

1 March 2016

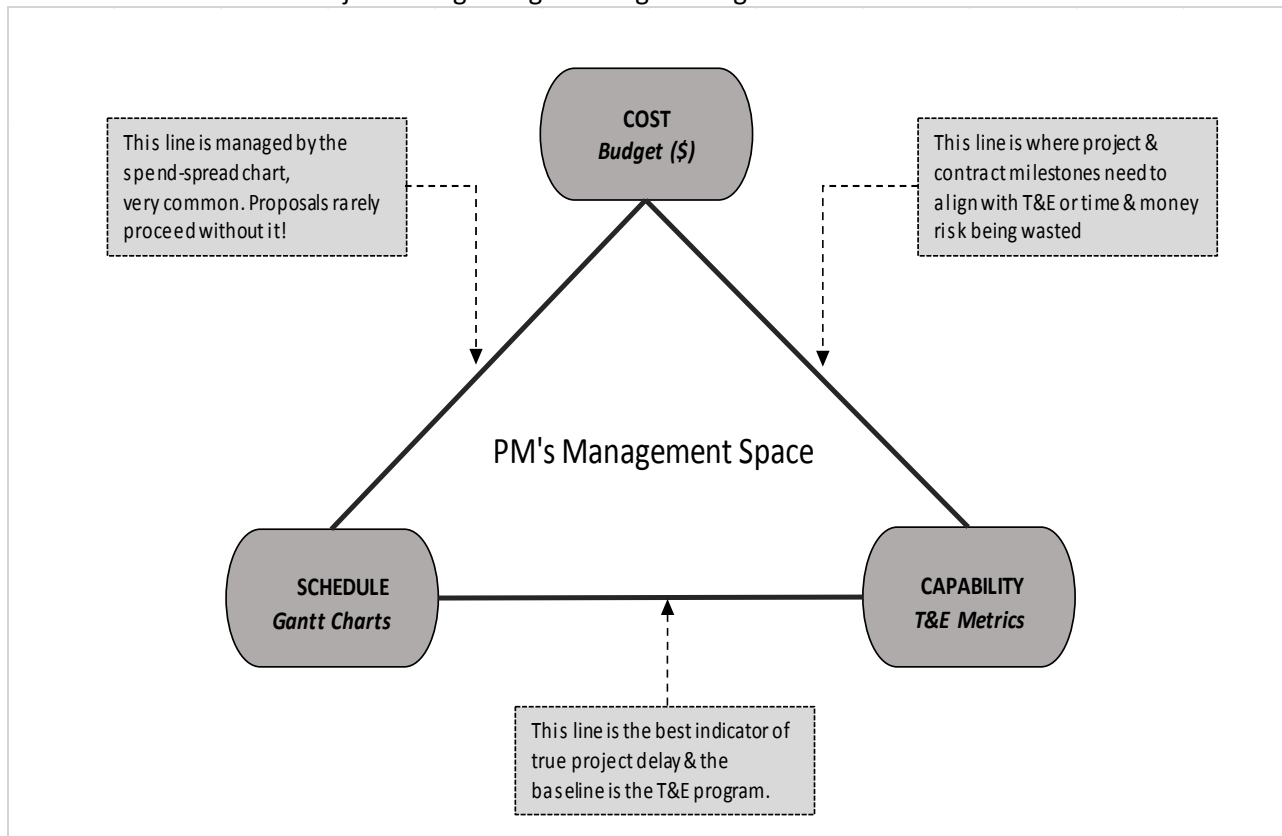
Joint Committee of Public Accounts and Audit  
Review of Auditor General's Report 16 Concerning Major Projects 2014-15  
PO Box 6100  
Parliament House  
Canberra ACT 2600

Dear Chairman and Committee Members,

**IMPROVING AUSTRALIA'S FUTURE MAJOR PROJECTS REPORTS BY INCLUDING CAPABILITY MEASURES AND ASSESSMENTS BY TEST AND EVALUATION PROFESSIONALS**

1. I was the Director General for Test and Evaluation (T&E) in Defence from 7 December 2010 until 19 January 2015 and I have since been employed as a Senior Lecturer in T&E at the University of NSW in Canberra. I have had many occasions over the last five years to review the evolving annual major project reviews (MPRs) to the JCPAA by the ANAO and DMO. In the same period, I have had a chance to review annual reviews to U.S. Congress by the U.S. Department of Defence, usually in reference to U.S. capabilities that Australian Defence is procuring.

2. I am encouraged by the accountability that the annual reporting to JCPAA by Australian Defence has engendered, however, the report remains focused on cost and schedule and not on capability. The illustration below which I use with my students, shows where T&E fits within the Project Manager's simplistic 'Iron Triangle'. This triangle symbolises the constant effort a project manager has to make to balance cost, schedule and capability. The challenge for a project manager in a complex acquisition and systems space like Defence, is to get measures for all three corners and track completion of them so that you do not end up with all of the cost and schedule spent in project management fees and no capability, or a capability that you now have to take regardless of what is on offer. Without being confrontational, suffice it to say the contractor usually has a somewhat different objective regarding securing funding commitment.



3. The difficulty in reporting capability along with cost and schedule is that, when compared to the U.S. Defense, Australian Defence does not always put in place upfront what the T&E measures are for capability and then does not always adequately track their achievement, especially in numerical terms. In part, this is because our acquisition strategies usually outsource much of the verification to the contractor and so the

capability measures are often not available (declared) in any detail until the 'design acceptance' period, quite late in the project. Hence the current MPR has short and very qualitative paragraphs defining what capability has been achieved. These statements could often be put simply as '*we are a year closer to an operational capability*' and this is rather sadly repeated until we eventually report '*we achieved a limited operational capability this year*'. That is, the numeric or logic we use on capability is often really just schedule. Also, the authority for these statements regarding capability, at least until operational capability is achieved, is usually the project manager without any real independent measure and assessment by T&E staffs. The contrast with the rigour the U.S. Defence is forced by Title 10 law to report annually to Congress is stark. The annual reporting on capability achieved through T&E metrics for all major projects is given in the U.S. by the independent Director of Operational T&E ([www.dote.osd.mil](http://www.dote.osd.mil)), whether the system is in operational T&E or earlier developmental T&E. The baseline DOT&E uses as metrics are the agreed T&E metrics for the capability set in the T&E Master Plan at the U.S. milestones for approval-to-solicit (Milestone A), approval-to-contract-development (Milestone B) and approval-to-production (Milestone C). Australian Defence often, but not always, grants approval to contract development and production in one Second Pass and the T&E metrics at Australia's equivalent milestones are at best, assessed as formative compared to the U.S..

4. I encourage the JCPAA to continue to pressure Defence to improve the real metrics and independent reporting of the bottom-right capability corner in the MPR. Until Defence has robust and rigorous T&E metrics and agencies like the U.S. has implemented, particularly since 2009, you will only get a cost-schedule distorted view of the progress of major Australian Defence projects and the trade-offs being made therein.

5. **Testimony.** I hope this overview is useful. I would gladly testify to any of what I have raised or simply to answer what questions you might have.

Yours Sincerely,

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