of the engineering design material was presented to **tie** on 18th May. The submission is indicative of the quality and quantity of work being prepared for Preliminary Design by the SDS Team.

A Pre-submission review of the Depot Preliminary Design was carried out on 15th May. A complete review was made with representation from the **tie** Technical Team. The comments and design amendments will form the basis of the Depot Preliminary Design, which is scheduled to be issued first week of next period.

A Preliminary Design Standard Design Drawing Pack was reviewed by **tie** during this period with a combined **tie**/SDS informal review on 26th May.

The inconsistencies within the topographical information received by SDS requiring resolution before Mx Track and Roads Alignment can be finalised has been studied further and SDS Survey Teams are being deployed to procure the outstanding information.

Additional technical modelling resource has been drafted in to the SDS Design Team providing TRANSYT/LINSIG modelling input to support the low level and wide area model.

In the period SDS have progressed the Preliminary Design. All disciplines are now at full strength and working in accordance with the SDS programme.

Achieved Milestones in the Period:

- The SDS Organisation chart has been updated to reflect **tie** review comments. The SDS Team have been identified by office location and team discipline.
- The SDS design delivery programme was presented to CEC in this period. The programme presentation was well received and included the relevant CEC submission review periods. CEC representatives requested an additional detailed presentation for TRO's/TTRO's and the relevant junction modelling interface procedures.
- The SDS baseline drawings incorporating Client comment and the Parliamentary process were submitted to **tie** on 18th May.
- Exemplar tramstops have been mapped onto the Preliminary Design P Way alignment and site specific tramstops have been developed with confirmed road layouts for Section 1, (Haymarket to Newhaven). These Preliminary Design deliverables are due for delivery to **tie** in the next period.
- SDS presented a detailed presentation on TRO's / TTRO's and junction modelling processes to CEC on the 25th May. Ongoing junction modelling workshops are to be convened with representatives of CEC.

- Utility submissions to the utility providers have been distributed during this period and dialogue/interaction with the utility companies has commenced

Planned Milestones for Next Period:

- Completion of the horizontal alignment and transfer to the SDS Roads Team, allowing them to prepare full road and junction layouts for the Preliminary Design.
- Infill topographical Survey will be undertaken to resolve the issue of survey mis-alignment at the Roseburn delta.
- Tramstop Preliminary Design for Phase 1 and Phase 1a with equipment/material layouts.
- Depot Preliminary Design including E&M Submission.
- Completion of procurement documentation for the Infracore ITN documentation.
- IDC's for each individual discipline to prepare for finalised drawing submissions to **tie**.
- The background noise surveys are to be commenced next period. Access arrangements to undertake these surveys have been set up with **tie**.
- VE Workshops for Depot and Trackform. **tie** is requested to have major interaction with the SDS Team in this process.

6.2 Site Investigations

General

Surveys work is progressing well. SDS is working collaboratively with **tie** to try to smooth the access approvals process, but the number of discussions on access is larger than expected.

Achieved Milestones in the Period:

- Completed Caley Ale House survey.
- Delayed Leith Walk rail bridge survey pending Network Rail access approval.
- Prepared scope of work for detailed inspection Coltbridge Viaduct.
- Prepared scope of work for structure arch coring exercise.
- Continued GPR survey through Picardy Place & started in Leith Walk & Constitution Street.
- Met with voids survey contractor to arrange scope of work.
- Awarded Archaeological survey contract (paperwork being finalised).
- Awarded Ground Investigation survey contract (paperwork being finalised).
- Prepared scope of work & programme for Ecological & Invasive species survey.
- Completed Hydrological survey.

Planned Milestones for Next Period:

- Leith Walk railway overbridge: Conduct survey (pending Network Rail access approval)
- Roseburn Corridor structures: Appoint contractors & organise site access, including TTROs from CEC
- Topographical: Agree scope & start field work
- Utilities detection (GPR): Complete field work
- Voids & cellars/basements: Agree scope & mobilise contractor
- Archaeological: Mobilise contractor & start field work
- Ground Investigation: Mobilise contractor & start field work
- Ecological update: Complete survey in mid-June

6.3 Road and Traffic Management

General

Roads are developing their on-street design in conjunction with P-Way and are continuing to work towards delivery of the Preliminary Roads design for the end of June. TROs and TTROs are continuing to progress.

