

EDINBURGH TRAM PROJECT

Review of Progress and Management of the Project

January 2011 to June 2012

Confidential & Legally Privileged
FOI(S)A Exempt

DRAFT

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Project: Edinburgh Trams Project

Reference

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1.0 INTRODUCTION

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**2.0 EARLY ANALYSIS AND EMERGING CONCLUSIONS
PERIOD JANUARY 2011 TO MARCH 2012**

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3.0 AN OVERVIEW OF TACTICS STRATEGY AND AIMS OF MEDIATION

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4.0 APPROACH TO BRING A MANAGEMENT STRUCTURE TO DEAL WITH THE PROJECT CIRCUMSTANCES

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5.0 CLIENT CONTROL AND REPORTING

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6.0 PROGRESS PROGRAMME AND NEXT INITIATIVE

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7.0 FINANCIAL BRIEFING REPORT – MAY 2012

7.1 Purpose

The purpose of this report is to brief the incoming Transport Convenor on the evolution of the capital cost of the project from the period leading up to mediation to the current point in time and the future forecasts. The briefing also includes detail on the business case appraisal and review on the project that was undertaken in the summer of 2011.

7.2 Pre Mediation

In the period prior to mediation a significant amount of effort went into identifying the likely cost of the project within a range of possible outcomes should the contract with the Infraco consortium be progressed or terminated.

During the period in the lead up to mediation, the Council's then Director of Finance requested that a member of his own team form part of the finance team at tie Ltd (tie), with a view to the Council having a greater degree of transparency in relation to project costs.

As a result of this, a group was formed that included tie's senior team and commercial team to assess the range of possible outcomes. CEC finance were a strong part of this group to ensure that the process was driven hard and that a full financial picture could be understood by the Council in advance of mediation. In addition to this, tie had already had a number of views on the likely commercial/contractual impacts from a number of sources, including legal and quantity surveyors as a result of previous commercial settlements they had attempted with the Infraco consortium as part of the commercial strategy they were following at that time.

The results of the various financial outcomes were then plotted on a spreadsheet with a working title of "Deckchair".

Prior to mediation, tie had also employed consultants, Gordon Harris Partnership and Tony Rush to pursue settlement of the commercial issues with BBS.

It became apparent from the pre-mediation work outputs that tie's commercial assessments of the likely outcomes were of a very hard line when compared to the assessment of where the culpability for delay fell. It has become clear that the dominant cause of delay to the works was the delayed MUDFA utility diversions.

The hard line tie were taking was also apparent in the position Tony Rush was advising versus the in-house tie commercial team. At that point tie was forecasting an estimated outturn cost of £638.2m to finish the line to St Andrew Square. This sum took no account of exclusions from the contract but did include tie's assessment of delay costs. The settlement deal (named Project Phoenix) that Tony Rush was discussing with Infraco at the time would have resulted in an anticipated final cost of £760.3m with defined exclusions still sitting outside the settlement.

7.2 Pre Mediation cont'd

The detail of the two positions is highlighted in Appendix I. The baseline for the position Tony Rush took in his assessment was the "Phoenix" deal he was discussing with Infraco. The Project Phoenix proposal was the baseline for Infraco's discussion at mediation.

7.3 Mediation

Work continued on the financial forecasts in preparation for mediation. The "Deckchair" spread sheet (appendix 2) remained the repository of tie's financial forecasting. These forecasts were then presented to the full CEC/tie mediation team. The range of scenarios included in these forecasts were as follows (the deckchair spreadsheet also had a range of potential terminal points, the forecasts highlighted below were tie's view of St Andrew Square as the terminal point;

- Settlement with the current contractor (Assumes Infraco walk away and re-procure with a new contractor). All numbers in this scenario were tie's assessment.

