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The Parliament of the Commonwealth of Australia

# Report 442

## **Inquiry into the 2012-13 Defence Materiel Organisation Major Projects Report**

Joint Committee of Public Accounts and Audit

May 2014  
Canberra

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ISBN 978-1-74366-160-4 (Printed version)

ISBN 978-1-74366-161-1 (HTML version)

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## Foreword

This report constitutes the first Defence Materiel Organisation (DMO) Major Projects Report (MPR) reviewed by the Joint Committee of Public Accounts and Audit (JCPAA) in the 44<sup>th</sup> Parliament and the sixth to be reviewed by the JCPAA overall. This year's report covers 29 projects with a combined approved budget of \$44.325 billion.

The DMO MPR constitutes the ANAO's review and analysis of the progress of selected major Defence acquisition projects managed by DMO, and aims to consider cost, schedule, and capability performance and to function as a longitudinal analysis of procurement projects over time.

The JCPAA assesses the overall content, accessibility and transparency of the information provided in the MPR, and also reviews and endorses the guidelines that constitute the MPR.

The Committee is committed to ensuring the information presented in the Major Projects Report helps to maximise transparency and accountability in the Defence acquisition process for major projects managed by DMO.

Specific areas of focus in the Committee's review of this year's report include cost, schedule, and capability performance, and governance and business processes.

Defence Major Projects are inherently complex, a point acknowledged by the Auditor-General in his opening remarks in this year's MPR. Meeting cost, schedule and capability targets must be considered in this context, particularly for developmental projects.

DMO has previously summarised the range of issues affecting the completion of Major Projects. These include managing induced schedule delays as a result of budgetary constraints; employing and maintaining an appropriately skilled workforce where the skills required are in high demand by other industries; acquiring new equipment presenting multiple integration challenges; contractor overestimation of the technical maturity of proposed equipment solutions; contractor underestimation of the level of effort and complexity required to deliver new equipment; unavailability of in-service equipment (due to operational requirements) limiting the ability of projects to install, and test new or upgraded

equipment in accordance with the original planned project schedule; complying with increasingly demanding certification and regulatory requirements; and ensuring access to intellectual property to enable continued further enhancement and improvement of systems.

The Committee acknowledges these various challenges.

The creation of DMO and the evolving improvements in how it operates were a significant step forward for Australia. The MPR is an important element of this progression along with the corresponding parliamentary scrutiny.

The Committee's report makes recommendations directed at:


- Improving the reporting of budget estimates and actual expenditure;
- Improving the line of sight between the MPR, the Portfolio Budget Statements and Portfolio Budget Estimates Statements;
- Developing a more effective methodology for reporting sustainment activity and expenditure;
- Improving the reporting of slippage post Second Past Approval and acquisition type by approval date;
- Improving the assessment and reporting of statements relating to capability;
- Retaining the publication of project maturity scores until they are no longer required by the JCPAA; and
- Improving reporting on exited major projects.

On behalf of the Committee, I would like to express my appreciation for the work done by the DMO and the Australian National Audit Office in producing the Major Projects Report each year.

I also thank the witnesses from the DMO and the ANAO for their participation in the Committee's review.

Dr Andrew Southcott MP  
Chair





## Membership of the Committee

Chair Dr Andrew Southcott MP

Deputy Chair Mr Pat Conroy MP

Members	Ms Gai Brodtmann MP	Senator Cory Bernardi
	Mrs Jane Prentice MP (from 25/02/14)	Senator Alex Gallacher
	Mr Craig Laundry MP	Senator the Hon Kate Lundy
	Mr Andrew Giles MP (from 18/03/14)	Senator Anne Ruston
	Dr Peter Hendy MP (from 18/03/14)	Senator Dean Smith
	Mr Michael Sukkar MP	
	Mr Angus Taylor MP	
	Mr Tim Watts MP	
	Ms Lisa Chesters MP (until 18/03/14)	
	The Hon Tony Smith MP (until 18/03/14)	
	The Hon Dr Sharman Stone MP (until 25/02/14)	

## Committee Secretariat

Secretary            Mr David Brunoro  
                             Ms Susan Cardell

Research Officers    Mr Shane Armstrong  
                             Mr Nathan Fewkes

Administrative Officers Ms Antoinette Gardiner  
                             Ms Tamara Palmer



