UNSW AUSTRALIA
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Never Stand Still

Capability Systems Centre, School of Engineering and Information Technology

Implementing Defence First Principles Review:

Two key opportunities to achieve best practice in capability development

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- Defence FPR will be judged by success of capability development reform.
- Propose
  - industry-standard PMO to oversee life cycle of all acquisition projects.
  - robust centralised branch to manage all T&E, so all projects have credible test results underpinning PMO's decision-making throughout development & fielding.
- Governance by a PMO & central T&E is key to more consistent, accountable & credible acquisitions.

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AUSTRALIAN DEFENCE FORCE ACADEMY

Senate concluded on Defence acquisition:

'*Defence projects for acquiring major capital equipment … of a scale and complexity that they present 'formidable and ever-increasing challenges'. The problems identified in defence procurement, however, are largely a function of the Defence organisation's own making—unintentionally self-inflicted. They include: inadequate planning and scoping of project; poor risk management from beginning to end of project; failure to appreciate the developmental nature of the project or complexity with integration; poor project management; underestimation of defence industry capacity; lack of skilled workforce; inadequate contracting arrangements; insufficient consideration of through-life support; and a breakdown in the relationship between the relevant service, DMO [Defence Materiel Organisation] and contractors.'*

[2012, p. 249]

Failed experiment?

- What's disappointing about Senate findings is they follow over a decade of significant investment by Defence into a specialist acquisition organisation, with the rare latitude & time to invest in the necessary skills & processes at all levels to do acquisition well.
- Chapter 2 found some $7.6 billion of projects between 2000 and 2010 had significant management difficulties, which is about 10% by value for the period.
- While that proportion of problem projects would be a good record in some industries, closer examination finds that most difficulties were largely avoidable. i.e., Chapter 12 found many surprise technical risks could have been found substantially earlier with the proper use of T&E, especially before contract

FPR found:

- *'Acquisition teams must comply with over 10,000 specific policies & procedures which includes 35 policy & procedure artefacts totalling around 12,500 pages on procurement processes & controls.'* (p. 14)
- '*Recurring issues with a lack of accountability, ill-defined authority, unclear allocation of responsibility & great difficulty measuring & monitoring real performance.'* (p. 14)
- *'The current capability development construct creates a disconnect between customers & the purchaser as well as multiple & unnecessary handover points which increase complexity & risk.'* (p. 32)
- Worse still, the FPR found that, despite the DMO experiment, Defence was an '*organisation which has drifted from contemporary best practice*' (p. 1)

FPR all but recommends PMO:[1]

- *'A stronger & more strategic centre able to provide clear direction, contestability of decision-making, along with enhanced organisational control of resources & monitoring of organisational performance.'*
- *'An end-to-end approach for capability development with Capability Managers having clear authority & accountability as sponsors for the delivery of capability outcomes to time & budget, supported by an integrated capability delivery function & subject to stronger direction setting & contestability from the centre.'* (pp. 5-6)
- '*standardised management & reporting tools are necessary to enable the leaders of this function to manage the business well*'
- '*A detailed set of life cycle management processes which provide the project & engineering discipline with which to manage complex materiel procurement from initiation to disposal*'

Note 1: Unless you work in Defence & think its extra not less bureaucracy!

Reform risk:

- Implementation of FPR has, principally, been left to the agencies themselves which:

"….is like prodding a very large recumbent elephant which then, after many prods, shuffles to one side then plops down again"

- Examine theories of self-perpetuating oligarchies found principally in hierarchical organisations like military & church …

PMOs:

- *PMOs began as centres of excellence in project, program and portfolio management around 2000*
- *'P' can stand for:*
  - *project,*
  - *program or*
  - *portfolio,*

  depending on the Emphasis of the PMO.
- *Roles now accredited by the like of AIPM.*

Last year's PGCS:

- ATO Assistant Commissioner stated *'the PMO is delivering better projects in accordance with the slogan, 'Right projects, right way, right results'.*