High £698m
Medium £659m
Low £682m

- Phoenix proposal (Baseline proposal from Infraco on settlement)

Infraco view £747m (Infraco price [xx])
Tie view (high) £749m
Tie view (baseline) £682m

7.4 Settlement with the Current Contractor and Re-procure

This scenario seemed to be tie's preferred strategy with mediation in mind. There are a number of fatal flaws in the assumptions that tie made in this scenario. For example, the cost of settlement with Infraco was forecast at £33m, which was essentially the balance of entitlement for work done set against work certified to date. This number was not cognoscente of any contractual entitlement Infraco would have had for delay (MUDFA delay being the dominant cause) or disputed design changes that had already been built. In addition, this forecast assumed a new contractor would be able to take up where Infraco left off without any risk allowance being included and without any "bad project" premium being allowed for in the price. In addition, there was no indexation built in for materials that would be required where the price would have changed in relation to the original contract sum. It is also important to note that tie had priced the on-street section from Haymarket to St Andrew Square at £19m and did not allow for any significant risks for the on street section at this time, nor did they allow for any extension to the programme as a result of having to re-procure.

7.5 Phoenix Proposal

As highlighted above, the Phoenix proposal represented Infraco's opening position at mediation. tie's negotiating standpoint on this proposal was that a deal could be achieved which would have resulted in an anticipated final cost of £682m compared with the Infraco proposal, which would have resulted in an anticipated final cost of £747m.

On closer examination of the Infraco Phoenix proposal it became clear that there was c£77m of exclusions in this proposal which may have resulted in a similar addition to the final cost of the project, had CEC signed up to the Phoenix proposal as it was.

7.6 Separation

As highlighted above, tie would have preferred to terminate with Infraco and re-procure. This went against all the advice that was given by independent advisors at this time. During the initial stages of mediation, there was a significant amount of discussion between tie and CEC (including CEC advisors) on the assumptions tie had made in the forecasts for separation. It soon became clear that tie had not considered a number of cost headings at this time which would have had a significant impact on the final cost. In very broad terms, these items were in the order of £150m for settlement, professional costs, bad project premium risk, systems re-procurement risk, and inflation, which would have potentially resulted in a final outturn cost of at least £800m. Appendix 3 shows the working papers from mediation for this eventuality.

7.7 Post Mediation and Financial work streams for June 30 Council Meeting

- Option appraisal – Cancellation, Continue to St Andrew Sq, Continue to Haymarket (Appendices will be provided for estimated capex and McGrigors report on tie liability in the case of cancellation.)
- Business Case Review (Atkins report plus financial model)

7.8 Budget and Risk Preparation for August 25 Council Meeting

- Commentary on the process undertaken
- Appendices showing the risk allowance and budget formation

7.9 tie Ltd close report and financial consequences

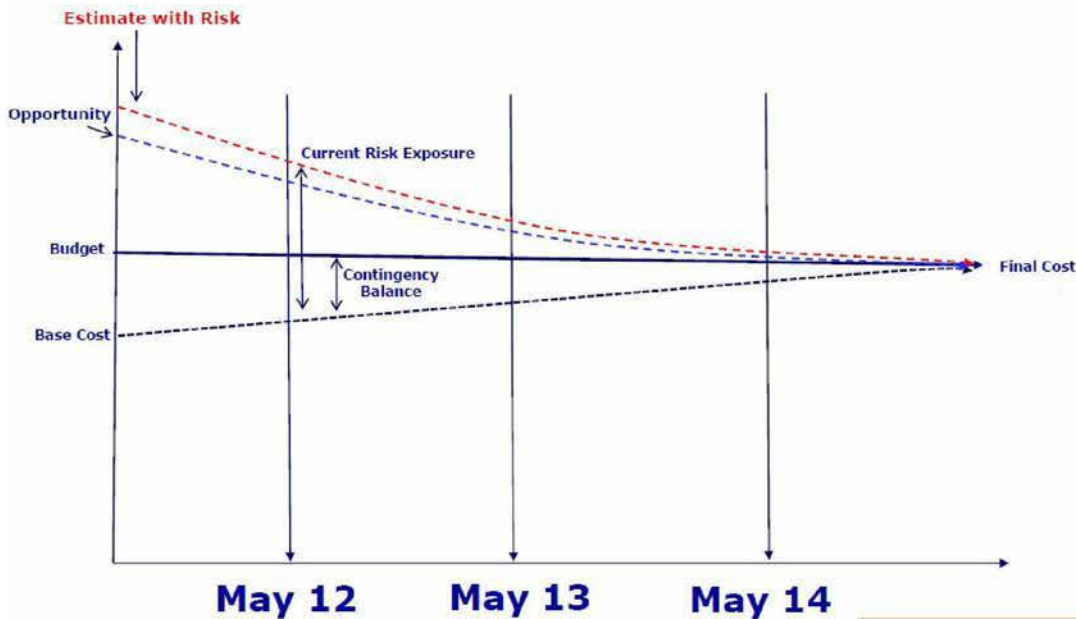
7.10 Turner and Townsend engagement and cost profile

Current forecast and position since September 2011

Project budget- August/September 2011

At the time the project budget was set there were a large number of uncertain items for which the risk/contingency allowance was identified. As work on the project has progressed more clarity has emerged on these items. An illustration of the risk profile of the project is outlined below.