## List of abbreviations

AMOTS	Australianised Military Off-The-Shelf
ANAO	Australian National Audit Office
COTS	Commercial Off-The-Shelf
DMO	Defence Materiel Organisation
FMR	Final Materiel Release
FOC	Final Operational Capability
IPA	Independent Project Analysis, Inc.
JCPAA	Joint Committee of Public Accounts and Audit
JPD	Joint Project Directive
MAA	Materiel Acquisition Agreement
MOTS	Military Off-The-Shelf
MPR	Major Projects Report
PDSS	Project Data Summary Sheet





# List of recommendations

## 3 The Committee's Review

### Recommendation 1

The Committee recommends that starting from the 2013-14 Major Projects Report, the Defence Materiel Organisation and the Australian National Audit Office publish expanded information on each Major Project's budget estimates and actual expenditure during the financial year. Additional details for each Major Project could include:

- Comparison of variation citing specific dollar amounts;
- Percentage of variance; and
- Overall totals and averages, where calculable.

Additionally, ANAO should analyse DMO's reasons and explanations for projects' in-year budget variance.

### Recommendation 2

The Committee recommends that the Australian National Audit Office and Defence Materiel Organisation consult as necessary and amend Section 2.2 of the PDSSs, in time for submission of the draft 2014-15 MPR Guidelines to the JCPAA, to ensure that the following are reported:

- (a) each Major Project's 1 July budget estimates, as published in the Portfolio Budget Statements;
- (b) mid-year estimates, as published in the Portfolio Additional Estimates Statements;
- (c) if necessary, any more subsequent estimates since the mid-year estimates; and
- (d) 30 June actual expenditure; along with
- (d) explanations of variance between each of the above.

### Recommendation 3

The Committee recommends that Defence and the Defence Materiel Organisation take the necessary actions to ensure there is improved line of sight between the Major Projects Report and the Portfolio Budget Statements and Portfolio Budget Estimates Statements. For example, by improving the consistency of project names and groupings between the documents.

### Recommendation 4

The Committee recommends that the Defence Materiel Organisation prepares a suitable and separate methodology for reporting sustainment activity and expenditure, and that this methodology be reported to the Committee within six months of the tabling of this report.

### Recommendation 5

That starting from the 2013-14 Major Projects Report, ANAO publish a similar version of Figure 8 (on page 64 of the 2012-13 MPR), relating to Major Project total slippage post Second Pass Approval and acquisition type by approval date.

### Recommendation 6

That the Australian National Audit Office and Defence Materiel Organisation consult as necessary to ensure that statements or graphs relating to capability in the PDSSs, particularly Section 1.2 and 5.1, be appropriately qualified in the 2013-14 Major Projects Report, by noting that:

- The graphs in Section 5.1 do not necessarily represent capability achieved; and
- The capability assessments and forecasts in the PDSSs are not subject to ANAO's assurance audit.

#### Recommendation 7

To improve the robustness of capability performance information, that the Australian National Audit Office and Defence Materiel Organisation consult as necessary and propose amendments to Section 5.1 and 1.2 in the 2014-15 MPR Guidelines, to:

- Apply a more objective method to assessing capability performance; and
- Distinguish capability achieved from capability yet to be achieved, capability unlikely to be achieved, and capability exceeded.

ANAO and DMO should provide a specific proposal to the Committee preferably by the end of August 2014 in line with submission of the 2014-15 MPR Guidelines.

#### Recommendation 8

That DMO maintain the ability to publish project maturity scores in future Major Projects Reports until these are no longer required by the guidelines endorsed by the Joint Committee of Public Accounts and Audit.

## 4 Guidelines for the 2013-14 Major Projects Report

#### Recommendation 9

That all future Major Projects Reports, including the 2013-14 Major Project Report, include information on recently exited Major Projects, at a level similar to Tables 2.1 to 2.3 on pages 114 to 116 of the 2012-13 Major Project Report.

#### Recommendation 10

The Australian National Audit Office and Defence Materiel Organisation consult as necessary to propose amendments to the 2014-15 MPR Guidelines to make provision for information on exited Major Projects.





