

# PROJECT PITCHFORK

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## PROJECT PITCHFORK EXECUTIVE SUMMARY

### Preamble

Pitchfork is the working name for the project which commenced in January 2010 with the objective of setting out reasoned conclusions and recommendations on the future direction of the Edinburgh Tram Project. This document is the Executive Summary of the Pitchfork Report submitted to the Tram Project Board on 10<sup>th</sup> March 2010. The Executive Summary should represent a self-standing synopsis of the report, but considerable further detail is set out in the report, which itself is intended to be self-standing but is supported by a range of documents providing the evidence base for the report's conclusions and recommendations.

The report was prepared at the request of the Tram Project Board (TPB) by **tie** Limited, under the direction of Richard Jeffrey, Chief Executive Officer of **tie**. The narrative assumes familiarity with the development of the project and the related nomenclature.

**By including reference to and extracts from specific Legal Advice which has been obtained by tie and City of Edinburgh Council (CEC) in contemplation of dispute resolution and litigation, tie does not waive in any way any privilege or confidentiality in connection with such Legal Advice. Nor does tie intend to dilute or affect that privilege and confidentiality by sharing the Report with a limited distribution list of Directors, Senior Executives and Council officers.**

**tie regards the material in the Report as being of the utmost commercial sensitivity, the complete confidentiality of which is essential to protect the interests of CEC, TTransport Edinburgh Ltd (TEL), tie and the Scottish Government.**

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### Purpose of the Pitchfork Report

The purpose of the report is to capture in one document the important aspects of the dispute between **tie** and the Infraco Consortium and to provide the TPB with a reasoned recommendation on the approach to resolving the dispute, progressing the project to completion and achieving the best value possible for the investment of public funds within an affordable cost envelope.

The analysis addresses legal, financial, commercial, technical and operational considerations and incorporates the views and knowledge of the **tie** project team and expert external advice.

The following digest is intended to offer readers of the document a sense of its direction and conclusions which might be a useful in advance of reviewing the full document set.

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## Digest

The report commences with an analysis of the current situation, which is characterised by serious dispute, programme delay and potentially material cost increase. Construction progress has been considerably slower than programmed. A summary of the principal events which have led to this scenario is set out, noting that during 2008 and 2009 **tie** adopted an increasingly assertive approach to the promotion of its contractual rights and interests, but without achieving a breakthrough.

At the end of 2009, a revised approach was agreed which would focus on two sets of actions – a step-up in the intensity and formality with which **tie** managed its contractual rights and applied pressure to BSC to meet its obligations ; and a series of workstreams designed to rigorously reinforce **tie**'s position in the next stage of negotiations. The essence was to make Bilfinger Berger, Siemens, CAF Consortium (BSC) understand the robustness of the position taken by **tie** and CEC on key issues and to seek the means of bringing matters to a head. Four options were examined – termination ; continue “as is” ; the means of negotiating the exit of Bilfinger Berger (BB) ; and a proposed “enforced adherence “ to the contract terms by BSC. Workstreams were established to test these options.

The audit workstream identified valuable information in support of **tie**'s concerns about design management, programme management and BSC's sub-contractor relationships ; the design management and programme management workstreams set out the issues under each area for deployment in the legal and commercial negotiations to follow ; the proposal from BSC that a revised set of terms be applied to on-street work was examined and rejected, but in favour of an alternative proposal which will be pursued ; McGrigors LLP, with supporting Senior Counsel opinion, reviewed the legal underpinning to each of the key contractual matters in dispute referred to below and provided valuable analysis and direction ; throughout January and February 2010 **tie** has stepped up the use of formal contractual mechanisms through a series of targeted letters to BSC, the responses to which, taken together, represent for the first time a statement of BSC's case capable of being both comprehensively understood and negotiated ; the financial implications of the options were analysed, concluding that termination would incur the least absolute cost, though with material uncertainty as to the financial outcome and very little uncertainty about the demise of the project ; the options aimed at project delivery contain different levels of uncertainty but all point to an outturn cost broadly in the range £600m - £650m ; the analysis of BB's corporate position concluded that the difficulties in Edinburgh coincided with group-wide toughening of approach to civils project management, well-publicised major problem contracts and public plans substantially to exit the civils business world-wide.

The analysis of the options, with the benefit of the information from the workstreams, concluded that the option most likely to produce best value was the enforcement of adherence to the existing contract, tempered by the possibility of appropriate amendment to its terms in relation to on-street works and risk transfer. This option could lead to the partial or full exit from the project of BB, but **tie** cannot mandate this and will seek to develop that possibility indirectly, including through dialogue

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with Siemens who have not closed their minds to the possibility. At the heart of this is a desire now to engage with BSC from a position of much greater strength than previously.