Achieved Milestones in the Period:

- Optioneering of various design concepts for Princes Street, Shandwick Place, Picardy Place, and St Andrew's Square.
- Haymarket Corridor and Haymarket to Balgreen Road Roads Design is complete ready for IDC.
- Input to development of Roseburn Corridor Cross Section for Roseburn to Crewe Toll.



- On-going consultation with CEC and other stakeholders for the design, TROs and TTROs. (Includes tacit agreement on TTRO (MUDFA) traffic management plans for Constitution Street and Shandwick Place)
- Participation in the Traffic Management Steering Group and its off-shoot working groups.
- Development of Traffic Management Plans and report for Haymarket to Princes Street, TTROs

Planned Milestones for Next Period:

- Nearing completion of the Preliminary Roads Design Packages
- Continued field visits to support the TTRO and utilities diversion process.
- On-going consultation with CEC and other stakeholders for the design, TROs and TTROs.
- Participation in the Traffic Management Steering Group and its off-shoot working groups.
- Consultation with Public Transport Operators and CEC PT Unit for TTROs.

7.0 Procurement

General

The SDS provider procurement team has continued to support the **tie** team leading Tramco and Infraco procurement. Following meetings with **tie** concerning procurement programme and strategy, SDS await confirmation of issue dates for the ItN packages from **tie**.

At the request of **tie**, consideration is being given to the provision of resource to support the non-technical aspects of the process which remain to be finalised. Initial review of contractual documentation by SDS procurement team has commenced

Achieved Milestones in the Period:

- Production of technical documentation (employers specifications i.e. amplification of original **tie** requirements, schedules 11-16 of the SDS agreement) from Requirements Definition Specifications, for inclusion in the Infraco Contract.
- Completion of Tramco technical tender documentation for the originally intended ItN issue date.
- Continued development of Preliminary Design information for issue to **tie** for inclusion in the eventual Infraco ItN (date to be advised)
- Tramco technical documentation issued to bidders by tie 17th May 2006.

Planned Milestones for Next Period:

- Red Team review of Infraco ItN (date to be advised).
- Gateway review of Infraco ItN (date to be advised).
- Gateway review of Tramco ItN (date to be advised).



