In March we were already considering our options to proceed with the construction of Phase 1a of the tram without Bilfinger Berger (BB). However the contract is with the consortium and it is therefore only BB's partners Siemens and CAF who could effect their removal, amicable or otherwise, from the project. This paper recaps on our previous deliberations updated to reflect the state of play in August following commencement of full scale contractual efforts by **tie** for force resolution and progress.

Termination of the BSC contract

This would require confident legal reasons to do so – very significant breach of contract – and although the behaviours of BSC to date do not accord with those of a willing contractor fulfilling their obligations it would still be difficult to convince ourselves that there were persistent breaches we could go to court with. There are also very significant reputational considerations for both the contractor and Scotland.

Note: A refusal by BSC to carry out works when instructed to do so in respect of matters referred under the Dispute Resolution Procedure (DRP) would constitute a very signifcant breach of contract.

In addition there are a number of compelling reasons to consider termination as the worst of outcomes including:

- Doubts about the deliverability of a new procurement on the same terms - The market appetite for the Infraco work on our contractual terms was poor first time round (we only had two serious bids to consider) and it may not have changed. There is no legal way to reengage with the under bidder or any obvious price advantage in doing so. However, a new procurement would be against the background of completed and consented design and completed utility diversions.

- BB behaviours could reflect an under pricing or the original bid by them in relation to the subcontracts they have negotiated - However subcontractor prices might be significantly softer in today's market and the proximity of the underbidder's price and other benchmarking carried out at the time of contract make this unlikely.

- BB are now mobilised or appear to have their subcontractors ready to go and we have no big problems with Siemens/CAF performance – There is an eagerness on the ground to progress and the subcontractors are ready (albeit not yet all under contract) to do the job. We'd be losing the value of 2 years+ accumulated knowledge and mobilisation costs.

- Stakeholder support for the project – The history of precarious political and public support for the project may weigh heavily on the minds of any new consortium considering a bid for the work.

Removal of BB and replacement with a new civils partner

There is still a conviction that Siemens and CAF are the right partners to deliver the technically specialist areas of the project. Any decision to remove BB would be made by the other consortium partners not by us.

Siemens were as commercially aggressive as BB during procurement and they have continued to allow BB to lead the commercial engagement since. Siemens have been very aggressive in their valuation of the extension of time agreed to date (said valuation is the subject of a DRP we have already commenced).

We continue to apply the available pressures on Siemens identified back in February – namely:

- Emphasise the attendant risk to reputation and demonstrate our resolve (and, crucially, that of CEC and other stakeholders) and thereby bring about greater influence by Siemens in the consortium.
- Through targeted DRP keep Siemens well briefed on the nature and extent of the principal contractual disputes we face and the detailed analysis of the issues rather than the high level generalised positions BB have taken so far.

Our observation is that the consortium may have closed ranks slightly following the press and political coverage of the 20th August Council report.

In the event of BB departure the best result in terms of time and cost impacts would be for Siemens themselves or the civils arm of their trackwork subcontractor BAM to undertake the role. We might expect the price Siemens would try to negotiate to take on the civils work to be lower than that required by a new civils partner. The best outcome would also preserve the assembled BB supply chain as much as practicable and a continuation with programme critical activities.

Removal of BB and management of civils subcontracts directly by tie

This approach would involve eliminating the BB "middleman" and establishing a revised contractual arrangement whereby **tie** managed the civils work directly. In March this option was deemed unattractive as (depending on the detailed negotiation) it could leave the public sector managing contractual interface risk currently wrapped up in the Infraco consortium including the engineering/design interface between the civils work and the following track and systems installation as well as any delay and disruption to Siemens due to delayed civils work.

Since March this option may have become relatively more attractive as the extent of the dispute now encompasses the entire contractual risk allocation and payment mechanism in any case and the factors which could delay the civils works such as ongoing utilities works are becoming less of an issue.

Critically – we would need to reassess our position under procurement rules to engage the subcontractors directly in the absence of concluded contracts and collateral warranties to **tie** which would provide our step in rights. In the absence of clear contractual culpability it's highly likely that BB would require a payment for lost profits and perhaps historical costs unrecovered to step away.

In any case it seems that further consideration of this option must be informed by the outcomes from the formal dispute process and the reaction or otherwise of BSC delivery to those outcomes.

Procure programme critical elements of the civils work outside the BSC contract

This was not explicitly an option considered back in March – but **tie** believe that we could procure significant elements of the civils works (eg groundwork and structures) outwith the Infraco contract in an economical manner and in a way which minimised further delay to those works if BSC continued to find reasons to delay.