The information drawn from these workstreams and option analysis has been drawn together into an action plan which is aimed at achieving better progress toward resolution over the period to June 2010. The actions include :

- demonstrating to BSC that their refusal to act on instruction is untenable (the major weapon in their armoury, as it prevents meaningful construction progress). Legal advice has indicated that there is a reasonable legal argument available that would entitle **tie** to enforce instructions to proceed ;
- committed effort to resolve programme delay issues ;
- negotiation of the on-street arrangements ;
- defining the line of attack on BSC's management of SDS and its implications ;
- resolution of outstanding design evolution cost disputes on a commercial basis ;
- possible restriction of milestone payments ; and
- commitment of effort to resolve the matters affecting progress of Siemens work on the Airport – Edinburgh Park section.

In addition to these seven specific workstreams, steps will be taken to ensure that construction progress is maintained and media/stakeholder communications managed effectively.

In view of the potential outturn costs and the affordability risk, re-phasing of the programme will be negotiated to seek to ensure progress on continuous sections working West to North East. The possibility of truncation will be examined, including operational and financial viability.

There is an overriding requirement to monitor the impact of the resolution process on the cost estimate for the project and to relate this to the available funding and the delegated authority structure which governs the approval of changes to cost budget and to programme

On 5<sup>th</sup> March 2010, the BB Executive Board Director responsible for Civils, Kenneth Reid, met at his request with David Mackay. The meeting was followed by a lengthy (and pre-prepared) letter from Reid. This contained little that was new, but the expression of views of the most senior director below the Group CEO is a further sign that the resolution process has greater momentum than in 2009.

The report from **tie** recommends that the TPB endorse the pursuit of the enforced adherence option, with regular progress reporting and a view to a further gateway assessment no later than June 2010.

The Executive Summary of the report follows.

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### Current situation

The Infraco Consortium has achieved 14% of the physical construction of tram infrastructure compared to 75% anticipated in the programme within the Infraco Contract by the end of February 2010. Utility diversion work under the MUDFA Contract and related agreements with utility companies (including all telecoms cabling) is expected to be complete by December 2010, some 24 months later than in the Infraco programme. The design work, which has been under the control of Infraco since Financial Close, is expected to be substantially complete by April 2010, some 18 months later than in the Infraco programme. No reliable revised programme to completion has been agreed to deal with these delays and the most recent submission from BSC sought to confirm a commencement of revenue service date of October 2013, compared to July 2011 in the Infraco Contract. Construction of the tram vehicles has proceeded to programme.

The full project cost estimate has recently been revised to c£540m plus X, a factor which is driven by the cost of delay and other matters of dispute between **tie** and Infraco. X is difficult to estimate with any certainty because of the nature and complexity of the matters in dispute, but the signs are that it will take the full project cost into the range of £600m - £650m.

The range of disputes includes claims for additional cost, responsibility for programme delay and the interpretation of the contract in some critical areas.

The report sets out an action plan aimed at resolving these disputes.

### Principal events leading to current situation

In October 2007, the Infraco Consortium was awarded preferred bidder status after a formal procurement process. The Infraco Contract was signed in May 2008, after a lengthy period of difficult further negotiation.

The MUDFA Contract was signed in October 2006 with an expectation that works would be complete by end September 2008 and that other utility works would also be complete by this date. The target completion date was not achieved and although a revised programme was accommodated in the Infraco Agreement, the revised completion dates have not been achieved and this has been a significant cause of delay to the Infraco construction programme, which is explainable but which is contractually to **tie**'s account under the Infraco Contract.

The causes of delay to the utility programme have included :

- Slow delivery of the design
- Increase in scope of utilities to be diverted, from c27,000m to c48,000m, mainly as a result of the poor quality of drawings provided by the utility companies upon which the design was based.

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- Scope of utilities diverted – as a result of encountering underground obstructions and congestion of existing utilities
- Poor performance of Carillion (formerly Alfred McAlpine) which resulted in slower than expected progress and rework
- Attitude of the SUC's where commercial arguments were being used to prevent progress on the ground

The original project budget included a risk allowance for these matters which proved not to be adequate.

The project design contract was signed with Parsons Brinckerhoff (PB) in 2005. The target completion date was not achieved and the design contract was novated to the Consortium at Close, with a revised completion schedule, which has not been achieved.

The performance of PB has been problematic throughout, arising from :

- Slow mobilisation at the very start of the contract
- Geographic spread of PB designers
- Early lack of co-ordination and communication between PB, CEC and **tie**
- Poor relationships between PB and their main sub-contractor (Halcrow)
- Poor quality of design requiring multiple iterations leading to consistent late delivery of the design

Over the period from Close in May 2008 to the end of 2008, it became increasingly clear that the project was not progressing smoothly. BSC's engagement and the pace of mobilisation of competent resources on the ground was poor despite an advance works agreement being in place several months prior to contract close for this purpose and there was little evidence that they took their responsibility to mitigate delay and cost problems sufficiently seriously. From autumn 2008 relationships deteriorated.

During this period, **tie** sought to operate the contract in a firm manner while seeking to agree accommodation with BSC on several fronts to assist with the over-riding requirement to deliver the tram project in a best value manner.

In February 2009, Infracore refused to commence the construction works as planned on Princes Street, despite the access and extensive traffic diversions arranged by **tie** and CEC.