GRAPH TO BE REFINED



The red line shows the overall project cost plus risk exposure at any point in time. Generally speaking, the further away from project completion the greater is the risk exposure. In the case of this project there were some significant risks in September 2011. Since that point in time these risks have either crystallised, been mitigated through management action, have reduced/not materialised or still remain as risks.

Those risks that have materialised have an associated cost which has been met by drawing down from the risk allowance. The management action already taken to mitigate risk has, in some cases, an associated cost. This too has been drawn down from the risk allowance.

A number of opportunities exist for the project- these are items that will benefit the project in terms of cost or time. The blue line on the chart reflects the overall project cost plus exposure to risk and opportunity. Any opportunity that is realised increases the risk allowance.

Since September 2011 considerable progress has been made and the project is much clearer on the challenges that face it. As such a large number of items have moved from being categorised as risks and are now being factored into cost forecasts. As a result of this the project's risk exposure has considerably reduced as illustrated by the Quantitative Risk Assessment (QRA) figure of £5m (more details on the QRA can be found in the risk section of this report).

Current drawdown from risk allowance

The current drawdown from the risk allowance is £9.075m. This figure reflects the approved changes which have gone through the project's change process excluding any items relating to value engineering (which are detailed in the on-street section).

AREA-BY-AREA BUDGET BREAKDOWN:

Infraco- off-street

Position 25th August

The original budget for the off-street section was £360.06m. This figure provided for a base contract sum of £362.5m with an assumed saving of £2.44m relating to value engineering in the Forth Ports area. In addition a specific provision of £1.1m was made within the original risk allowance (of £34m) for risks in this section.

Current Position

The current forecast spend on the off-street section is £360.87m. The Forth Ports value engineering has been instructed and the £2.44m saving realised. Changes totalling £0.645m have already been approved with a further £0.165m of change forecast for the remainder of the project.

Explanation of Movement

A number of approved changes have been approved, the most significant include utility related costs which, in accordance with the settlement agreement, fall outside the fixed sum contract for the off-street section, and costs associated with the continued use of the consortium offices at Edinburgh Park until the completion of the project.

Infraco- on street

Position 25th August

The original budget for the on-street section was £38.8m. This figure comprised a base cost of £45.8m with an assumed saving of £7m to be found through value engineering initiatives. In addition provision was made in the risk allowance for two types of item- £2.772m for pricing assumption variations and £1.35m for specific risks in this section.

Current Position

The forecast spend for the on-street section is £46.947m. To date changes of £2.464m have been approved and it is anticipated that a further £3.774m of change will need to be approved in the remainder of the project.

Explanation of Movement

The key components of the changes approved to date (£2.464m) include design work on the York Place terminal point, design items related to utilities, a Princes Street water main diversion, various works in the Haymarket area, the cost of the Princes Street Christmas embargo, traffic management items in St Andrew Square, Shandwick Place and section 1a, and costs related to OLE bases in St Andrew Square, Haymarket and Shandwick Place.

Further changes anticipated and not yet approved (£3.774m) principally include pricing assumption variations in relation to floating track slab and the York Place terminal point, bridging trackform over utilities in St Andrew Square, and various other settlement agreement exclusions.

The base contract has been finalised at £47.367m, this is £1.567m in excess of the budgeted sum.

The value engineering exercise has at present identified cost savings and contributions of £6.658m, this is £0.342m short of the budgeted amount of £7m.

Utilities

Position 25th August

The original budget (at 25th August 2011) for utilities was £2.91m. In addition a specific provision of £5m was made in the original risk allowance for utilities.

Current Position

The current forecasted spend on utilities items for the project is £18.61m. To date changes of £5.961m relating to utilities have been approved and this sum has been drawn down from the risk allowance. It is anticipated that a further £9.739m will need to be drawn down from the risk project over the course of the project.

