New BT Contract: Enterprise Asset Management (EAM)

Recommendation

That the Board:

- i. Notes that AT is proceeding to RFP for an Enterprise Asset Management solution.
- ii. Notes that a business case will be presented to the Board, prior to contract signing, if the project cost estimates exceed \$5 Million.

Executive summary

- 1. Auckland Transport is facing significant pressure to improve efficiency and to deliver smarter technology solutions to meet business needs and opportunities. We have an increasing asset base, rapidly changing digital landscape, growing maintenance and operations funding gap and a changing workforce environment. To address these challenges and realise required efficiency gains we need robust, comprehensive and reliable information.
- 2. AT has no single asset management system, and has no capability in any system for the new Business Information Models (BIM) files that engineering companies are now providing at the end of the various projects undertaken on behalf of AT. These detail all the assets and as-built documentation, warranty information and maintenance schedules. Currently, these files are printed and manually updated with changes. CRLL requires AT to specify a solution that AT will have for these files so that CRLL can include this in their supplier contracts.
- 3. Historically, many organisations have treated asset management as a single function within the organisation that simply performs periodic strategic asset planning with an operational focus on maintenance and renewals. Enterprise Asset Management describes a way of coordinating the functions across the whole enterprise that optimises asset based services and drives value for money and customer service over the whole of the asset life.
- 4. Following an assessment of maturity against the International Organisation for Standardisation (ISO) standard for Enterprise Asset Management, Auckland Transport (AT) has developed an Enterprise Asset Management strategy which over time will address all of AT's assets. When implemented, this will deliver business improvements tailored with the adoption of an integrated digital system solution that will drive business efficiencies and customer responsiveness. In other words, it will deliver on our smart buyer strategy.
- 5. This will be a long-term initiative. It is not proposed to launch a large-scale project, but to implement a core generic system that AT will input the asset data and rollout over a number of years, and to the CRLL delivery timelines.





6. It is assumed that once BT staff are initially trained, they will be able to configure the core system once procured and that vendor assistance will be limited to specific areas where there is knowledge or expertise gap.

Previous deliberations

7. Feedback from the 9 May Board meeting has been incorporated into this report.

Strategic context

- 8. The proposed Enterprise Asset Management approach is aligned with both AT's Technology Strategy (June 2016) and the Sustainability Framework (March 2016) Focus Area 6: Innovation and Technology.
- 9. This paper details AT's approach to managing the business processes and technology that support the stewardship of a transport network and consequently contributes to the social and economic outcomes contained in the Auckland Plan. The asset information world is changing, and AT needs to respond through strengthening its application of asset management and the digital technology that underpins both network performance and the customer experience.

Background

- 10. AT is responsible for the region's transport services and the associated assets. These linear and non-linear assets include roads, bridges, street lighting, cycling, parking and public transport facilities and buildings.
- 11. AT is also facing significant challenges:
 - Significant population growth forecasted
 - Increasing network complexity
 - Constrained budgets particularly for operations and maintenance (OPEX)
 - A growing asset portfolio, with major infrastructure projects planned and underway
 - An increasing need to not only achieve, but transparently demonstrate value for money.





12. Currently asset management has a limited lens across AT's business, being mainly focussed around managing and optimising renewals and maintenance. Opportunities to enhance customer outcomes and to maximise the benefits are being missed through not taking a whole of life approach, from initial strategic planning through to decommissioning. A silo-ed approach to data and information also reduces the opportunity to optimise costs and streamline processes. A whole of business view to managing assets is known as Enterprise Asset Management (EAM) and is the subject of a significant ISO standard (ISO 55000) which identifies good practice in asset management. EAM encompasses both business processes and the management of data and information to help align traditional asset management and organisational requirements.

External Consultation/Engagement

13. None currently identified.

EAM Programme Activities

- 14. The EAM strategy recommends moving to a single EAM technology solution, and identifies a number of worthwhile benefits in doing so. This is also consistent with many of the EAM vendors that provide a single product capable of managing all the assets AT has.
- 15. At the May Board meeting BT indicated:
 - "By June this year a request for the submission of a digital technology solution that can support the Enterprise Asset Management initiative will be put to the market. This will clarify the competency of the market to deliver a fully integrated system to support digital engineering across AT".
 - "The outline business case and project mandate for Enterprise Asset Management are currently being developed. These will further define both governance and project control for business and system improvements, along with a clearer definition of individual work streams and costs."
- 16. The above timeline has not been achieved for a variety of reasons, including taking longer to define requirements clearly, and impacts of staffing changes.
- 17. The selection of the digital technology solution is underway.

It is important to understand that technical solution will drive different implementation approaches, i.e. SAP is more complex in its solution involving multiple different products and also has multiple vendors in country that can implement either the entire solution or the individual components where they have expertise. For other solutions that are less modular (more integrated) a different approach on a single solution is required.



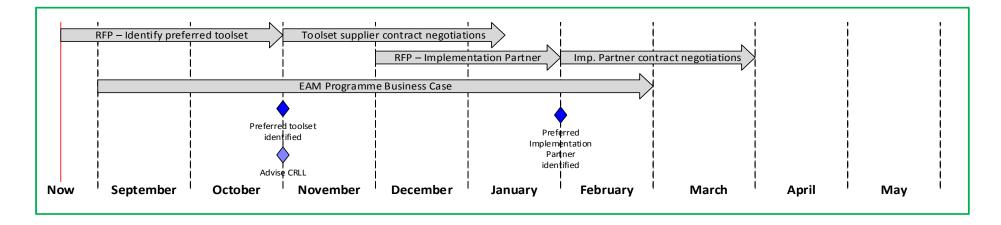


It is proposed to go to RFP to establish the costs for the technology platform and if required costs for implementation of that system. It is anticipated that any solution other than SAP will be available as Software as a Service (SaaS). An indication of resource costs (if required) to assist with future implementation will be obtained so that AT can take into account the overall life cycle costs.

If it is established that AT needs significant assistance on an ongoing basis to implement the best technical solution due to complexity, then a second RFP for that can be completed with firms familiar with the selected technology. At this point the total costs would be known.

This change will enable AT to provide the CRL team with an indication of our preferred toolset by November and in doing so allow them to undertake planning activities they will begin at that date.

Current EAM Toolset Procurement Timeline:







Next steps

- 18. In September, an RFP (Request for Proposal) for a digital technology solution that can support this Enterprise Asset Management initiative was put out to the market. Proposals received will be evaluated for suitability and price and it is expected that in November a clear preference will have emerged. The CRLL team will be notified of our preference at that point.
- 19. In December, a request for the proposal of a digital technology solution implementation partner, if required, will be put to the market. Proposals received will be evaluated for suitability and price and it is expected that a preferred partner will be selected.
- 20. A Business Case for the whole EAM Programme end-to-end will be presented to the Board dependent on the technology selection and the requirement or not for an implementation partner in either late 2017 or early 2018.
- 21. The Board will next be updated on EAM activities in November 2017 following the evaluation of the RFP.

Document ownership

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