

Mr E.J. Bushell

[REDACTED]

19<sup>th</sup> March 2014

Committee Secretary  
Joint Committee of Public Accounts and Audit

*SUBMISSION TO JCPAA HEARING INTO*

*DMO MPR 2012-13 ON 20<sup>th</sup> MARCH 2014*

Please accept my apologies for this late submission. I had assumed that the 20<sup>th</sup> March hearing would be limited to the ANAO Review of the Defence Capability Development Group, and only received notice of the MPR 2012-13 hearing today.

My submission is attached.

Kind Regards and best wishes for a successful hearing,

[REDACTED]

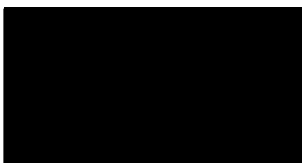
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*SUBMISSION TO THE*

*JCPAA HEARING INTO*

*DMO MPR 2012-2013*



*E.J. BUSHELL*  
*Air Cdre, RAAF (R'td)*

*19<sup>th</sup> March 2014*

## SUBMISSION TO JCPAA HEARING INTO DMO MPR 2012-2013

### BACKGROUND.

The author has submitted to the JCPAA analyses of all five MPRs raised to date, in addition to comments on several of the JCPAA hearings and reports that followed.

Those analyses have traced the evolution of Defence/DMO's public sector administrative processes over that period and provided evidence derived from the MPRs themselves which shows that the use of such principles and processes are wholly inappropriate for the capability development, acquisition and sustainment of Australia's military requirements.

The author's analysis of the MPRS for 2010-11 (especially Annex A, which identifies the common reasons behind project problems) and 2011-12 (which includes comments on JCPAA Report 436) are particularly relevant in highlighting this conclusion. The JCPAA is thus urged to take those two analyses into account at this hearing.

In addition, any search for accessible, transparent and accurate information on Australia's capability acquisition should include the findings of the project-specific audits conducted by the ANAO. Those completed recently for the M-113, the Air Warfare Destroyer and the Defence Capability Development Group, for example, are quite revealing.

Finally, the Final Report of the Foreign Affairs, Defence and Trade References Committee on Procurement Procedures for Defence Capital Projects (Aug 2012) provides much background on the subject.

In view of the the above, and the fact that MPR 2012-13 shows no material improvement in performance, the analysis of MPR 2012-13 that follows will be brief and cover only a few aspects that stand out

### SUMMARY.

The Auditor-General's Forward notes that "*Schedule slippage remains a key focus for the DMO*", and "*The ANAO will continue to monitor delivery in terms of cost, schedule and capability*". However, as the DMO does not administer all costs, schedule, or capability aspects of major projects, it is not able to provide meaningful information on project status. It can only give late and unreliable subjective estimations, which do not appear to have improved in accuracy over the past six years. Hence, under current Guidelines, neither the DMO nor the ANAO is able "*to monitor project delivery in terms of cost, schedule and capability*" in any meaningful or accurate way.

Furthermore, much of the data needed to assess project status accurately and timely remains unavailable, as: "*Excluded from the Scope of the ANAO's review is PDSS data on expected future events or the forecast achievement by future dates (including forecasts on delivery of key capabilities), the project financial assurance statements, and major risks and issues. Accordingly, the conclusions of this review does not provide any assurance in relation to this information*".

In short, while the MPRs raised over a period of six years have provided considerable insight into DMO's administration of major projects, a clear, accurate and timely status of major projects has not been forthcoming and, under current public sector administrative processes, nothing will change.

## ASSESSING PROJECTS' PERFORMANCE.

Three key indicators have been derived to analyse the three major dimensions of a project's progress. (Para 2.2, Page 45):

- ⬆ The percentage of budget expended. (Cost).
- ⬆ The percentage of time elapsed. (Schedule).
- ⬆ The percentage of key capabilities expected to be delivered. (Capability).

Percentage indicators are used to enable comparisons between different projects, and to provide an overall view of progress performance. The reasoning behind such a methodology is unclear, as there is no inherent nexus between the percentages derived and Project Maturity (Status). ANAO observations at Pages 46 and 47 support this concern. Cost, Schedule and Capability are driven only by the specific characteristics of individual projects and how well they are managed.

ANAO's analyses “..continues to highlight inconsistencies within the application of Project Maturity, reducing the level of reliability of maturity assessments for key decision makers..” Para 2.13, Page 50).