# Introduction

## Background

- 1.1 The Major Projects Report (MPR) is a consolidated review of 29 selected major defence acquisition projects ('Major Projects') being managed by Defence Materiel Organisation (DMO). Projects in the MPR include, for example:
- Air Warfare Destroyers;
  - Joint Strike Fighters;
  - Collins Class Submarines;
  - Armidale Class Patrol Boats; and
  - Bushmaster Vehicles.
- 1.2 The MPR reviews overall issues, risks, challenges and complexities affecting Major Projects and also reviews the status of each of the 29 selected Major Projects, in terms of cost, schedule and forecast capability. The MPR is a joint publication of the DMO and Australian National Audit Office (ANAO) and is prepared in accordance with Guidelines approved by the Joint Committee of Public Accounts and Audit (JCPAA).
- 1.3 The aim of the MPR is to improve accountability and transparency for the benefit of the Parliament and other stakeholders.
- 1.4 In 2003, the Senate Foreign Affairs, Defence and Trade Reference Committee recommended that the Department of Defence produce an annual report on the progress of major defence acquisition projects, detailing cost, time and technical performance data for each project.<sup>1</sup>

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<sup>1</sup> Senate Foreign Affairs, Defence and Trade References Committee, *Report into Materiel Acquisition and Management in Defence*, March 2003, pp.xv-xvi.

- 1.5 In December 2006, the JCPAA recommended that the ANAO receive additional funding to produce such a report. In August 2008, the Committee published *Report 411: Progress on Equipment Acquisition and Financial Reporting in Defence*, which provided a broad outline of the key features deemed critical for inclusion in the report. Thereafter, the ANAO and DMO have jointly published the MPR, which is usually released in December each year and covers the previous financial year.
- 1.6 Since the first iteration, the MPR continues to evolve. During 2011-12, a stakeholder survey found that “73 per cent of users agreed that the MPR was useful for understanding the DMO’s project performance, while around 44 per cent used it as a comparison tool and to produce further reports.”<sup>2</sup>
- 1.7 The 2012-13 MPR is the sixth produced by the DMO and ANAO. The JCPAA has reviewed five of the past six MPRs and produced reports on four (2007-08; 2009-10 to 2011-12).
- 1.8 The MPR comprises a series of Project Data Summary Sheets (PDSSs) for each of the 29 selected projects and analysis by ANAO and DMO. Project data (except forecasts of capability) is subject to an assurance audit by the Auditor-General.
- 1.9 In February 2012, the JCPAA identified the MPR as a priority assurance review.<sup>3</sup> This allows ANAO to utilise information gathering powers available under the *Auditor-General Act 1997*.<sup>4</sup>

## Role of the Committee

- 1.10 The MPR is automatically referred to the JCPAA in accordance with its statutory obligation to examine all reports of the Auditor-General that are tabled in each House of Parliament.<sup>5</sup>
- 1.11 The JCPAA assesses the content, accessibility and transparency of the information provided on Major Projects. The Committee concentrates its review on overall transparency, performance and governance, rather than specific details of individual projects.
- 1.12 More generally, the JCPAA has a duty under s.8(d) of its Act to report to Parliament on any matters in the “accounts, statements or reports” of the

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2 JCPAA, *Report 436*, p.32. Based on a sample of 86 respondents.

3 *Major Projects Report 2011-12*, p.17; JCPAA, *Report 429*, p.33; *Auditor-General Act 1997* (Cth) s.19A(5).

4 *Major Projects Report 2011-12*, p.17; JCPAA, *Report 429*, p.33.

5 *Public Accounts and Audit Committee Act 1951* (Cth) s.8(1)(c).

Commonwealth or Auditor-General “or any circumstances connected with them, that the Committee thinks should be drawn to the attention of the Parliament.”<sup>6</sup>

- 1.13 As well as reviewing the MPR, the Committee annually reviews and endorses the MPR Guidelines. The MPR Guidelines include:
- criteria for project selection and removal (or ‘entry’ and ‘exit’);
  - a list of projects proposed for inclusion or removal from the MPR;
  - the roles and responsibilities of the DMO in the production and review of the MPR;
  - guidelines for the preparation of the PDSSs;
  - a PDSS template; and
  - an indicative audit program.
- 1.14 The Guidelines endorsed by the JCPAA and used to prepare the 2012-13 MPR can be found in Appendix 1 of the MPR on page 515.

## Conduct of the review

- 1.15 The JCPAA has reviewed the MPR by way of a public hearing in Canberra with representatives of ANAO and DMO, which was held on 20 March 2014. Witnesses who appeared at the hearing are listed at Appendix B.
- 1.16 The Committee received three submissions to the inquiry, which are listed at Appendix A.