**tie** considered that this was a smokescreen to create additional stakeholder pressure and force **tie** to accept the Bilfinger Berger allegation (made in early February) that c£80m of additional costs were required to enable them to complete the civils works. In addition to rejection of the principle, **tie** was not provided with substantive support for the financial claim. Rather than accede to BB's request in order to avoid delay to this prominent section of work, **tie** and CEC concluded that a firm line needed

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to be taken, regardless of the potential for poor publicity which BB appeared to wish to use as leverage.

This eventually resulted in a proposal for a Supplemental Agreement (known as the PSSA) which would modify the Infraco Contract in a limited way for the 1km section of Princes Street and which allowed work to commence in late March 2009.

The scope of works for the PSSA related specifically to civil engineering works, and is primarily associated with excavation and construction up to the underside of the track construction box. There were a number of obstructions either known or suspected which would have been addressed as either Compensation Events or **tie** Changes under the usual contract mechanisms as a **tie** liability.

It was also agreed that a Project Management Panel (PMP) comprising representatives of **tie** and BSC would be convened to resolve a number of the more contentious differences between the parties. Although this showed some potential to assist issue resolution, the early impetus petered out with no material change to the manner in which BB were approaching engagement despite new senior personnel being introduced by both BB & Siemens.

Although work was proceeding reasonably well on Princes Street under the supplemental agreement, the attempts to resolve other matters in dispute were largely proving fruitless. A meeting was held with Dr Keysberg of BB and Dr Schnependahl of Siemens. This meeting resulted in both parties agreeing to an intensive week of informal mediation which was held in the week commencing 30th June 2009 covering a range of critical issues. On 8th July 2009, **tie** reported back to the TPB that the mediation had not been successful and Richard Jeffrey outlined 4 options for consideration by the TPB as follows:

- 1) Negotiated settlement
- 2) Formal contractual approach – Dispute Resolution Procedure (DRP) and other contractual mechanisms
- 3) Reduce/re-phase BSC scope
- 4) Terminate the BSC contract

TPB endorsed option 2) and approval of the detailed approach was given at the TPB on 29<sup>th</sup> July 2009. This approach represented a step-up in the assertiveness with which **tie** was approaching resolution of the dispute, reflecting the failure of more informal methods. It was recognised that there was a hierarchy of steps to be taken, with termination the ultimate step but one that was not appropriate at that stage. The objectives of this strategy were to:

- test a number of contractual principles which lay at the heart of the changes;
- drive down the value of Estimates being submitted by BSC;
- get work started at a number of locations through the application of Clause 80.15 of the Infraco Contract; and

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- drive change in behaviours by the contractor;

A discrete number of disputed matters were initially selected for dispute resolution. The proposition was that without DRP there would be no agreement on entitlement or value unless **tie** conceded unacceptable positions, especially on cost where the evidence was of consistently inflated estimates.

The DRP strategy was intensive of management time and expensive in advisor costs. The effectiveness of the strategy was addressed in detail in December 2009. It was concluded that the strategy was not delivering the desired outcomes. Whilst **tie** had achieved the objectives of getting work started at some locations put into dispute and significantly driving down the final value of Estimates being submitted by BSC, success had not been as visible on matters of legal interpretation and especially on the principles of the Pricing Assumptions contained in Schedule Part 4 of the Infraco Contract. Whilst the resolution of these DRP's has required investment of time and cost, the process has not unduly delayed the programme in itself because of the continuing impact of the late utility diversions (and subject to the debate about concurrency).

Recommendations were made by **tie** to the December 2009 and January 2010 TPB meetings which set out a further series of steps aimed at resolving the dispute, controlling project cost and regaining traction on the programme. The recommendations were approved and Project Pitchfork was launched.

### Project Pitchfork

The view underpinning the Pitchfork work was that BSC, but particularly BB, had not responded to the partnership approach **tie** feels it deployed in the period from Close to early 2009. BB/BSC appeared to have adopted an extremely aggressive approach to the Princes Street works which went beyond contractual entitlement in early 2009 and had shown at best inconsistent interest in improving progress during the latter half of 2009 when formal dispute procedures were deployed on specific issues. It was also the view that any softening of **tie**'s approach would not be met by accommodation from BB.

### Options examined

The fundamental options available to **tie** and CEC fall into three categories :

1. Termination of the Contract with the probable consequence of project termination ;
2. Continue "as is" with the Contract and players, with progress dependent on BSC adapting their behaviour ; or
3. Enforce adherence to the Contract, settlement of disputed matters, amendment of terms as necessary.

The issues around option 1 include the probable loss of the project, the waste of public investment and the likely risk of expensive litigation. However, this would be examined further to establish

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whether there were grounds upon which **tie** could terminate and what the consequences of termination might be.

Despite ratcheting up the use of contractual rights through the DRP process, BSC had not meaningfully responded and by end 2009 there remained serious doubt about the ability to get the disputes resolved and to progress the project. Option 2 is the default position, which would continue in the absence of a change in approach by **tie** or BSC.