Appendix A - Programme

Activity ID	Activity Name	Original Duration	Start	Finish	4 Week Lookahead																														
					May 29							Jun 05							Jun 12							Jun 19							Jun 26		
					Th	Fri	Sat	Sun	Mon	Tue	W	Th	Fri	Sat	Sun	Mon	Tue	Wed	Th	Fri	Sat	Sun	Mon	Tue	Wed	Th	Fri	Sat	Sun	Mon	Tue	Wed			
ULE90130-13.10.D.100.404	Structures	76.0d	10-May-06 A	24-Aug-06	[Gantt bar: 100% complete]																														
ULE90130-13.10.D.110 OCT - NER		57.1d	28-Apr-06 A	20-Jul-06	[Gantt bar: 100% complete]																														
ULE90130-13.10.D.110.404	Structures	42.0d	28-Apr-06 A	28-Jun-06	[Gantt bar: 100% complete]																														
ULE90130-13.10.D.110.406	Sub Stations Leith Sands	50.1d	09-May-06 A	20-Jul-06	[Gantt bar: 100% complete]																														
ULE90130-13.10.C MDR - FOW (Section 1B)					109.0d																														
ULE90130-13.10.C.999	Intermediate Section Wide	87.0d	06-Mar-06 A	10-Jul-06	[Gantt bar: 100% complete]																														
ULE90130-13.10.C.999.20	Roads	30.0d	16-May-06 A	27-Jun-06	[Gantt bar: 100% complete]																														
ULE90130-13.10.C.999.312	Utilities	87.0d	06-Mar-06 A	10-Jul-06	[Gantt bar: 100% complete]																														
ULE90130-13.10.C.999.1	TRO's	35.0d	10-May-06 A	28-Jun-06	[Gantt bar: 100% complete]																														
ULE90130-13.10.C.999.40	TTRO's	15.0d	20-Jun-06	10-Jul-06	[Gantt bar: 100% complete]																														
ULE90130-13.10.C.060	MDR - BAS	70.0d	03-May-06 A	09-Aug-06	[Gantt bar: 100% complete]																														
ULE90130-13.10.C.060.402	Tram Stop Balfour Street	5.0d	03-May-06 A	07-Jun-06	[Gantt bar: 100% complete]																														
ULE90130-13.10.C.060.404	Structures	54.0d	25-May-06 A	09-Aug-06	[Gantt bar: 100% complete]																														
ULE90130-13.10.C.070	BAS - FOW	37.9d	08-May-06 A	17-Jul-06	[Gantt bar: 100% complete]																														
ULE90130-13.10.C.070.402	Tram Stop Foot of the Walk	5.0d	23-Jun-06	29-Jun-06	[Gantt bar: 100% complete]																														
ULE90130-13.10.C.070.406	Sub Station Leith Walk	37.9d	08-May-06 A	17-Jul-06	[Gantt bar: 100% complete]																														
ULE90130-13.10.B PSW - MDR (Section 1C)					91.0d																														
ULE90130-13.10.B.999	Intermediate Section Wide	91.0d	06-Mar-06 A	14-Jul-06	[Gantt bar: 100% complete]																														
ULE90130-13.10.B.999.312	Utilities	91.0d	06-Mar-06 A	14-Jul-06	[Gantt bar: 100% complete]																														
ULE90130-13.10.B.999.10	Track	76.0d	09-Mar-06 A	28-Jun-06	[Gantt bar: 100% complete]																														
ULE90130-13.10.B.999.20	Roads	38.0d	10-May-06 A	03-Jul-06	[Gantt bar: 100% complete]																														
ULE90130-13.10.B.999.1	TRO's	20.0d	06-Jun-06	03-Jul-06	[Gantt bar: 100% complete]																														
ULE90130-13.10.B.999.40	TTRO's	15.0d	19-Jun-06	07-Jul-06	[Gantt bar: 100% complete]																														
ULE90130-13.10.B.030	PSW - SAS	6.0d	08-Jun-06	15-Jun-06	[Gantt bar: 100% complete]																														
ULE90130-13.10.B.030.402	Tram Stop St. Andrew Square	6.0d	08-Jun-06	15-Jun-06	[Gantt bar: 100% complete]																														
ULE90130-13.10.B.040	SAS - PIP	27.1d	26-May-06 A	05-Jul-06	[Gantt bar: 100% complete]																														
ULE90130-13.10.B.040.406	Sub Station Cathedral	27.1d	26-May-06 A	05-Jul-06	[Gantt bar: 100% complete]																														
ULE90130-13.10.B.050	PIP - MDR	5.0d	01-Jun-06	07-Jun-06	[Gantt bar: 100% complete]																														
ULE90130-13.10.B.050.402	Tram Stop McDonald Road	5.0d	01-Jun-06	07-Jun-06	[Gantt bar: 100% complete]																														
ULE90130-13.10.A HAY - PSW (Section 1D)					86.0d																														
ULE90130-13.10.A.999	Intermediate Section Wide	86.0d	06-Mar-06 A	07-Jul-06	[Gantt bar: 100% complete]																														
ULE90130-13.10.A.999.10	Track	4.0d	19-Jun-06	22-Jun-06	[Gantt bar: 100% complete]																														
ULE90130-13.10.A.999.20	Roads	38.0d	10-May-06 A	03-Jul-06	[Gantt bar: 100% complete]																														
ULE90130-13.10.A.999.312	Utilities	86.0d	06-Mar-06 A	07-Jul-06	[Gantt bar: 100% complete]																														
ULE90130-13.10.A.999.1	TRO's	39.0d	04-May-06 A	28-Jun-06	[Gantt bar: 100% complete]																														
ULE90130-13.10.A.999.40	TTRO's	15.0d	19-Jun-06	07-Jul-06	[Gantt bar: 100% complete]																														
ULE90130-13.10.A.010	HAY - SHP	5.0d	23-Jun-06	29-Jun-06	[Gantt bar: 100% complete]																														
ULE90130-13.10.A.010.402	Tram Stop Shandwick Place	5.0d	23-Jun-06	29-Jun-06	[Gantt bar: 100% complete]																														
ULE90130-13.10.A.020	SHP - PSW	43.0d	28-Apr-06 A	29-Jun-06	[Gantt bar: 100% complete]																														
ULE90130-13.10.A.020.402	Tram Stop Princes Street West	43.0d	28-Apr-06 A	29-Jun-06	[Gantt bar: 100% complete]																														
ULE90130-13.70 Haymarket Corridor (Section 2)					107.0d																														
ULE90130-13.70.9	Section Wide (Section 2)	63.0d	24-Apr-06 A	21-Jul-06	[Gantt bar: 100% complete]																														
ULE90130-13.70.9.999	Section Wide	63.0d	24-Apr-06 A	21-Jul-06	[Gantt bar: 100% complete]																														
ULE90130-13.70.9.999.100	Preliminary Design Approvals	63.0d	24-Apr-06 A	21-Jul-06	[Gantt bar: 100% complete]																														
ULE90130-13.70.A ROJ - HAY (Section 2A)					107.0d																														
ULE90130-13.70.A.999	Intermediate Section Wide	77.0d	09-Mar-06 A	30-Jun-06	[Gantt bar: 100% complete]																														
ULE90130-13.70.A.999.10	Track	4.0d	26-Jun-06	29-Jun-06	[Gantt bar: 100% complete]																														
ULE90130-13.70.A.999.20	Roads	2.0d	01-Jun-06	02-Jun-06	[Gantt bar: 100% complete]																														
ULE90130-13.70.A.999.312	Utilities	55.0d	09-Mar-06 A	30-Jun-06	[Gantt bar: 100% complete]																														