## Correction

- 1.17 In *Report 436*, on the review of the 2011-12 MPR, the JCPAA stated at paragraph 3.13:
- The MPR disclosed that approximately \$1.1 billion had been drawn upon from major project contingency budgets in 2011-12 to retire project risks, equivalent to 2.3 per cent of the total approved project budget.
- 1.18 This statement was attributed to page 177 of the 2011-12 MPR. Paragraph 2.49 on that page stated:

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6 *Public Accounts and Audit Committee Act 1951* (Cth) s.8(1)(d).

To 30 June 2012, of the total contingency allocated across the 29 projects, approximately \$1.1b (or 2.3% of total approved project budget of \$47.3b) has been applied to retire project risks.

- 1.19 In a letter dated 20 September 2013, Mr Warren King (CEO, DMO) wrote to the JCPAA advising that:

The \$1.1 billion is a valid summation of contingency expenditure, however, it should have been more clearly explained that it has been drawn down over the life of the projects since their various approval dates, and not just in the 2011-12 financial year.

- 1.20 In December 2013, after the Committee was re-formed following the 2013 general election, the JCPAA authorised publication of Mr King's letter.<sup>7</sup>
- 1.21 The JCPAA acknowledges that paragraph 3.13 of *Report 436* incorrectly attributed \$1.1 billion of contingency expenditure to the 2011-12 financial year, rather than over a longer period of time.

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7 See JCPAA website:  
<[http://www.aph.gov.au/Parliamentary\\_Business/Committees/House\\_of\\_Representatives\\_Committees?url=jcpaa/defenceannual1112/govtresponses.htm](http://www.aph.gov.au/Parliamentary_Business/Committees/House_of_Representatives_Committees?url=jcpaa/defenceannual1112/govtresponses.htm)>

## Major Projects Report 2012-13

### Introduction

- 2.1 This chapter provides an overview of the 2012-13 Major Projects Report (MPR) and a summary of the Australian National Audit Office (ANAO)'s findings in regard to cost performance; schedule performance; capability performance; and governance and business processes.
- 2.2 The MPR is structured into three parts:
- Part 1: ANAO review and analysis, which includes:
    - ⇒ Analysis on the three key elements of the Project Data Summary Sheets (PDSSs): cost, schedule and capability performance.
    - ⇒ Longitudinal analysis of projects over time.
    - ⇒ Discussion of general issues, not within the direct scope of the assurance audit, in particular governance and business processes.
    - ⇒ Noting of any interesting or unusual patterns evident from DMO's project data.
  - Part 2: DMO overview of strategic performance and project performance. This includes:
    - ⇒ Consolidated information on the status of Major Projects, such as cost and schedule, reflected by the PDSSs.
    - ⇒ Discussion of Major Projects' progress or challenges.
  - Part 3: Auditor-General's independent review report; DMO Chief Executive Officer's statement and 29 PDSSs.
    - ⇒ Several appendices provide information for ease of reference.
- 2.1 The collection of PDSSs for each of the 29 selected projects form the largest portion of the MPR. The PDSS are presented in a form compliant with

Guidelines endorsed by the JCPAA.<sup>1</sup> In their current form, the PDSSs are structured as follows:

- Section 1: project summary;
- Section 2: financial performance;
- Section 3: schedule performance;
- Section 4: project cost and schedule status;
- Section 5: materiel capability performance;
- Section 6: major risks and issues;
- Section 7: project maturity;
- Section 8: lessons learned; and
- Section 9: project line management.

2.2 In terms of presentation, the PDSSs were largely unchanged from 2011-12, although in places the Guidelines altered the process used to compile the data and information.

## Major Projects reviewed in 2012-13

2.3 The 29 Major Projects in this year's report and their approved budgets appear in Table 2.1 below. Project entry into the MPR is based on selection criteria found in section 1.7 of the Guidelines.<sup>2</sup> The DMO considers around 180 Major Projects to be "major acquisition projects".<sup>3</sup> The total value of all Major Projects is around \$80 billion; the MPR covers \$44 billion of this value.<sup>4</sup>

2.4 Major Projects are complex, a point acknowledged by the Auditor-General in his opening remarks in the MPR.<sup>5</sup> Meeting cost, schedule and capability targets should be considered in this context, particularly for developmental projects. In last year's MPR, DMO summarised the range of issues affecting the completion of Major Projects:

- Managing induced schedule delays as a result of budgetary constraints...;
- Employing and maintaining an appropriately skilled workforce. ... particularly... where the skills required are in high demand by other Australian industries;

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1 *Major Projects Report 2012-13*, p.515.