Option 3 is conceptually the most desirable approach, so long as the outcome is on acceptable and affordable terms. To achieve an acceptable outcome, two broad lines of attack were developed – a considerably more assertive approach to contract management by **tie**; and detailed examination of the causes of the current disputes and their possible solutions (allowing fully for the extent of **tie**'s liability). The approach to contract management would be designed to enforce compliance with the Contract and support the resolution of all material disputes within acceptable boundaries, by making it plain to BB and their partners that the weight of legal and commercial argument is firmly on **tie**'s side. As a corollary, the objective is to demonstrate to BB that failure to deliver contractual obligations would place BB in a very unattractive place. Examination of the causes of the disputes would provide a platform for their resolution on acceptable terms.

The three fundamental options identified above were examined in detail along with a range of variants. The termination and “as is” options remain available and the “enforced adherence” model was developed into two sub-options (numbers 2 and 4 in the table below). These four resulting options are regarded as the most credible outcomes.

Option	Original Option no	Description
1	1B	<b>Termination</b> - without cause
2	2B2	<b>BB exit</b> - Infraco Contract remains intact with BB full or partial exit
3	3A	<b>As is</b> - Continued application of the Infraco Contract in its present form with the present players
4	3C	<b>Enforced adherence</b> - Assertive application of the Infraco Contract in its present form but with disputes settled in the short term and a negotiated new way of working

These were the main drivers behind the Pitchfork Project. The results of the more assertive approach to contract management and the conclusions from the examination of the disputed matters would be brought together in an action plan to be presented to the TPB on 10<sup>th</sup> March 2010.

In addition, workstreams were established to ensure that construction progress and normal contract management processes were maintained, so far as **tie** could do so; and to ensure that stakeholder and media communications were managed effectively.

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### Workstreams

In addition to **tie**'s project team and principal advisers, **tie** had increasingly deployed additional expert resource in the areas of contract and dispute management, technical, commercial, forensic planning/delay analysis and legal expertise over the period to end-December 2009. This resource was fully integrated into the workstreams executed under the Pitchfork Project, which were as follows:

#### **(1) Performance Audits**

**tie** is entitled under the Contract to audit BB's performance in key areas. Audits were conducted on design management, programme management and sub-contractor arrangements.

In overall terms, there was clear evidence that BSC's approach to design and programme management has been deficient. The evidence gathered from these audits will reinforce the actions described below in relation to resolving the dispute.

While Siemens appear to have proper arrangements in place with their sub-contractors, BB have no such arrangements. All BB's sub-contracted work to date has been performed under letters of intent, which breaches obligations in the Infraco agreement with regard to the approved engagement of sub-contractors.

#### **(2) Design**

The design process has been problematic throughout the project and completion of the work is badly behind the programme established in the Infraco contract. Whilst **tie** Changes have driven some of this delay, for example in areas such as Gogar Interchange and Picardy Place, there has been no clear justification from BSC as to the reasons for overall delay. There are also indications that the scope of what SDS has been asked to deliver compared to the base scope has increased substantially, though the reasons have not been communicated to **tie** by BSC. There is further work to do in this area, but it is a key component of the action plan, including the approach to ensuring that Parsons Brinckerhoff, now a BSC sub-contractor and owned by Balfour Beatty, are brought fully to account.

#### **(3) Programme**

The most recent submission from BSC points to revenue service commencement in October 2013, which **tie** believes is unacceptable and unrealistic if the present disputes can be resolved. Amongst a number of documented failings, BSC have not demonstrated that they have effectively sought to mitigate delay.

**tie** has no dispute that utility diversion delays, which are to **tie**'s account, have caused substantial delay to the construction programme. This was acknowledged in an offer from **tie** in late 2009 of Extension of Time for 9 months and costs covering 6 months. It appears this offer has not been

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accepted, but the resolution on reasonable terms of the utility delay impact will form an important part of the overall programme resolution as explained further below.

#### **(4) On-street contractual arrangements**

The precipitate action taken by BSC in early February 2009 when work was halted on Princes St was resolved by agreeing an adaptation of the Infraco Contract on acceptable terms. BB are seeking to impose a new set of terms governing all on-street works which are unacceptable to **tie**, not least because, if accepted, **tie** would potentially be exposed to sanction for breach of procurement regulation.

However, a detailed counter-proposal has been prepared by **tie** and will be a key feature of the search for resolution.

#### **(5) Contractual mechanisms**

In addition to the comprehensive advice provided to **tie** and CEC from DLA Piper and partly at the suggestion of **tie**'s peer review group, McGrigors LLP were tasked with creating an overarching report which would address the legal aspects of the key contractual matters in dispute and suggest the approach which might be deployed by **tie** and CEC. McGrigors LLP sought the opinion of Richard Keen QC on the most important of these matters.

