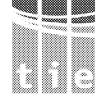


#### tie

**Tram Project** 

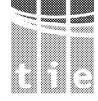
A review

David Crawley January 2007



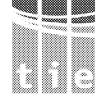
## Scope

- A review of the Design Review Process based on interviews with key personnel
- Identification of key themes
- Proposal for solution methodologies.



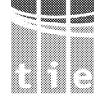
## Interviewees

- Graeme Walker
- Douglas Leeming
- Trudi Craggs
- Daniel Persson
- Gavin Murray
- Jim Harries
- Alex Joannides
- Ray Millar
- Jim Hunter
- Martin Donohue
- Mark Bourke
- Ailsa McGregor



#### **Process**

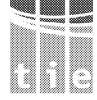
- Open questions
  - How is it going?
  - What problems in doing your job?
  - Where are the big risks?
  - Will you meet the project programme?
  - What are your solutions?
- Reporting summarised close to verbatim
- Free-form interviews
- Conclusions drawn from comments made
- Solutions proposed.



### Interview notes

- Summarised, but as close to verbatim as possible
- Scope not forced to be consistent with defined scope of review freeform discussion to elicit as much information as possible.
- Most participants had wider ranging issues than just design review.
- Good consistency for common themes

The interview notes ....



#### Graeme Walker

- Discussion on utilities diversion as a hot issue.
- MUDFA arrangement leaves SDS and Utilities with design iterations (with visibility by AMIS) prior to final design being given to AMIS. AMIS deliver diversions but leave old utilities intact but disconnected – Infraco install track on top and treat all utilities as live – i.e. installation on 'unsterilised' land.
- Ground Penetrating Radar at hot-spots, but too many non-intrusive surveys elsewhere. Now
  putting slit trenches in other locations inevitable that unpleasant surprises await.
- **Risk** <u>Practical</u> detailed design far exceeds planned scope and leads to programme slippage, e.g. telecoms standards requirements on minimising number of connections or splices.
- **Risk** Implementation and continuity plans lead to further delay once scope understood.
- Risk third part interfaces add to scope and delay.
- 'Charettes' process is adding to scope also
- Will the programme be met? On a spectrum of Good Chance Tight Probably Not, view tends towards 'Probably Not'.
- **Solutions** none but felt that he has available to him processes that work for him.



### **Daniel Persson**

- Biggest issue problems with RFI (Requests for Information) from SDS.
- **tie** have 7 day response time not meeting this. Even though SDS should re-issue requests not responded to, **tie** position is commercially weak.
- Some RFIs not for tie but Daniel P is seen as default source of all information he is overloaded.
- Difficult to get queries answered everybody is very busy.
- Many queries are, or should be linked. There is no effective process to do this.
- Risk SDS commercial position is strengthening towards a claim
- Other comments
  - Internal communications poor
  - Organisation has unclear responsibilities
  - Under-resourced, everybody too busy.
  - Perceived lack of meaningful programmes available, and those from SDS and tie are at different levels of detail. Not practically useable on a real-time basis and little clarity for people on how to plan their own work. Constantly responding rather than being pro-active.

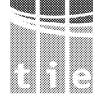
#### Solutions

- Inter-departmental meetings
- Simplify organisation
- Better scheduling (weekly) to support individual work programmes



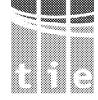
# Trudi Craggs

- Biggest issue consents and approvals e.g. Traffic Regulations, prior approvals for power substations, tram stops, poles etc
- Successful improved traffic light (RAG) process but what to do with the red issues?
- Procurement processes not obviously supportive of phasing in design, approvals and contract letting.
- Many personnel changes leading to lack of continuity few now understand the contracts and context of different issues as they arise. The information may exist in records, but it is not accessible.
- Little apparent acceptance in the team as a whole that design is an iterative process.
- CEC difficult to engage effectively
- Real concerns over governance of **tie.** Manageable as long as all parties have the same political will, but a real risk to delivery and cost if not, and possibly a personal risk for **tie** (Companies Act) directors
- **tie** believes risk had been laid-off through contracts, and, at first, everyone sat back and let things run except there were too many gaps and oversights.
- Risk "Programme not sustainable"
- Solutions
  - CEC should have desks in tie
  - Use the hiatus of the political process in May to re-think the project and 're-start' (without overt announcement)



## **Douglas Leeming**

- Biggest issue **tie** don't know how to use TSS to greatest effect, and ignore their strengths and/or bring them in too late on any given issue
- TSS feel ignored (little response to their various proposals) and threatened, and believe their runrate of spend exceeds what is necessary if the whole project were effectively integrated.
- TSS believe that **tie** lean on them for support when the going gets tough but would prefer not to use them at all but also believe that they have people who are vital to the success of the project which they care about greatly. This affects morale adversely.
- A serious lack of effective management processes, particularly at an earlier stage of the project.
   Most people reacting rather than following a plan leading to poor and ineffective resource utilisation.
- What is the culture of the Tram Project?
  - Answered in terms of tie, TSS, SDS
  - Not seen as integrated at all
  - Not seen as a team, even within tie
- **Risk** programme slippage
- Solutions
  - Fewer, but 'better' people at the right levels. 'Better' = more experienced. Do more for less spend run-rate by concentrating on the right things first time.