Explanation of Movement

As work on the project progressed after September 2011 it became apparent that the scope of the utilities work was considerably greater than had been anticipated. McNicholas Construction Services Ltd has been engaged by CEC to work on utility related items and whilst the cost of that work is more expensive than had previously been anticipated it has significantly mitigated the risk of delay to the project's completion date.

The forecasted utilities spend of £18.61m is £10.7m in excess of the originally identified budget and specific risk allowance of £7.91m. This excess will need to be funded from the risk budget and can be linked to the risk budgets identified for design risk and delay.

Trams

Position 25th August

The original budget for the tram vehicles (CAF) was £62.4m. There was no specific provision for any risks related to the contract for the provision of the tram vehicles.

Current Position

The current forecasted spend on the tram vehicles is £63.65m, £1.25m above the original budget. This sum will need to be drawn down from the risk allowance.

Explanation of Movement

The increased cost forecast for this area is attributed to the finalised contract amount with CAF being excess of budget and exchange rate fluctuations around the time of contract settlement.

Project Management

Position 25th August

The original budget for project management was £277.82m. There was no specific provision for any risks in this area (see risk budget section below for detail of general, project related risks).

Current Position

The forecast spend on project management is £282.32m, £4.5m in excess of the original budget. This sum will need to be drawn down from the risk budget.

Explanation of Movement

The project management budget heading covers a wide number of individual budgets areas, many of which have seen movements in the forecast since the budget was set. The most significant areas of increase include tie Ltd redundancy costs of £2.56m, legal costs £0.71m, technical support staff £0.75m, land and property costs £1.2m and insurance £1.05m. There have been downward movements in forecasts for other areas which have partially offset these increases.

Risk

Position 25th August

The original risk allowance was set at £34m. Of this £10.222m was linked to specific risk in the on-street, off-street and utilities areas (as detailed in those respective sections above). The other key components of this risk allowance were £13.37m for delay related risks, £3.3m for the risk of the project moving to a cost reimbursable basis, general design risk of £5.925m and other risks of £1.183m.

Current position

Funding of £9.075m has already been drawn down from the risk allowance.

It is anticipated that a further £4.541m will need to be drawn down to fund the cost associated with the delay in signing the contract with the consortium in September 2011 although this may reduce subject to commercial negotiation.

As outlined in the various sections above it is anticipated that further drawdowns from the risk pot will be required: £0.165m in relation to the off-street section, £5.683m in relation to the on-street section, £9.739m in relation to utilities, £1.245m in relation to trams and £4.497m in relation to project management.

Further risks and opportunities

The quantitative risk assessment (QRA) being managed by Turner and Townsend has evaluated a net £5m of risk and opportunity based on the current master program. The QRA is made up of three key components. £4m of the sum relates to specific cost events occurring which do not impact on the project schedule, £1.2m relates to costs associated with delay to the project (n.b. there is no risk of delay to the overall project completion- this relates to sectional delays only), -£0.2m relates to opportunities (savings) to the project relating to early completion of certain workstreams.

NOTE: ABOVE FIGURES REQUIRE TO BE CONFIRMED BY T&T

An opportunity exists for the project from the sale/leasing out of surplus tram vehicles. It is anticipated that this may deliver £5m of income.

Further opportunities remain open to the project, particularly in relation to the advancement of the works in York Place. This has not yet been quantified but, if approved, should result in a reduction in the figure identified by the QRA.

Risk budget as at 2/9/11	£34m
Less: approved change to date	-£9.075m
Less forecast change:	
-On street	-£5.683m
-Off-street	-£0.165m
-Utilities	-£9.739m
-Trams	-£1.245m
-Project management	-£4.497m
-Delay in signing	-£4.541m
Less: Quantitative Risk Assessment (including opportunities)	-£5m
Add: Opportunity- sale/lease of tram vehicles	+£5m
Final risk budget forecast at project completion	-£0.945m