The areas addressed by McGrigors LLP are :

- Price – particularly the operation of Pricing Assumption 1 (PA1) in Schedule Part 4 to the Contract in relation to the evolution of design ;
- Progress – particularly **tie**'s ability to instruct that construction progress continues notwithstanding that matters are the subject of change processes or in dispute ;
- Time – the issues surrounding causes of delay and their effect on EOT claims ;
- Breach – the grounds on which **tie** and Infraco may reasonably rely in pursuing termination through breach ; and
- DRPs – further application.

In short form, McGrigors LLP conclusions were :

- PA1 – The language in the Contract is open to differing interpretations and whilst there is strong common sense argument which militates against BSC's interpretation uncertainty does exist as to how far a court would go in supporting **tie**'s interpretation.
- Progress - There is a reasonable argument available to **tie** that **tie** is entitled to instruct BSC to progress work, even where there is a dispute about who should bear the risk of that work.

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- Time – the analysis focuses on the need to identify the dominant cause of delay, prominent among which is the late completion of utility diversions, but which could also include design delay arising from BSC’s management of SDS. BSC’s failure to provide programme information may be another influential feature.
- Breach – there are not clearly substantive grounds to support termination by **tie** for breach by Infraco, but certain aspects may reinforce this option, notably failure by BSC to comply with instruction from **tie**, a matter which is being progressed.
- DRPs - approach to further formal process on key issues and the need to consider potential deadlines for commencing court proceedings in particular in relation to the risk of design evolution in the context of PA1.

Simultaneous with the workstreams described above, **tie** developed a series of contractual letters which were sent to BSC during January and February 2010 covering the following topics:

- Design management
- Programme
- Change
- Obligations under Clauses 6 & 7 of the Infraco Contract
- OSSA (On Street Supplemental Agreement)
- Confidentiality
- Compensation Events
- Milestone payment reductions

The messages being relayed in this correspondence were indicative of **tie**’s desire to operate the existing contract mechanisms, expressed concerns about BSC’s approach to fulfilling their obligations and challenged their interpretation of key contractual mechanisms such as Clause 80 (**tie** Changes) and Pricing Assumption 1.

These messages and the contractually assertive approach were clearly understood by BSC and a range of responses were received the evening before a critical meeting between the parties which is explained below. Of significance is a comment made in one of the letters:

*“In this regard we would also record what we see as a marked shift in **tie**’s approach since the beginning of this year. We have been required to respond to a large number of allegations of breach of contract which have been developed now for the first time, including in relation to our management of SDS, Best Value, as well as very general accusations of breach of Clause 6, 7 and 73, all of which are entirely lacking in any detail. We remain confident of the veracity of our position in response to all these spurious accusations and respond to some of them below and in separate correspondence sent today. This exceptionally aggressive approach by **tie**, no doubt designed specifically to place Infraco under pressure, is accordingly both transparent and entirely baseless.”*

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The paragraph quoted contains a number of important assertions which **tie** rejects. However, it was an objective of Pitchfork that BSC would see a step-change in **tie**'s approach and this at least has been achieved.

**(6) Financial analysis**

Project cost estimates were reworked to align with the options developed under the Pitchfork process.

Based upon an assessment of confidence in the base costs and risks comprising the outturn costs in each of the above base estimates an assessment of the range of possible outcomes is as follows:

	Option 3A "As is"	Option 2B2 "Exit BB"	Option 3C "Enforced adherence"
Base Estimate	£661.5m	£667.2m	£639.9m
High Estimate (Higher Confidence)	£691.5m	£699.1m	£664.9m
Low Estimate (Lower Confidence)	£641.6m	£646.8m	£622.7m

Relative to the 2007 Business Case cost budget, which was finalised at £512m at Close, the main drivers of increased cost have included increased allowances for delay and disruption, including impact of utility diversion delays, design development, project management costs and on-street works. Detailed reconciliations of the movement in cost estimates have been performed.

As is explained in detail in section 5, the termination option assumes cessation of the project for the foreseeable future. It is possible that full re-procurement of the infrastructure could be executed, but there are material uncertainties about funding availability, timescales, market appetite and therefore costs. These variables make it difficult to flesh out a full re-procurement option with any degree of reliability.

Sustainable asset value is restricted to the utility work executed in the absence of a continuing project, representing £60m out of a total estimated at £388m, the balance of which would represent dead investment.

The currently approved funding availability is £545m. Each of the continuing options carries estimated cost materially in excess of this. Within each estimate there are significant variables which will only be determined by further legal and commercial negotiation. In addition, preliminary discussion has taken place with BSC about re-phasing the project to move from West to North-East in stages, which would support a phased delivery model within the funding envelope. Further work would be required to assess the re-phasing options, including their operational and financial viability.

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The extent of public funding already invested and the low prospect of achieving sustainable value from that investment in the event of contract termination combine to justify continuation of construction works and the efforts to resolve the contractual disputes. The fall-back position is the likelihood that a valuable tram system asset can be delivered even if short of the original full scope of Phase 1A. **tie** and its stakeholders require to keep this area under close consideration as the dispute resolution process proceeds.