2 See Appendix 5 of the *Major Projects Report 2012-13* pp.516-517.

3 *Major Projects Report 2012-13*, p.99.

4 DMO, Submission No.3, p.2.

5 *Major Projects Report 2012-13*, p.11.

- Acquiring new equipment presents multiple integration challenges for projects, and existing platforms...;
- Overestimating by contractors of the technical maturity of proposed equipment solutions and underestimating the level of effort and complexity required to deliver new equipment...;
- The unavailability of in-service equipment, due to operational requirements, may limit the ability of projects to install and test new or upgraded equipment in accordance with the original planned project schedule;
- Accelerating the maturity of the maintenance operations and supply chains for new equipment to support the transition to in-service use by ADF units;
- Complying with increasingly demanding certification and regulatory requirements; [and]
- Ensuring access to intellectual property to enable continued further enhancement and improvement of systems.<sup>6</sup>

2.3 The Committee acknowledges these various challenges.

2.4 By 31 August each year, ANAO advises the Committee of projects proposed to be entered (or exited) from the MPR, together with the draft Guidelines for the forthcoming reporting period, which the Committee endorsed in September 2012.

Table 2.1 29 MPR projects and approved budgets at 30 June 2013

Project Name (Project Number)	DMO Abbreviation	Budget (\$m)
1. Air Warfare Destroyer Build (SEA 4000 Ph 3)	AWD Ships	7,869.2
2. Airborne Early Warning and Control Aircraft (AIR 5077 Ph 3)	Wedgetail	3,843.7
3. Multi-Role Helicopter (AIR 9000 Ph 2/4/6)	MRH90 Helicopters	3,649.9
4. Bridging Air Combat Capability (AIR 5349 Ph 1/2)	Super Hornet	3,556.0
5. Amphibious Ships (LHD) (JP 2048 Ph 4A/4B)	LHD Ships	3,073.5
6. Future Naval Aviation Combat System Helicopter (AIR 9000 Ph 8)	MH-60R Seahawk	2,958.3
7. New Air Combat Capability (AIR 6000 Ph 2A/2B)	Joint Strike Fighter	
8. Armed Reconnaissance Helicopter (AIR 87 Ph 2)	ARH Helicopters	2,031.5
9. F/A-18 Hornet Upgrade (AIR 5376 Ph 2)	Hornet Upgrade	1,878.6
10. Air to Air Refuelling Capability (AIR 5402)	Air to Air Refuel	1,802.6
11. Guided Missile Frigate Upgrade Implementation (SEA 1390 Ph 2.1)	FFG Upgrade	1,450.1
12. Bushmaster Protected Mobility Vehicle (LAND 116 Ph 3)	Bushmaster Vehicles	1,254.3
13. Field Vehicles and Trailers (LAND 121 Ph 3A)	Overlander Vehicles	990.5
14. Next Generation SATCOM Capability (JP 2008 Ph 4)	Next Gen Satellite	863.7
15. ANZAC Anti-Ship Missile Defence (SEA 1448 Ph 2B)	ANZAC ASMD 2B	675.9
16. High Frequency Modernisation (JP 2043 Ph 3A)	HF Modernisation	580.1
17. Additional Medium Lift Helicopters (AIR 9000 Ph 5C)	Additional Chinook	564.0

6 *Major Projects Report 2011-12*, pp.151-152.

18. Armidale Class Patrol Boat (SEA 1444 Ph 1)	Armidales	537.2
19. Collins Replacement and Combat System (SEA 1439 Ph 4A)	Collins RCS	449.9
20. Battlespace Communications System (JP 2072 Ph 2A)	Battle Comm. Sys. (Land)	441.2
21. Indian Ocean Region UHF SATCOM (JP 2008 Ph 5A)	UHF SATCOM	432.5
22. Replacement Heavyweight Torpedo (SEA 1429 Ph 2)	Hw Torpedo	425.1
23. Collins Class Reliability and Sustainability (SEA 1439 Ph 3)	Collins R&S	411.4
24. SM-1 Missile Replacement (SEA 1448 Ph 2A)	SM-2 Missile	400.2
25. ANZAC Anti-Ship Missile Defence (SEA 1448 Ph 2A)	ANZAC ASMD 2A	386.5
26. Artillery Replacement (LAND 17 Ph 1A)	155m Howitzer	323.9
27. Follow On Stand Off Weapon (AIR 5418 Ph 1)	Stand Off Weapon	317.4
28. Battlefield Command Support System (LAND 75 Ph 3.4)	Battle Comm. Sys.	308.0
29. Counter – Rocket, Artillery and Mortar (LAND 19 Ph 7A)	C-RAM	253.9
<b>TOTAL</b>		<b>44,325.0</b>

Source 2012-13 Major Projects Report, Table 1, p.15

2.5 In 2012-13, the C-17 Globemaster III Heavy Airlifter (AIR 8000 Ph 3) project was exited from the MPR and the Battlespace Communications System (JP 2072 Ph 2A) was entered into the MPR.