█ Actual Work ◆ Milestone
█ Remaining Work
█ Critical Remaining Work

4 Week Lookahead

Date	Revision	Checked	Approved
31-May-06	ULE90130-SW SW PRO-00005 Version 7		

Data Date: 01-Jun-06

CEC01684827_0014

Activity ID	Activity Name	Original Duration	Start	Finish	May 29							Jun 05							Jun 12							Jun 19							Jun 26		
					Th	Fri	Sat	Sun	Mon	Tue	W	Th	Fri	Sat	Sun	Mon	Tue	Wed	Th	Fri	Sat	Sun	Mon	Tue	Wed	Th	Fri	Sat	Sun	Mon	Tue	Wed			
ULE90130-13.50.9.999.100	Preliminary Design Approvals	40.0d	05-May-06 A	06-Jul-06	◆																														
ULE90130-13.50.A	GOG - AIR (Section 7A)	204.0d	06-Mar-06 A	21-Dec-06																															
ULE90130-13.50.A.999	Intermediate Section Wide	81.0d	06-Mar-06 A	30-Jun-06																															
ULE90130-13.50.A.999.10	Track	28.0d	12-May-06 A	21-Jun-06	■																														
ULE90130-13.50.A.999.20	Roads	15.0d	06-Jun-06	26-Jun-06	■																														
ULE90130-13.50.A.999.312	Utilities	81.0d	06-Mar-06 A	30-Jun-06	■																														
ULE90130-13.50.A.999.1	TRO's	20.0d	01-Jun-06	28-Jun-06	■																														
ULE90130-13.50.A.010	GOG - IPR	167.0d	28-Apr-06 A	21-Dec-06																															
ULE90130-13.50.A.010.402	Tram Stop Ingliston Park and Ride	13.0d	12-Jun-06	28-Jun-06	■																														
ULE90130-13.50.A.010.404	Structures	167.0d	28-Apr-06 A	21-Dec-06	■																														
ULE90130-13.50.A.010.406	Ingliston Park & Ride Sub Station	32.8d	09-Jun-06	26-Jul-06	■																														
ULE90130-13.50.A.020	IPR - AIR	66.0d	19-May-06 A	21-Aug-06	■																														
ULE90130-13.50.A.020.402	Tram Stop Edinburgh Airport	20.0d	01-Jun-06	28-Jun-06	■																														
ULE90130-13.50.A.020.404	Structures	66.0d	19-May-06 A	21-Aug-06	■																														
ULE90130-13.80	Ingliston Park & Ride to Newbridge (Section 8)	71.0d	01-Jun-06	08-Sep-06	■																														
ULE90130-13.80.9	Section Wide (Section 8)	71.0d	01-Jun-06	08-Sep-06	■																														
ULE90130-13.80.9.999	Section Wide	71.0d	01-Jun-06	08-Sep-06	■																														
SDS0240	Preliminary Design	71.0d	01-Jun-06*	08-Sep-06	■																														