### **(7) Assessment of BB's corporate approach**

In the last two years, BB's Civils Division, a material part of their Group results, has made public announcements about three major problem contracts. Two of these have required disclosure in the context of their reported results (the road projects in Norway and Qatar) because of the significance of the losses incurred. The third has been the subject of considerable press coverage and interest from analysts (the Cologne tunnel collapse). **tie** is also aware of a major dispute in Canada, which resulted in termination and litigation.

Since 2008, BB's public position has been to tighten its risk management procedures on acceptance and execution of civils projects, to limit the scale of their civils portfolio and to actively exit the civils business.

BB has made persistent attempts to restructure the contract onto a "cost-plus" or similar arrangement, which would mitigate their cost pressures and risk, an approach consistent with their corporate direction.

### **Current state of relationships**

A series of three meetings took place in the week beginning 1<sup>st</sup> March, which have relevance to the conclusions to be reached.

**tie** insisted on a meeting between the senior representatives of the Consortium as entitled under Clause 6.5 of the Infraco Contract. A proposal for re-phased construction was tabled by the consortium. However as this had pre-conditions attached **tie** advised BSC that it was not acceptable. There was no appreciable change in attitude detected in the behaviour of BB but there were evident tensions between the Consortium parties at the meeting.

A meeting was held with Siemens senior UK management (at **tie**'s request) on 3rd March 2010. The general view was that Siemens felt that something had to be done and that they were very aware of their joint and several liability with BB. When pressed, they indicated that they would consider proceeding without BB but this was not an easy option.

Finally, a meeting between David Mackay of **tie** and TEL and Kenneth Reid, the Executive Board Director of Bilfinger Berger AG responsible for Civils, was held on 5th March 2010 at Reid's request. This was the highest level of active engagement from BB to date. The meeting was cordial, but

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contained no material new proposals from BB to resolve the dispute. Reid indicated that BB were willing to look at any option and suggested putting the “6 key issues” to an independent expert for decision (on a without prejudice basis). **tie** agreed to consider this and the proposal is implicit in **tie**’s proposed action plan, set out below.

Later that day a detailed letter was received from Reid, which was clearly pre-prepared under legal advice and probably with the knowledge and consent of the Consortium partners. The letter was heavily slanted in favour of BB’s previously stated view of the issues and contained no new arguments which may have weakened **tie**’s position. The principal arguments remain around design changes and utility diversions. **tie** believes a critical weakness in BB’s position is their refusal to execute works when instructed under Clause 80. Reid’s letter makes no comment on their claimed right to refuse instruction, which may reflect concern on their part about the real strength of their argument.

The letter contained a clear statement that the existing contract was capable of being followed and could produce the tram system, in sharp contrast to previous comments about the inoperability of the contract by BB senior UK management.

Reid’s letter is the clearest documented statement of BB’s position and the approach adopted by **tie** in early January 2010 has significantly heightened the profile of the dispute within BB.

There was evidence in the period to Close that the Consortium members were not operating in harmony. There was also evidence of tension between BB and their proposed sub-contractors. Since that time, a number of discussions with senior representatives of Siemens and CAF have confirmed the view that there are significant differences of opinion within the Consortium on key aspects of their contract management and with the approach BB are adopting toward construction progress. Although Reid’s letter seeks to imply unanimity, the tensions within the Consortium remain.

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## Principal findings and conclusions

**tie** has formed the following conclusions :

### **Option 1 - Termination**

If **tie** did terminate, it is very likely that litigation will follow, pursued by both parties. Should BB terminate, it is possible that their grounds for doing so could be flimsy offering a prospect of a financially successful litigation result. However, this is not a scenario which is easy to define, risk assess and promote with any degree of confidence. BB may have the resources and the appetite for lengthy litigation with the attendant financial risks, but this is not a scenario the project funders will find attractive from a financial perspective. Regardless of which party actions termination, it is almost certain that funders would freeze or cancel the project until the financial outcome was clear, which could be many years ahead. Termination would mean the end of the project for the foreseeable future.

A negotiated termination of the Infraco could minimise the financial risk and limit the period of uncertainty. However, if the project is to continue, full re-procurement of the uncompleted works would be needed with no certainty of market appetite or price. This option would also be likely to end the project for the foreseeable future.

### **Option 2**

An attractive scenario for **tie** and CEC could be to continue under the present contract, but with BB exited and all financial and programme uncertainties resolved in an acceptable range. The importance of BB's exit lies in the lack of trust **tie** has in BB's willingness to adhere to proper rules of engagement and to deliver their contractual obligations without further material dispute arising. It is also realistic to assume that BB would prefer this option, subject to the terms of the divorce, which would be in line with their group approach of limiting the scope and risk profile of their civils business.

**tie** however, cannot enforce this option on the Infraco Consortium and the underlying terms of a negotiated exit of BB will be complex. It would be necessary for the remaining Consortium members to come to agreement with BB on the financial separation terms and on risk transfer or retention, including adoption of lead responsibilities for the Consortium.

In summary, although a desirable option to pursue, its deliverability is very uncertain.