Conclusions

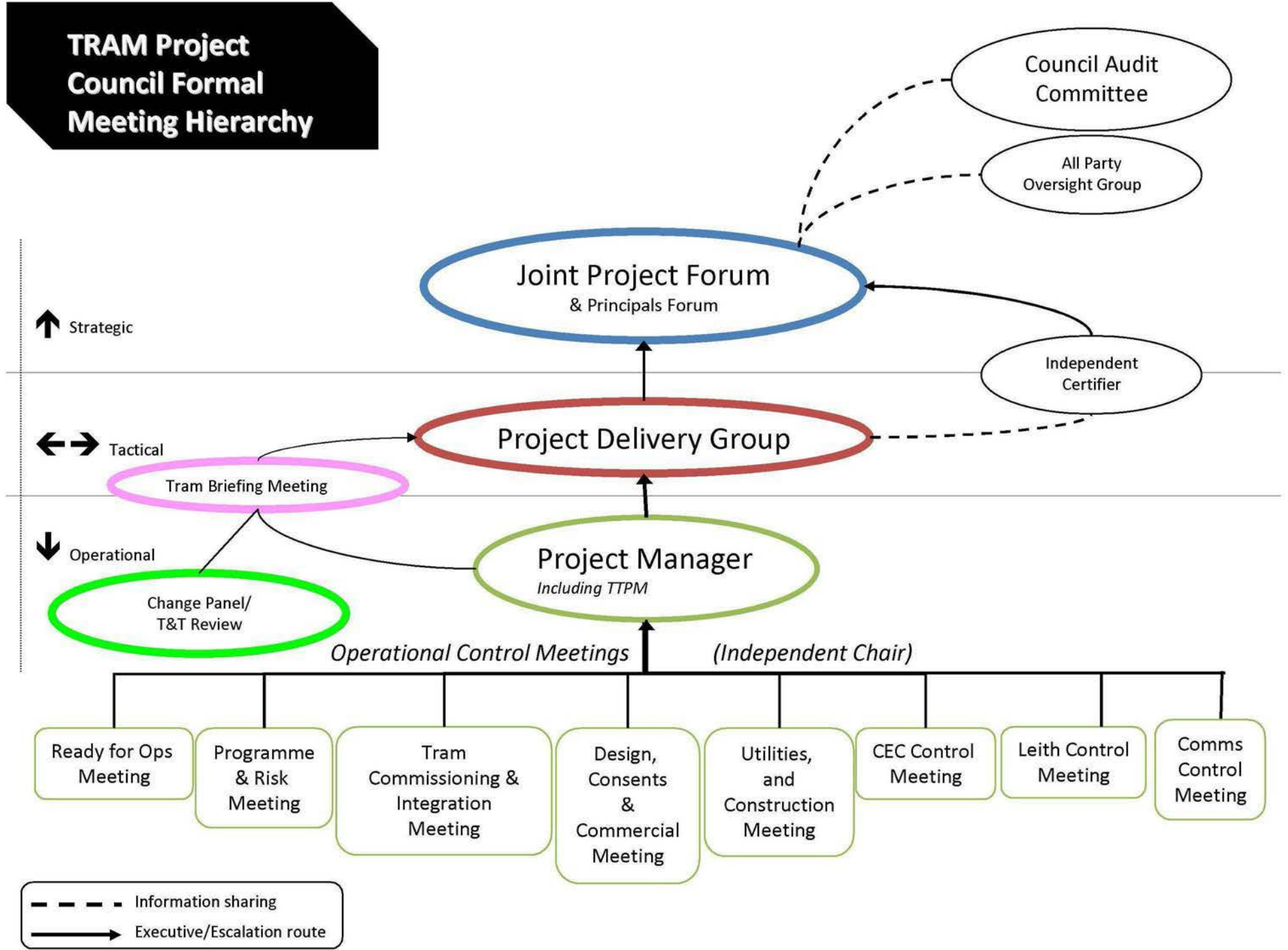
The forecast cost for the tram project (including risk) is £776.945m compared with a budget of £776m. This reflects an overspend of £0.945m. This figure represents the cost associated with the current project master program which has a project completion date of the 25th June 2014.

Significant opportunities to reduce the project cost and mitigate risk are being explored which could reduce the forecast project cost to within the current budget. The most significant of these is the advancement of the York Place works, the cost saving implications of which are still to be confirmed.

Appendix I
Governance Diagram

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TRAM Project Council Formal Meeting Hierarchy



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Appendix II
Extract from Contractor's Progress Report

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Appendix III
Extract from T&T Report

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Appendix IV Progress Photographs

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