- ATO PMO encountered some strong but necessary resistance …
- hence full-scale model of process – the contentious funnel shape, in which projects are culled or reset where necessary for excessive risk or poor reviews

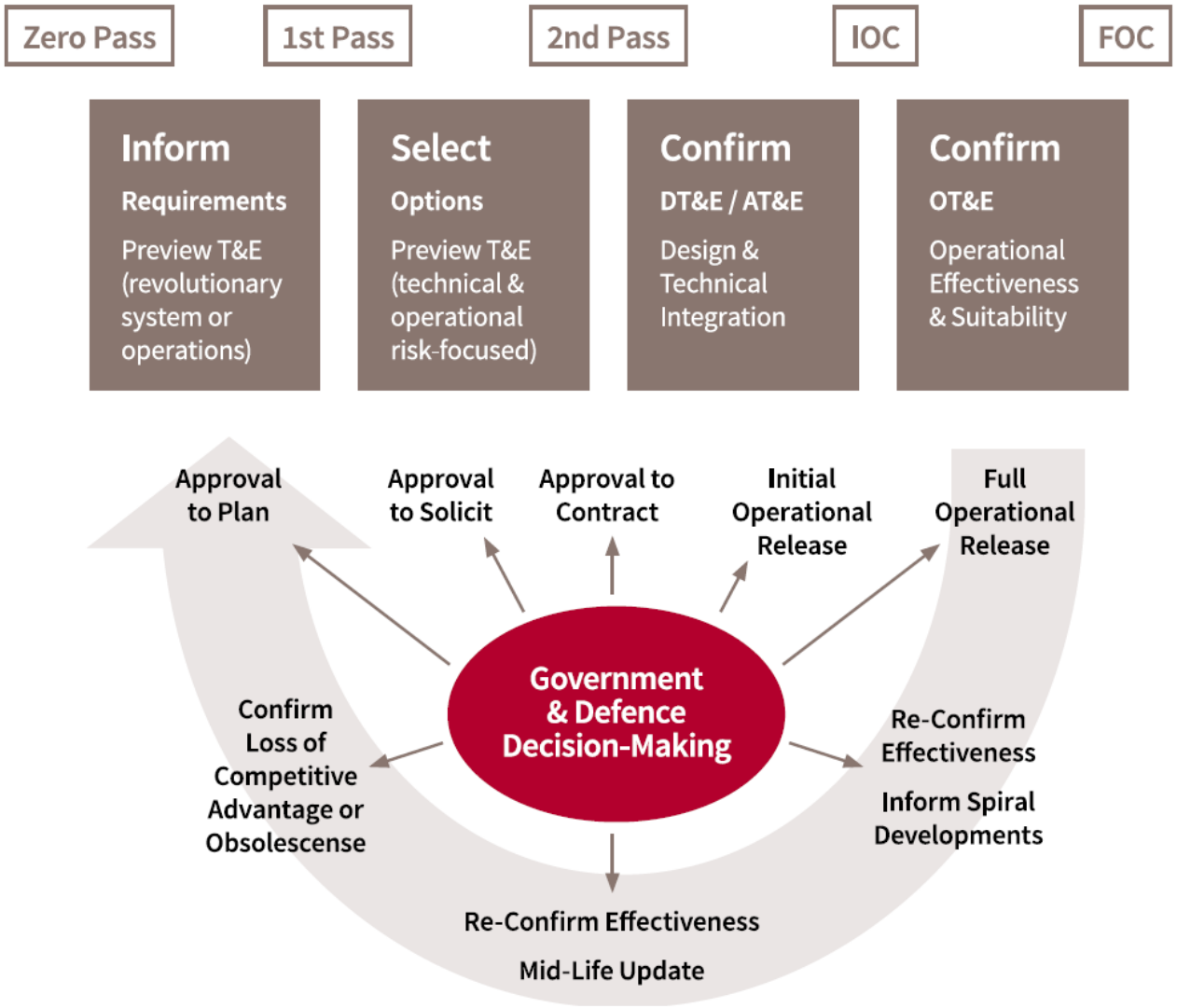
Endless calls for Central T&E:

- Central T&E is key in U.S. DoD model (see Pentagon Wars, Title 10 Congressional law & www.dote.osd.mil)
- Recommended by ANAO in 2002, rejected by Defence
- Partially implemented by Gen Hurley 2007-2015
- Reinforced by Senate Inquiry 2012 (Chapter 12)
- ANAO Audit in 2015 found:
  - continuing deficiencies in T&E policies,
  - compliance problems with those policies,
  - disparate & inadequate management of T&E competency
  - decentralisation of T&E organisation in Defence involving some 12 different T&E organisations, many of which are highly specialised to unique military functions
  - recommended FPR reorganisation strengthen T&E
- Reiterated by Parliament's Joint Committee for Public Accounts & Audit (JCPAA) in Mar 16

The T&E Challenge:

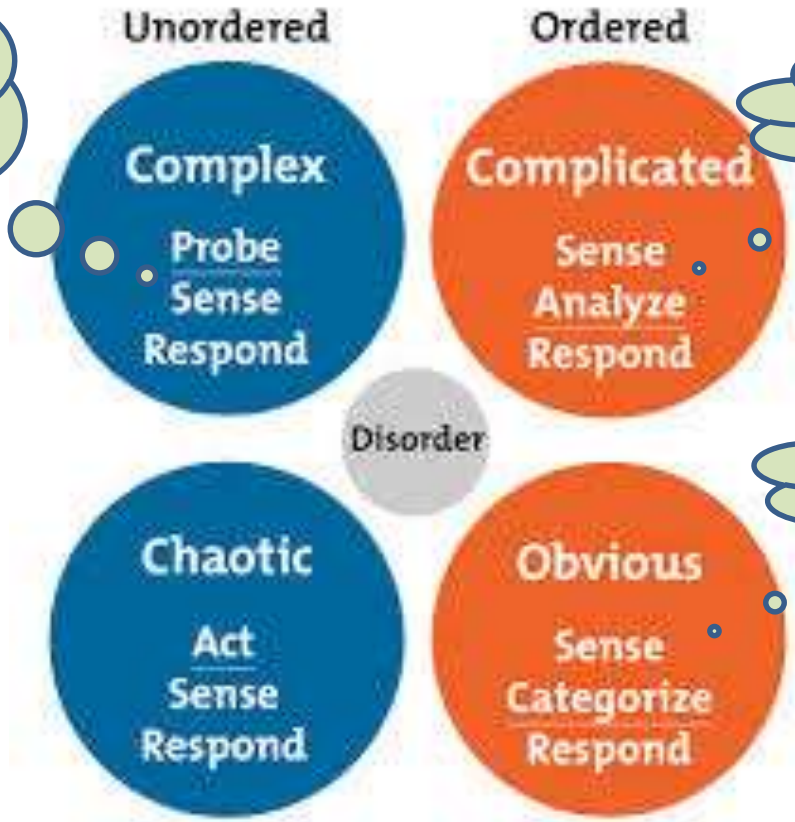
- Is to have competent T&E planned & conducted early enough to address technical risks, when the 12 T&E organisations are decentralised & there are some 180 acquisition projects at various stages in the acquisition life-cycle, each either competing for a limited T&E resource or, worse, not engaging because its advisers and contractors want to do the testing at the end (when it's too late).
- Think of a matrix of 12 teachers, each teaching a different subject, and 180 students of various ages: the challenge is to get the right teachers working with the right students at the right time. Now imagine that the students are put in charge of where they spend their money & their curriculum, but that the teachers are in charge of who is allowed to graduate by setting the final exam (in the case of T&E, being safe and effective for operational service).