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### Option 3

The default position of no material change to the present scenario is unattractive, as it offers no certainty on price or programme. A continuation of the current lack of progress will also probably cause public and political support to evaporate. All factors considered, this approach is likely to lead to termination, negotiated or enforced, with substantial risk as to the ultimate financial outcome. To follow this approach would also pre-suppose that BB will change tack and there is little evidence supporting this assumption.

### Option 4

Accordingly, the 4<sup>th</sup> option emerges as the preferred route. It should be noted that pursuit of this option may lead to the exit of BB indirectly, which reinforces the rationale for pursuing Option 4. The approach which **tie** will take to pursue this option is set out below and is considered to be deliverable and to carry a reasonable prospect of success.

### Action plan

In the short term, **tie** recommends that the current Infraco Contract is utilised and that the increasingly contractually assertive approach by **tie** continues. This is clearly showing signs of impact and should continue whilst the medium term recommendation is pursued. Of the four credible options, Option 1 – termination could be executed in the short term but would carry a high risk of creating a very uncertain financial outcome with limited sustainable asset value.

In the medium term **tie** would aim to move BSC towards a position of more co-operative working in two stages :

- Using the weight of argument developed over the last eight weeks, clarify the contractual interpretation of significant areas of difference between the parties. This can be done through DRP or litigation or by taking such matters by agreement to an independent expert (without prejudice) to decide on such matters. A critical part of this strategy is the determined application of the contractual levers available to **tie** so that BB are in no doubt about the strength of **tie**'s position ; and
- By moving BB into a position where their current approach has started to be eroded, move them into a more collaborative method of working providing **tie** with an increased level of control in the contract and more significantly in the on-street works. The two dimensions which make this a credible outcome, in summary, are 1) **tie**'s ability with the benefit of the analysis now completed to convince BB and BSC that alternatives to this outcome are unpalatable ; and 2) pressure from Siemens on BB.

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A third important aspect of this approach is that it potentially incorporates the full or partial exit of BB crystallising Option 2 above). There are good reasons to think that BB at a corporate level would find exit an attractive option on the right terms. Were **tie** to progress this option the cost to **tie** and CEC in terms of divorce settlement and risk absorption will be worse than if BB promote the option.

The application of the contract terms will be targeted at achieving breakthrough in the following critical areas :

1. Application of Clause 80 and 34.1 ;
2. Agreement on EoT, including reasonable allowance for the effect of utility diversions ;
3. On Street working mechanism ;
4. Exposure of the risk created for BSC by their design management performance ;
5. Resolution of the design cost risk dispute (BDDI – IFC cost evolution) ;
6. Milestone payments ; and
7. Focus on the off-street Airport – Edinburgh Park section to support Siemens .

Infraco has now responded in reasonably comprehensive fashion to a number of recent targeted letters from **tie**. It is thought that these replies will allow **tie** to establish Infraco's "heads of claim", which has previously not been possible because BSC have not hitherto provided sufficient insight into their position. Whether or not BSC's position is tenable, the new information should facilitate a much more rational negotiation than has previously been possible. This, coupled with the heightened profile of the dispute at senior levels within BB and **tie**'s ability to access those senior directors, provides a more promising backdrop to the next stage of negotiation than at any time since Close.

The specific actions to be taken are set out below.

### **Clause 80**

Bringing about Infraco's recognition that pursuant to Clause 80 (in particular Clause 80.13) and Clause 34.1 they are obliged to carry out alleged changed work before the agreement of Estimates is a fundamental issue which will have to be addressed before the revised contract is finalised. If BSC's position on Clause 80 can be unequivocally settled in **tie**'s favour, a major plank of their approach will have been removed. Legal analysis suggests this may be within **tie**'s capability. Construction progress would have less risk of being impeded and a valuable argument in the EOT dispute will be available to **tie**. Commercial planning must assume that it may be many months before there is a decision which Infraco will accept. It has to be recognised that under such circumstances Infraco would more than likely not be amenable to agreeing to any change in scope which may be required for affordability purposes. This aspect will require careful monitoring.

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### ***Utility Diversions***

It is a matter of fact that Infraco has been substantially delayed by late completion of utility diversions. Moreover, such delays would warrant substantial extension of time without mitigation and acceleration. Agreement on this matter would facilitate the agreement of a new programme and measures required to achieve that programme. Infraco's compensation should thereafter be based on this revised programme and the agreed measures.

### ***On Street Mechanism***

It is thought that **tie** cannot agree to Infraco's OSSA proposal because it is based on open-ended cost reimbursement and programme. Moreover, EU procurement Law considerations arise.

An alternative approach is to agree a revised programme with BSC based on a shallower depth road reconstruction with any soft ground encountered being dealt with via the Clause 65, Compensation Event route. A skeletal heads of terms for agreeing a Clause 65 route has been drafted by **tie** and consideration can now be given to its deployment.

### ***Infraco's performance including SDS performance***

The evidence from the audit of BSC's management of SDS confirms **tie**'s assessment that BSC has not fulfilled its contractual responsibilities in this area, with repercussions for BSC's position in the disputes over design cost liability and programme. The formulation of the precise legal argument may yield further strengths and weaknesses in this line of attack, but at this stage the line seems well worth developing.