■ Actual Work ◆ ◆ Milestone
■ Remaining Work
■ Critical Remaining Work

4 Week Lookahead

Data Date: 01-Jun-06

Date	Revision	Checked	Approved
31-May-06	ULE90130-SW SW PRO-00005 Version 7		

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Appendix B – SDS Risk Register Top Level Risks

Key for status report:						
The risk management action cannot begin until a future specified date. It is not possible, therefore to measure progress						
No progress has been made						
Moderate progress is being made on risk management action with little, or no evidence of the deliverable						
Progress is being made, commensurate with the stage of the project, with appropriate evidence of the deliverable						
Risk management action has been successfully completed and any associated deliverable has been provided						
RISK ID. No.	RISK DESCRIPTION	OWNER	MITIGATING STRATEGY (PLAN)	DUE DATE	TREATMENT STATUS	STATUS
tie Risks						
432	Forecasts show revenue has a good chance of being unsustainable	tie	1) Early choices of preferred route-options should consider results of previous economic/financial appraisal work. 2) Later opportunity to investigate multiple service specifications may be required and possible use of Revenue Model's Test Result Estimator to inform scheme option configuration	16-Jul-06	No progress is reported by JRC.	
25	The project is unaffordable or cannot be delivered within the programme because of unrealistic client aspirations	tie	1) Reduce scope. 2) Agreement of Requirements Definitions documents between SDS and tie. 3) Design teams to work to functional specifications checked by the Heads of Disciplines and the Design Manager. 4) Implement Value Management process	1) N/A. review as design and estimates are developed. 2) 30 June 06 3) Ongoing 4) 24 June to 26 July	1) CN1 issued. 2) Agreement of Requirements Definitions documents between SDS and tie is ongoing. 3) Design teams work is ongoing. 4) Value Management workshops programmed by SDS between 20 June and 26 July	
153	Unique procurement process leads to unpredictable response of Infraco candidates to pricing novation of SDS and Tramco	tie	1) At the time of tender, the SDS is known and the 4 Tramco bidders are known. The Infraco bidders will be able to take a view on how they expect to work with the SDS and Tramco 2) Bidders will be able to do a Due Diligence on the SDS and Tramco bidders through a controlled, monitored and documented access to SDS design	Dates for return of tenders, BAFO and date of Infraco contract award being revised by tie	Expressions of interest have been received Bidder selection processes are ongoing	
35	Cost increases and delays caused by competing projects which approach or exceed the market's capacity	tie	Monitor closely the market and competing projects	Ongoing	The procurement team will ensure that tie engages the correct candidates that are able and willing to submit competitive bids	
468	Gogar Depot - very high construction and operational costs. Unknown ground conditions at Gogar site with potential for rock, contaminated ground and high water table (which would require 24 hour pumping during the operational life of the tram), large volume of material to be excavated and removed	tie	1) Make adequate provision in the budget for full scope of depot works. 2) Geotechnical investigation and other surveys. 3) Consider alternative locations for the depot.	1) Ongoing 2) 19 June 06 3) Ongoing	1) Re-estimating ongoing. 2) Surveys due to start onsite early June. Initial results early July. 3) tie is investigating alternative sites - but there is the risk of delays if the depot is re-located	
473	Service diversions not included in the MUDFA scope. (Examples: Gogar depot - gas main and Leith Walk 230 KV feeder)	tie	1) tie to determine who will perform these works and communicate conclusions 2) Work to be performed prior to Infraco commencement of construction	1) Ongoing 2) 21 September 07	1) Ongoing. 2) Current date for start of Infraco construction is September '07	
474	MUDFA scope of works, costs and potential for re-work	tie	Review tender submissions and negotiate scope and prices	02-Jun-06	Tenders due on 2 June 06	
168	Network Rail interface issues. (Approvals, conflict with NR projects, unavailability of key signalling sources and signalling records, betterment)	tie	1) Engagement with Network Rail. 2) Agree design responsibilities	1) Ongoing 2) 30 June 06	1) Detailed discussions with NR have commenced. Joint workshops have commenced and are ongoing. 2) Discussions between SDS and tie have commenced	
SDS Risks						
472	Failure to obtain CEC approvals - particularly for roads if wide-area model results are not available to assess the impacts of the tram network both on and off-route	SDS	1) Develop junction models 2) Run low-level model 3) Run wide area model	01-Sep-06	1) SDS is developing the junction models to feed the low-level model. Work to be substantially complete by the end of June 06. 2) JRC will run the low-level model. 3) JRC will run the wide-area model for tie based on the results from the low-level model. Note that the process is iterative Results from the wide area model are expected by the end of August	
299	Late submission of drawings and documents required for consideration and approval of the TROs	SDS	1) Ongoing consultation and discussions between SDS, tie and the CEC. 2) TRO working group to review processes, approvals and associated risks	28-Jul-06	Meeting held 25 May with the CEC when proposed process and timescales were presented to the CEC. Initial submission from SDS on 28 July to CEC officers Following review, complete pack for consideration by CEC members to be submitted in October	
398	CEC insist that TROs are in place prior to construction	SDS	1) Agreement with CEC on the processes that will be adopted for traffic Orders (TTRO and TRO)	Rolling programme of part-made orders	Meeting held 25 May with the CEC. Proposal for 'umbrella' TTRO containing outline of restrictions. Followed by coordination between the CEC and contractors (MUDFA and Infraco) in advance of the work in a given area. Proposal for TROs is for a rolling programme of part-orders during construction	
486	Lack of agreement on deliverables between SDS and tie	SDS	Ongoing discussions between tie and SDS	30/06/2006	Meeting held 18 May to review deliverables Pack of sample drawings provided to tie - awaiting tie approval. Sample pack to be provided to the CEC after tie's comments have been received	

