

Edinburgh Tram Project

Forensic Planning Exercise

undertaken for tie Limited

on the instructions of

Susan Clark (Deputy Project Director)

and

Dennis Murray (Commercial Director)

Progress Report No. 1

(for work undertaken during w/e 24th April 2009)

Author

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1 Introduction

1.1 **tie** has instructed Acutus to undertake a forensic planning exercise on its Infraco contract. In its brief dated 8th April 2009 it set out its requirements. Following an induction meeting with **tie**'s senior management, held on 17th April 2009, Acutus commenced work on 20th April 2009. This document reports on;

- a) the activities undertaken to-date;
- b) initial observations;
- c) the proposed activities for the forthcoming period; and
- d) proposed immediate and long-term actions that **tie** may wish to consider for implementation.

2 Activities Undertaken

2.1 Several meetings have taken place with the following senior members of **tie**'s staff.

- Dennis Murray (Commercial Director)
- Susan Clark (Deputy Project Director)
- Tom Hickman (Programme Manager)

2.2 At these meetings background and explanation has been provided on the contractual arrangements that exist between the various parties involved in the project. There has been particular focus on the **tie** – Infraco contract. Copies of programmes, schedules and contract requirements have been handed over for use in the forensic planning exercise.

2.3 Acutus has spent time in **tie**'s contract data room to peruse the Infraco contract and extract copies of parts pertinent to issues associated with obligations and responsibilities relating to time for completion, relief events, compensation events and extensions of time.

2.4 Initial examination of this documentation raised a significant number of questions. These were discussed with Messrs Hickman and Murray during the various meetings



held. Their responses have helped clarify many issues and brought focus on areas for further investigation.

3 Initial Observations

- 3.1 The nature and complexity of the project as a whole has, inevitably, required the creation of complex contractual arrangements. The Infraco contract is one of many contracts operating in parallel to deliver the project. Not only are each of these contracts complicated, there are, inevitably, linkages between them. Changes in one contract frequently impact into others triggering change provisions and time adjustment mechanisms. Such is the complexity of these contracts, considerable study and research is required to develop an understanding of how they operate together. The work undertaken during this first week has made good progress on developing this understanding and has provided focus for further reading-in and examination in the coming weeks.
- 3.2 Acutus has been advised the parties to the Infraco contract have differing opinions on where liability lies for many of the delays to date. There appear to be many parts of the programme where numerous delay events have impacted. Issues of dominance and concurrency are to be found throughout and this will require careful consideration in the subsequent analyses of delay. This appears to be set against a background where both parties are experiencing difficulties in timeously completing their respective pre-construction preparations. **tie** is having to deal with delays and over-runs on the MUDFA contract. It is also having to instruct changes to the Infraco contract to address logistical, contractual and practical difficulties that have arisen since the contract was concluded. Running in parallel with these Employer delays and events, **tie** believes that Infraco is experiencing difficulties in procuring fully consented design for construction, sub-contractors and other resources to meet its programming obligations. It is considered that Infraco is consciously attempting to use Employer delays and alleged Employer delays to mask its own shortcomings and difficulties.
- 3.3 In examining the programmes and forming opinion on liability for delay, determining the correct contractual interpretation of risk allocation will be crucial. It is apparent that significant entitlements to time and money will turn on this (including **tie**'s entitlement to liquidated damages for delay). Further examination of the actual delays that are



impacting on each section of the project will establish the risk allocations that need to be considered in relation to one another. Once this has been done, focus can be brought on the specific risks that need to be considered in detail if liability and entitlement are to be correctly reported in the forensic planning exercise.

3.4 It would appear that a considerable amount of data exists in relation to plans, programmes, progress and notifications. Further research is required to determine the accuracy and completeness of this data prior to conducting delay analyses. **tie** is currently filtering and consolidating further data for use in such analyses and for its own management and control of the project. It is **tie's** intention that the product of their work in this regard will be provided to Acutus, to better inform and expedite our work on the current forensic exercise.

3.5 Discussions with **tie** staff have indicated there is much anecdotal evidence to suggest Infraco is experiencing difficulties and delays within its own operations. However, it would appear that, at present, little of this is being formally recorded. It is considered that this should be addressed forthwith.

4 Proposed activities for the forthcoming weeks

4.1 The following table sets out the activities and an outline timetable for the work Acutus propose to undertake during the remaining part of April and May 2009.