While much touted as a major management initiative, the Summary Longitudinal Analysis included at Table 2 (Page 23) explains little of value in as to why Defence/DMO's current “business – focussed”, contract administration processes, have, over the past three years, seen:

- ⬆ Schedule slippage from 760 months to 957 months (from 31% to 36%),
- ⬆ Average Schedule Slippage per project grew from 30 months to 35 months.
- ⬆ Average Annual Slippage grew from 72 months to 147 months (3% to 5%).

However, averages are not a good measure of project performance. Project management performance needs to be measured accurately and consistently for each project across all three key measures of Capability, Schedule and Cost, which current Defence/DMO contract administration processes are not designed to do. Nor do they permit identification of the impacts of schedule slippages upon Australia's capability and capability planning objectives.

Furthermore, while the ANAO's assurance review shows that “*Nothing has come to the attention of the ANAO that causes us to believe that the information in the PDSSs, within the scope of our review, has not been prepared, in all material respects, in accordance with the Guidelines*” (Page 22). the ANAO observed, in regard to Project Management:

- ⬆ “...inconsistency in the application of the Project Maturity Framework, reducing its level of reliability of the maturity assessment (Section 7 of the PDSS).
- ⬆ “..inconsistent recording of major risks and issues by projects from the DMO's Monthly Reporting System (Section 6 of the PDSS).
- ⬆ “..inconsistency in the application of the Capability Assessment Framework and difficulties in gaining assurance in relation to expected capability delivery” (Section 5 of the PDSS).

Given that many of the measures of capability are outside the scope of the ANAO review, and that the PDSS data is inconsistent, the ANAO, under current Guidelines, is simply unable to give the level of assurance sought by the JCPAA and Government.



## PROJECT MATURITY FRAMEWORK.

*“The project maturity framework....is a methodology used to quantify the maturity of projects as they progress through the acquisition cycle”.* (Note 18 Page 22)

Project maturity (Status) scores comprise an odd selection of seven attributes, assessed subjectively against a score 10 (Para 1.31, Page 38). These assessments have been found to be imprecise and inconsistent and lacking in alignment with the Defence Capability Plan. However, *“The benchmarks set for all seven attributes ...are the same for all projects regardless of the acquisition type”.* (Para 1.33, Page 38). ANAO then calls for *“emphasising the importance of objective and soundly based assessments of Project Maturity”.* (Para 1.35, Page 39)

However, objective and soundly based measures of project status may be obtained only from a Project Management Data Base. That is, by adopting Project Management Systems and disciplines under the control of operators and engineers having a sound knowledge of the operation and engineering aspects of the technology comprising the project.

## CAPABILITY ASSESSMENT FRAMEWORK.

*“The Capability Assessment Framework is a methodology used to assess the likelihood of delivering the key capabilities outlined in the Materiel Acquisition Agreement (MAA)”.* (Note 19, Page 22).

Previous ANAO reviews *“found that measures of capability performance recorded in the Monthly Reporting System do not always align with the MAAs, and are inconsistent in terms of degree of detail represented by each measure”*, a problem seen also with MPR 2012-13.

Furthermore, ANAO notes that advice of achievement of key capability milestones can be long delayed, and predicted capability involves making assumptions. In short, visibility of capability progress is diffused across areas outside the DMO, is late, based upon subjective assessment, and much remains out of scope of the ANAO review.

Under standard Project/Engineering Management Systems, project progress towards achieving capability requirements would (with Schedule and Cost) be visible, under tight project and engineering control and come under constant risk management.

As the ANAO reports (Para 1.53, Page 42), *“Decentralised project management and manual processes increase the cost of the production and validation of project information and does not facilitate ready access to key project information for DMO personnel”.* The ANAO also notes that there are 7,500 policies governing DMO's processes for project management – the price for not using standard and proven Project/Engineering Management Systems under the control of people skilled in the management, operation and engineering aspects of the technology comprising the capability. As a result, Defence and the DMO have had to develop alternative processes that better accord with their inappropriate, public sector methodologies and their unskilled workforce – a proliferation of processes and complexity.

## **RISK MANAGEMENT.**

The Enterprise Risk management Framework (ERMF)

The inability of both Defence and the DMO to manage risk has been a feature of all MPRs, specific ANAO project audits, as well as the 2012 Final Report of the FADT References Committee inquiry into procurement procedures for Defence capital projects, all to no material effect.