T&E is key to informed decision making especially early



Think Cynefin Framework

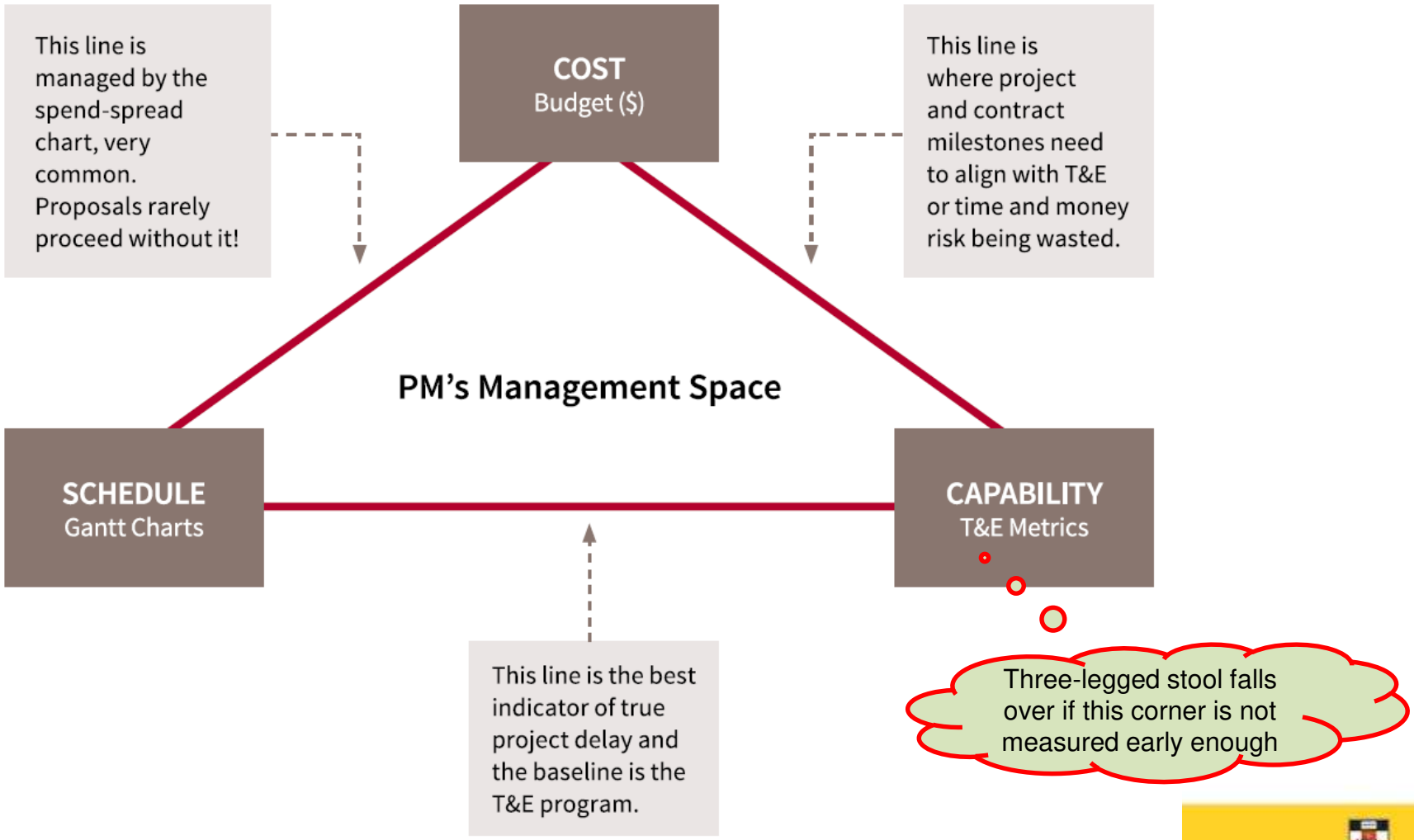
Yet Defence acquisition executives assess they are here



But test is necessary to analyze & iterate

Experience & paper-based methods handle this

Or the Iron Triangle



Questions:

Will Defence FPR (due 1 July) have a PMO?

Aka is Defence as good as the ATO or does complex equal something better than a PMO?

Will T&E be central to the new Defence lifecycle or is there a better way to inform capability decision-making?

Beware the recumbent elephant of a self-perpetuating oligarchy!