(Week No. 1 = w/c 20 April 2009)

Activity	Estimated effort (manhours)	Indicative timetable (Week No.)	Comment/Progress
1. Review of contract to understand provisions and mechanisms relating to time for completion, programme and entitlement to relief. This to include examination of risk allocation and the inter-relationships with other project contracts.	40	1 & 2	Initial reading-in and investigation commenced in Week No. 1. It is understood that tie is currently seeking advice from others on some aspects of the contract that affect this activity. It is presumed that said advice will be shared with Acutus. The timing of the receipt of such advice may affect when this activity can be completed.



Activity	Estimated effort (manhours)	Indicative timetable (Week No.)	Comment/Progress
2. Review planned v actual programmes and verify both the tie and Infraco view of forecast completion.	25	2	
3. Review history of programme analysis to-date and the relevant contractual correspondence.	10	(History reviewed in Week No. 1).	tie is currently compiling schedules of the relevant contractual correspondence and, in particular, schedules of Compensation Event notices. These will be examined when that information becomes available.
4. Analyse and quantify delay, disruption and prolongation in the context of specific contractual requirements, including a cause and effect analysis, concurrency of delays and identification of responsibility for addressing same.	50	2, 3 & 4	The level of detail to which the tasks associated with this activity can be taken will clearly be limited by the timescales set and the corresponding time available. As a consequence, particular focus will necessarily be placed on the key / major delay issues identified during discussions with tie project staff. Further and more detailed comment will be provided in subsequent progress reports.
5. Challenge the programme and commercial approach to-date and identify strengths and weaknesses in process and evidence/actions to-date.	10	4 & 5	
6. Provide view on opportunities to improve confidence in tie 's ability to negotiate a successful conclusion to programme delay and mitigation costs.	10	Weekly reports	
7. Identify / recommend opportunities for recovery or acceleration, if evident.	10	Weekly reports (as appropriate)	



Activity	Estimated effort (manhours)	Indicative timetable (Week No.)	Comment/Progress
8. Formal Report	20	5	Draft sections may be issued during their preparation for tie comment. If required, further adjustment and/or additional work could be undertaken during Week No. 6 (last week of May 2009)
Total estimated effort	175 hours		

5 Proposed actions for consideration by tie

- 5.1 Review of **tie** processes for the compilation of contemporaneous records with particular focus on recording and evidencing all areas of on-site activity **and inactivity**. It is understood that Infraco currently commission monthly sets of progress photographs. Each set consists of 50 prints. It is considered these are likely to be insufficient to evidence the progression of all areas of the site on a month-by-month basis. It is suggested that the **tie** Project Managers for each section be directed to routinely (weekly?) take a full set of digital photographs that, together, record the actual condition of their entire section. It is suggested that photographic evidence which shows areas where no progress is being made could be as important, if not more important, than those where work is actually being undertaken. Previous experience has shown that a parties' ability to evidence areas of the site where work could have been progressed, but was not, can be crucial in securing correct allocation of culpability for delay.
- 5.2 Contract Clause 72 provides **tie** with the option to require Infraco to submit routine returns of their resources. We are advised this option has not as yet been taken up. It is recommended that **tie** require Infraco to provided weekly returns for all of its resources *including* those of its sub-contractors. Such information is normally essential contemporaneous evidence which can assist in the identification of any delays that may be or are arising from shortage of resources.
- 5.3 We are also aware that **tie** staff are currently compiling schedules of delay events on a section by section basis. It is recommended that this work be brought up-to-date as quickly as possible and thereafter continued with due diligence. This will provide a



detailed delay log for the entire project. The importance of such a document cannot be over-stressed. It is proposed that risk ownership information (coding) be added to this schedule to facilitate allocation of liability for delay in subsequent analyses. Acutus can provide guidance and input to this process which will inevitably require a concerted effort by the tie staff who have the appropriated level of detailed job knowledge.

- 5.4 It has been suggested that some of the problems associated with late delivery of IFC drawings by the SDS Provider result from shortages of design resources in the past and, possibly, in the present. It is suggested that if evidence (historic and current) can be collected and put on record, this could prove invaluable in the identification of designer culpability in at least some of the delays that Infracore is currently notifying as Compensation Events.
- 5.5 Should tie so wish, Acutus can provide further details on how many of these records can best be compiled, referenced and stored for most efficient use in any future investigations / analyses / claims / adjudications / litigation.

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