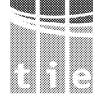
# **Gavin Murray**

- Biggest issues
  - Generally poor understanding by many of others' responsibilities. Not sure everybody is doing what they should.
  - Big concerns over the CEC interface and its effectiveness.
- Feeling of being understaffed and too busy to be sufficiently effective.
- Good view of RAG traffic light review process and frequency, but not happy with the resource demand to support it.
- Project arrangement is not sustainable too much stress and too little progress.
- Risk programme slippage
- Solutions
  - Additional resource
  - Need to be more 'clever' with the interface with CEC
  - SDS must recognise that the programme is not just a deliverable document from them, but something to be followed by them too. There is no evidence that they understand this.



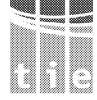
## Jim Harries

- Biggest issues tie have a long way to go to become an informed client.
- Too much reaction and 'shooting from the hip' and not enough planning.
- **tie** quick to blame others for failures and then quick to take on the risk and fix it themselves.
- SDS not performing well
- CEC interface is problematic they are ambivalent and can't decide if they want the tram system or not. Too much not-joined-up thinking.
- System interfaces feel uncomfortable
- Failure to control scope because no effective change control in place.
- Not enough of the right level of competence in the right places,
- Chance of meeting the programme overall? "Zero"
- Tram Project culture? "not unified, even within tie where silos exist".
- Risk programme will not be met.
- Solutions
  - Align tie across the middle managers anyone external to the project should not see the join between people from tie, TSS, SDS, Transdev.
  - Enforce the discipline of change control.



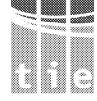
## Alex Joannides

- Biggest issue management of the SDS contact. To date neither **tie** nor SDS have managed the contract as written or originally planned. Seen as 'complex' and demanding. Whereas this may have been adequate for early work and preliminary design it will not cope with the rigorous attention required for the detailed design phase which the project is now entering. **tie** appear not to be contractually minded and need to become so.
- The DAP and 'traffic-light' process seen as effective, but notes that the number of issues emerging will be large and so programme-threatening.
- Culture "as good as you are going to get". Pragmatic assessment of what is likely to happen on the basis of a core team and others deployed through service contracts. Not seen as ideal but seen as adequate.
- Communications are "OK"
- Assumptions on design and procurement should be common but may not be however this is a
  necessary feature to enable progress to be made and they are "good enough".
- Risks without re-making the design review process and dealing with SDS management the detailed design process will be threatened.



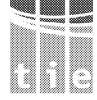
# Ray Millar

- Biggest issue reactive nature of the workload and apparent lack of planning
- Unclear on how the parties roles align
- Challenge to get design review done "remotely"
- Little notice from tie on work requirements. Few written instructions and frequent change of verbal instructions.
- The current processes will not work for the detailed design phase.
- Not enough interaction with tie people who seem too busy to stop long enough to engage.
- Thinks tie believe that TSS is expendable.
- **Risks** Programme "quite a challenge" to meet.
- **Solutions** cross-discipline meetings which are facilitated and must reach agreement and conclusions.



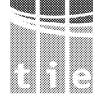
#### Jim Hunter

- SDS not very responsive to client requirements and driven by programme
- tie could make better use of TSS.
- Low level of interaction between the various parties
- The Tram Project seems "very organic" and "haphazard" compared with other project experiences which seemed "organised".
- Felt like "working in a bubble"
- High turnover of senior staff has not aided stability
- Risks programme "doesn't bode well"
- **Solutions** Learn from similar projects and copy their management processes.



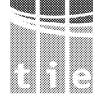
#### Martin Donohue

- Biggest concern information management seen by him as a basic hygiene factor failure to
  provide this will threaten the programme overall. Not content that tie have understood that their
  information management plans may not be deliverable, or have understood that their system will
  need to be configured a process which can take months. Not content that their proposed system
  can cope with the volume and integrity requirements for the detailed design phase.
- Tram Project team clear that it should feel inclusive, but clear that it is not.
- Project management is not proactive and mostly reactive
- Everyone is busy fire-fighting
- Agrees that the SDS contract management as currently implemented is not adequate for the detailed design process.
- Risks programme there is "no complete programme"
- **Solutions** Information management to cope with the volume and integrity requirements is key and any system should be intuitively useable. Proactive programme management is vital. Decisions should be made and communicated with clarity. "Procrastination" should be avoided.



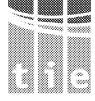
#### Mark Bourke

- Some contract issue "festering with SDS"
- Despite this some good progress made in recent times in having moved the project through significant change successfully.
- Positive transfer of risk as planned has not yet happened but still can.
- Culture is now more inclusive than it was, but the leadership team still has more to do. A project charter had now been produced but not yet communicated which would aid progress.
- Recognised the potential conflict between the creation of an inclusive culture and the existence of parties contracted through "aggressive" contracts.
- Need for more work on processes and planning
- Belief that the overall programme can be met building on recent and planned changes in order to achieve this.