RISK ID. No.	RISK DESCRIPTION	OWNER	MITIGATING STRATEGY (PLAN)	DUE DATE	TREATMENT STATUS	STATUS
470	Optioneering continues beyond completion of Preliminary Design.	SDS	Close out optioneering and finalise scope by the end of Preliminary Design.	30/06/2006	Development of options will be completed and the baseline design will be substantially finalised by the end of Preliminary Design	
469	Full extent of all Agreements, Undertakings and commitments made during the Parliamentary process is still unknown	SDS	1) SDS is developing a full list of the commitments contained in the Agreements and Undertakings made during the parliamentary process. 2) Develop actions and programmes for stakeholder management team and design teams	30/06/2006	1) The complete list of the Agreements and Undertakings was given to SDS on 25 May by D&W. SDS will review these to develop the full list of commitments. 2) develop list of actions, consultation and approvals for inclusion in the Approvals Tracker for	
36	Design implications of Landscape and Habitat Management Plan (LHMP) agreed in Parliament may not be achievable without additional expenditure. (For example, Roseburn where the LHMP constrains design significantly)	SDS	1) Review of LHMP and design problems. 2) Consult with HMRI and other stakeholders	1) Ongoing 2) Ongoing	1) LHMP) has been reviewed by Environment team. Meeting on Roseburn corridor held 23 May. Environment team needs locations of retaining walls etc from design teams to determine appropriate protection measures or actions, such as provision of badger tunnels, badger bridges or relocation of sets. 2) HMRI has indicated that badger fences will not be accepted along Roseburn for safety reasons	
461	Inaccuracies and gaps in topographical survey data received from tie	SDS	1) Review of information to determine inaccuracies. 2) Perform validation survey. 3) Perform gap survey	1) Review is in hand. 2) 30 June 06 3) 25 August 06	1) Desk study being undertaken. 2) Price received for validation survey of inaccuracies. (Best case result is that minimal work is required to align survey coordinates. Worst case would be re survey). 3) Tender for gap survey being prepared	
143	Late information from surveys including geotechnical, contaminated ground and archaeology	SDS	1) Award contracts for surveys. 2) Commence work on site	1) 30 May 06 2) 19 June 06	Geotechnical investigation including contaminated ground survey due to commence 19 June. (Includes trenches for archaeological work at depot site) Archaeological survey contract to be awarded w/c 29 May	