The primary challenges in adopting this approach would be:

- The time and cost to procure and the interfaces with works remaining within BSC scope.
- Ensuring a proper discount for the works by way of a negative tie change to the BSC contract.
- Our legal advice is that in the absence of significant breach (ie enough to terminate the BSC contract) such a move would almost certainly result in loss of profits claims from BSC.

Negotiate a major variation to the Infraco contract to settle contractual disputes

Since February our decision to discount this approach has been vindicated. Extensive discussions and mediation with BSC have not delivered either an acceptable overall outcome or the information and explanations we require to evaluate or validate additional costs and demonstrate value for money in any meaningful way.

It's also true that the BSC view has hardened with respect to the existing contract and that a move to a cost-plus arrangement for the on-street sections at least is the only way forward they will accept. This of course gives us very significant challenges in that it would pass all construction risks in relation to cost and programme back to the public sector and be open to challenge under procurement law.

What do the different options mean in terms of time and cost?

In April we assessed the order of magnitude marginal cost and time impact associated with each of our options as below (NB – these remain order of magnitude estimates and are reliable only for the purposes of comparing the relative merits of each option):

- **Terminate BSC and re-tender** – We assessed this as resulting in at least 9mths delay (if there was market appetite for the contract offered) and resulting in additional Infraco costs of c£80m encompassing rates and programme/inflation related increases, remobilisation and assumed demobilisation/loss of profits claims from Bilfinger and Siemens of c£20m. There would also be additional client side costs ie **tie** project management and other resource costs. It is assumed we would retain CAF as tram supplier.

- **New Civils partner** – We assessed the delay as 6mths and additional Infraco costs of c£49m. This amount did not include for any demobilisation/loss of profits payments to Bilfinger which on a simple application of rates in the contract might amount to c£10m-£15m (6% - 10%) of the Civils element of the original price.

- **Negotiated variation or settlement with BSC** – This was and is seen as the most expensive option (£80m and 12mths plus delay) as the consequences would mean risks being passed back to the public sector with significant remaining uncertainties beyond the point where we agreed an outcome.

	Terminate BSC and re-tender	**New Civils partner**	**Variation or settlement with BSC**
Delay to Feb 2012 ops commencement	9 m	6 m	12 m
Outturn Costs (£m)			
New Infraco /civils partner:			
Mobilisation	10.0	2.0	-
Rates	25.0	25.0	-
Programme	17.0	10.0	-
Inflation	6.0	2.0	-
SDS Costs	2.0	1.5	-
Siemens and CAF additional costs:			
Delay	-	6.0	-
Inflation	-	2.5	-
Settlement disputes and programme:			
Additional direct cost	-	-	50.0
Time related costs	-	-	31.0
Future changes	-	-	-
Settlement with outgoing Infraco / civils partner			
Loss of Profits	15.0	12.5	-
Demobilisation	5.0	2.5	-
Additional Infraco costs	**80.0**	**64.0**	**81.0**

- Re-tender delay assumes a very streamlined retendering process and market interest in the absence of which the additional time would be considerably longer than 9 months
- New civils partner option assumes a significant premium which might be mitigated if Siemens take on the civils role themselves – or **tie** was able to successfully step into the Civils management role.
- All delays assume implementation of acceleration measures identified by **tie**.
- Additional Project Management and legal costs would be incurred by **tie** at the rate of say £750k per month subject to mitigations.
- Expenditure to date (mid Aug 09) includes amounts paid to Bilfinger and Siemens of £30m (£15m each) in respect of mobilisation which would require substantiation and adjustment to actual cost in the event of termination or replacement.

Costs of Project Cancellation

It's also relevant to consider the prospect of project cancellation right now against the existing strategy of delivering certainty and progress through contractual means. To date we have spent £271m on Ph1a plus £6m on Ph1b. If the project were to be cancelled there would be and wide range of unpredictable close out costs including:

- Outcome of loss of profits and demobilisation claims from Bilfinger, Siemens and CAF
- Disposal of tram vehicles insofar as they are instructed
- Completion of utility diversions underway
- Restatement costs depending on determination of what was required in respect of eg:
  - Tram infrastructure already on Princes St
  - Gogar Depot site

  - Structures partially complete incl Haymarket Viaduct and Edinburgh Park Bridge
- **tie** project management and other resources eg legal fees required to settle the matters above (likely over an extended period of time)

It is not possible to be completely definitive about the extent of these cancellation costs - however it is not beyond the bounds of possibility that they could be £50m to £100m. The bulk of the sunk costs of over £300m would have little value in the absence of an operating Tram and the quantitative (hundreds of millions of pounds) and qualitative benefits described in the Business Case would also be lost as would those of the Gogar intermodal station.

It's also worth considering that cancellation, as well damaging the reputations of the contractors, would potentially mean collateral damage to the reputation of Edinburgh and Scotland in public procurement terms and maybe beyond.