### ***Design cost liability***

The legal underpinning to this consistent problem area is now much clearer, while the commercial consequences remain uncertain. The Infraco contract language does not provide **tie** with the unequivocal strength it would wish, and which **tie** had a strong commercial expectation of achieving. However, nor does the language unequivocally support BSC's position. Cost estimates have included contingency for this matter from an early stage.

The action here will include finalisation of the legal argument and an assessment of how best to take the matter forward in negotiation. Issue in relation to a timeline for pursuing court action require to be addressed further. It seems now that there is little benefit in further DRP submissions around this issue, beyond those already in play (which contain additional dimensions where clarity and an outcome is sought). The matter should be susceptible to a negotiation around the legal, technical and commercial aspects of each main section where the design and its evolution from BDDI is an issue.

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**Pressure on milestone payments**

In November last year **tie** offered to extend the completion dates by nine months, offering Infracore relief from LDs for that period. Infracore's current position on this appears to be to reject that offer and **tie**'s simultaneous confirmation that **tie** will pay for six months' delay costs on an established formula.

BSC's response causes them to be put at risk for increased claw-back of milestone preliminaries. The proposition has been put to BSC but not yet executed. When it is, the financial impact on BSC will be significant. The quantum and timing of this action are under detailed assessment.

**Focus on the off-street Airport – Edinburgh Park section to support Siemens**

A proposal was made by BSC, driven by Siemens, at the Clause 6.5 meeting on 2<sup>nd</sup> March 2010 in relation to a quick resolution of the matters in dispute (25 INTCs) in the most westerly section, where Siemens have the lead role. Since part of **tie**'s strategy is to enhance Siemens influence over BB, it is appropriate to pursue this matter and this has already been actioned. However, there are some difficult matters under dispute and a quick resolution cannot be guaranteed.

In addition to the seven specific workstreams described above, it is essential that construction progress is maintained and media/stakeholder communications managed effectively.

There is an overriding requirement to monitor the impact of the resolution process on the cost estimate for the project and to relate this to the available funding and the delegated authority structure which governs the approval of changes to cost budget and to programme.

**Summary of Action Plan**

The specific actions proposed to deal with these circumstances can be summarized as :

Mobilise action on Clause 80 and 34.1
Seek conclusion on impact of utility diversion delays and overall EOT claim, with consequent revision to a new agreed programme
Respond to OSSA and offer the Clause 65 alternative
Refine argument over SDS management and deploy as appropriate
Omnibus approach to resolution of outstanding BDDI – IFC disputes ; Expedite response to INTC's (other matters)
Quantify and execute amended position on prelims
Seek to resolve the Airport – Edinburgh Park disputes
Action plan for implementing more collaborative working

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### Remaining risks

Even if breakthrough is achieved in the areas set out above, there is no guarantee of avoiding further significant conflict with BSC. However, a successful outcome in those areas will leave BSC with considerably less scope for argument, with a further reinforcement that BSC will be well aware of the strength of argument brought to bear by **tie** and its advisers, coupled with a diminished expectation that stakeholder pressure will improve BSC's position.

### Success measures

It is unlikely that there will be a simple series of measurements which can be used to indicate success from this strategy. However, each of the elements in the action plan is capable of being deployed quickly and an outline of the time required to assess impact can be established. Progress may not be quantifiable in minute detail, but the direction of travel should become increasingly clear over the next 3 months, in advance of a further decision gateway in June 2010. Progress will be reported regularly during that period.

As progress becomes clearer, the concern about affordability will also come into sharper relief and a parallel workstream to assess re-phasing options, and if necessary truncation options, will be executed in the same period to provide the information necessary for robust conclusions in June 2010.

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## 7.0 Recommendation

The work performed in early 2010 constituted:

Detailed examination of the matters in dispute and the means to resolve them ; and  
Determined application of **tie**'s rights under the contract .

The approach adopted appears to have had a significant impact on BSC and the basis on which **tie** can seek to achieve an acceptable legal and commercial outcome is now considerably clearer. Accordingly, the recommendation from **tie** to the TPB is that **tie** should :

- Continue to pursue **tie**'s rights under the existing contract with vigour and seek acceptable resolution of the main disputes ; both according to the action plan described above ;
- Actively address the opportunity to achieve a partial or full exit of BB from the primary contract role they currently play, on acceptable cost and risk transfer terms ;
- Actively address affordability and re-phasing options, including operational and financial viability ;
- Reach a resolution of these matters with BSC in the form of a revised version of the existing contract which remains compliant with procurement regulation ;
- Confirm a new way of working with BSC which mitigates against further dispute risk ;
- Report progress regularly to the TPB, especially in relation to cost estimates, programme forecasts and potential scope changes in the context of funding availability and the structure of delegated authority which will govern any material changes ; and
- Formally reassess the revised arrangements on or before 30<sup>th</sup> June 2010.

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