The key reason for this is the inability of Defence and the DMO to specify operational and engineering requirements fully, and in the detail necessary to ensure that Contractors know what is needed, and so may be held to providing what is needed, and then ensuring that those requirements, throughout the project, come under project management staff having sound operational and engineering competencies in the technology comprising the capability, while following Project and Engineering Management systems and disciplines. Refer also to comments on Governance.

Since the late 1990s, these competencies have ceased to exist throughout the Defence Organisation – from the Capability Managers through the Defence Capability Development Group and the DMO – under Defence's "Business Model" and public sector processes. As a result, very high risks are embedded in major projects from the very beginning of capability planning, and remain entrenched and unidentified throughout the Gate Reviews and the six Governance mechanisms that follow, emerging as soon as the contract is signed and work commences. Much DMO activity, time and cost is then devoted to identifying the problems that inevitably arise from maturing risks, all of which directly impact Capability, Schedule and Cost. This has been identified in all MPRs raised to date. DMO's longitudinal analysis and governance mechanisms are all "after the event" activities; much like driving through the rear vision mirror.

The ERMF will never redress this situation.

## **COST.**

The 2012-13 MPR continues with the claim that projects come in within their government-approved budget, which is difficult to believe when Schedule delays from a year to over a decade are encountered which require prolonged Project Office, contractor, consultant, oversight governance body, foreign services or government assistance, and other remedial action, none of which was foreseen when the project was proposed and costed. Presumably, Defence/DMO overheads are not attributed against individual projects, and contingency budgets are sufficiently liberal to cover the cost of even Catastrophic risks occurring.

The ANAO's additional analysis of the relationship between cost and Project Maturity" *...continues to highlight inconsistencies within the application of Project Maturity, reducing the level of reliability of maturity assessments for key decision makers...*" (Para 2.13, Page 50)

The DMO's methodology for identifying and reporting project cost status is clearly inadequate. Payment should be made only when project management is completely satisfied that those tasks attracting costs have been completed fully and to the required standards. DMO is unable to establish this.



## GOVERNANCE.

Current governance calls upon:

- ▲ Gate Reviews.
- ▲ The Projects of Concern List.
- ▲ The Early Indicators and Warnings System.
- ▲ Joint Project Directives.
- ▲ DMO's Business Systems Rationalisation.
- ▲ Earned Value Management System.
- ▲ The Project Skills Program

To repeat the author's comments on JCPAA Report 436:

“After some 13 years of evolution, Australia now has a dysfunctional capability analysis, acquisition and sustainment organisation that:

- ▲ ▪ *Proceeds to contract with inadequate statements of operational and engineering concepts and requirements, leading to the procurement of a wrong, inadequate or overpriced capability..*
- ▲ ▪ *Proceeds when the design is immature or not understood.*
- ▲ ▪ *Is unable to manage system or software development or integration, or test and acceptance.*
- ▲ ▪ *Is unable to identify and manage project risk (essentially operational and engineering factors) and has to resort to buying its way out of the resulting problems.*
- ▲ ▪ *Does not have the operational, engineering or Project Management skills and competencies essential to the projects being undertaken.*
- ▲ ▪ *Focuses upon buying materiel rather than managing projects.*
- ▲ ▪ *Has now had to outsource its contract management and contract negotiation functions.*

*In fact, all the evidence points to Defence/DMO Major Projects suffering persistently self-induced injury through:*

- ▲ ▪ *Adopting public sector commodity product and service principles that have proven to be wholly inappropriate for the acquisition and sustainment of highly technology-dependent military capabilities.*
- ▲ ▪ *Failing to adopt the required long-trying and successful Project and Engineering Management methodologies.*
- ▲ ▪ *Replacing skilled and competent project and engineering managers with people lacking those skills and competencies.*

*The result has been (broadly):*

- ▲ ▪ Projects have been put forward for approval and acquisition that have not been fully and accurately scoped and specified in project, operational or engineering terms.*
- ▲ ▪ Source selection has been poorly managed, resulting in incorrect or poor acquisition decisions having inherent risks.*
- ▲ ▪ Contract negotiation is now beyond DMO's capabilities as (lacking even basic project, operational and engineering competencies) the Department of Defence is no longer seen as an informed and smart customer.*
- ▲ ▪ Project capability, schedule and cost risks inevitably arise that are beyond the DMO's competencies to manage. The problems arising from undetected risk are thus 'managed' through the Contingency Budget.*
- ▲ ▪ Capability schedule delays and sustainment difficulties have left protracted, gaping holes in Australia's military capabilities.*

**This largely summarises the problems that will face the ANAO Hearing**