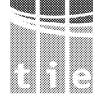
## Ailsa McGregor

- How is it going? "Was going very badly, got better, but now seems to have reached a plateau". There appears to be a project "malaise" where the programme is not sacrosanct as it should be. Backlog of issues with SDS not being managed properly. Failures by **tie** and SDS.
- Lots of resources on the project but not necessarily the right ones. Real concern at the poor value being gained from some staff and contracted staff.
- Project feels reactive rather than proactive.
- TSS are "ineffective"
- Real concern about the design review process difficult to drive without line management responsibilities. Real need to inject energy to make it effective.
- **Risks** Programme "a need to transform" to meet it.
- Solutions Change the people that need changing + leadership from the top.



## Specific Design Review issues

- The effective engagement of CEC remains an issue
- The Charettes process may lead to significant programme and cost risk as the enforced outcomes may not be consistent with the design and procurement assumptions. Believed to be close to an end – could more issues arise?
- The latest design review process seems to work, but resourcing may need to be reviewed.
- The alignment of the design review process and the procurement process needs further understanding are the assumptions made for the procurement process in order to make progress the same as the design assumptions? And how are they kept aligned? If they are not aligned how is the risk mitigated?
- SDS interaction and management is not effective.



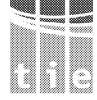
### Themes from the interviews

#### Issues

- The Tram Project is reactive and feels unplanned.
- Few <u>believe</u> the programme can be met (with current arrangements)
- Not enough of the right experience in the right place to aid achievement of good solutions first time
- CEC seen as (necessarily) having many factional and incompatible views which need joining up.
- The Tram Project is not one team
- Design should be seen as an iterative process, but is not accommodated as such.
- TSS feel isolated and not part of the team

#### Interviewees' 'solutions'

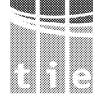
- More experienced staff in the right places less overall
- Create or use a natural hiatus to re-think the plan
- Enforce the discipline of change control and manage the SDS contract as contracted.
- Engage with CEC more effectively
- Have a project work plan aligned to the delivery plan which is practical to use.
- Change some of the people



# **Analysis**

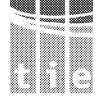
- The issues and solutions from the interviewees have a good degree of common ground.
- There is no disagreement on programme risk the programme will most likely not be met with current arrangements.
- Change control appears to need improvement and the need to understand how procurement and design assumptions are managed and aligned remains.
- The need to create overt common purpose and direction (and reduce energy spent on making internal processes work) is great.
- The need to move from the perception of reaction to planned action is great.
- Fixing these two issues will most likely lead to a reduction in spend run-rate planning enables achievement of the right thing first time, whereas reaction rarely does.
- To move from reaction to planned action while still delivering the work will prove difficult

   but must be attempted.



## Specific Strategic Problems

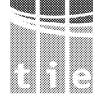
- The intention for tie to concentrate on strategic direction rather than detailed management has not been met.
- The management arrangements for the SDS contract are not appropriate for the detailed design phase – the provisions of the contract are not being utilised fully and the information turnover rate probably underestimated.
- The use of the TSS contract has not yet delivered the intended benefits. This is partly
  due to the fact that the form of management of the SDS contract has not allowed
  focused action by TSS, and so efficient use of TSS resources. It is also partly due to the
  fact that tie have not adopted their intended strategic role and so have managed TSS
  personnel on body-shopping arrangements rather than the TSS contract.
- The creation of one team from tie staff and contracted parties is not incompatible with effective management of the TSS and SDS contracts as a normal part of the management process – An effective team ethos should transcend its supporting contractual arrangements. This needs to be overtly addressed in the solution set.



## Solution Sets

A successful solution set is likely to contain the features of:

- Strong leadership fostering common goals and direction **outward facing** delivering political and public support (also important to prevent a governance 'crisis' see Trudi Craggs' notes) **inward facing** creating the environment which makes everybody want to cooperate. **tie** occupies a strategic role, delivering through its TSS and SDS contracts but with one team ethos.
- Local work delivery plans for project staff linked to the project deliverables plans.
- A small number of more effective high-impacting project management processes such as design review and change control – which are rigorously enforced.
- Excellent, intuitively useable information management tools which can cope with high volume and assured integrity.
- Management of the TSS and SDS contracts as originally designed.
- Ensuring that if there is any organisation change it is done to support process change as the prime mover, ensuring best skills-fit for the role.
- Acceptance that the project delivery plans may need to change to assure delivery from this point.



#### Action to deliver a solution

- A strategic level decision needs to be made on the need for action.
- There appears to be no shortage of ideas from the project team so they should grow their own solution(s).
- Leadership from the top is the most important feature to mould and encourage these solutions and, in the first instance, overcome barriers (perceived or real) between tie, TSS and SDS. The creation of a vision for the end-game is vital as part of this. Leadership is also the right tool to use to prevent the formation of a vacuum of ideas this encourages more reactive activity.
- Before specific solutions can be generated there needs to be a general sharing of issues to avoid everyone concentrating on their own solutions which act to the detriment of others.
- The project is resourced and structured to deliver a project, not to re-invent itself.
   Support in creating a solution to acknowledged problems is important to enable change while still delivering.