## ANAO's review

2.6 The ANAO conducts an assurance audit of the data and information supplied by DMO in the PDSSs.<sup>7</sup> An assurance audit is more limited than a performance audit. However, ANAO may separately undertake performance audits of some projects individually or capability generally.<sup>8</sup>

2.7 During its review of the 2010-11 MPR, the Committee identified the MPR as a priority assurance review under s.19A(5) of the *Auditor-General Act 1997*. This designation has allowed the ANAO full access to the information gathering powers available under the Act, without necessitating the agreement of the DMO to perform the review.<sup>9</sup>

2.8 After reviewing PDSS information and data, the Auditor-General concluded:

Based on my review described in this report, nothing has come to my attention that causes me to believe that the information in the

<sup>7</sup> The audit process is outlined on pp.30-31 of the *Major Projects Report 2012-13*.

<sup>8</sup> See, for example, Audit Report No.6 (2013-14) *Capability Development Reform* and Audit Report No.22 (2013-14) *Air Warfare Destroyer Program*.

<sup>9</sup> *Major Projects Report 2011-12*, p.17; JCPAA, *Report 429*, p.33.



PDSSs within the scope of my review has not been prepared, in all material respects, in accordance with the Guidelines.<sup>10</sup>

- 2.9 Projects' progress towards meeting capability performance is "outside the scope of the Auditor-General's formal review conclusion", but is included in ANAO's review and analysis in Part 1 of the MPR.<sup>11</sup>
- 2.10 Whilst published as Audit Report No.12 (2013-14), the MPR is a joint publication of the ANAO and DMO. The CEO of DMO has responsibility for presentation of the PDSSs for the 29 Major Projects reviewed. The MPR includes the following statement from the CEO:
- In my opinion, the Project Data Summary Sheets comply in all material respects with the Guidelines and reflect the status of the projects as at 30 June 2013.<sup>12</sup>
- 2.11 In 2012-13, the ANAO identified the following "key focus areas" for the purpose of its review and analysis of the MPR:
- The financial assurance framework, particularly project financial assurance statements and out-turned budgeting;
  - Project maturity framework and reporting;
  - Enterprise risk management framework and projects' major risk and issue data;
  - Capability assessment framework and DMO's capability forecasts; and
  - Efficiency of the MPR audit process, which remains largely manual.<sup>13</sup>
- 2.12 Whereas other audit reports may contain recommendations, ANAO does not include recommendations in the MPR.

## Summary of ANAO findings

- 2.13 The MPR reviews performance against the selected 29 Major Projects. Overall project performance is measured against three criteria:
- Actual cost;
  - Schedule; and
  - Progress towards expected capability delivery (or materiel systems delivery).
- 2.14 Each of these is measured against the budget, schedule and project scope as approved by government.<sup>14</sup> The table below summarises the headline

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10 *Major Projects Report 2012-13*, p.141.

11 *Major Projects Report 2012-13*, p.26.

12 *Major Projects Report 2012-13*, p.143.

13 *Major Projects Report 2012-13*, pp.31-32.

14 *Major Projects Report 2012-13*, p.21 and p.113.

findings in the 2012-13 MPR, with comparisons to previous years. The shaded section in the table below was outside the scope of ANAO's assurance audit.

Table 2.2 Summary of longitudinal analysis

	2010-11 MPR	2011-12 MPR	2012-13 MPR
<b>Number of Projects</b>	28	29	29
<b>Total Approved Budget</b>	\$46.1 billion	\$47.3 billion	\$44.3 billion
<b>Total Increase/Decrease since Second Pass Approval</b>	\$7.8 billion	\$5.9 billion	\$6.5 billion <sup>15</sup>
<b>Approved Budget Increase/Decrease (In year)</b>	-\$0.1 billion (-0.3 per cent)	-\$1.1 billion (-2.4per cent)	-\$1.5 billion (-3.4per cent)
<b>Schedule Slippage (Total)<sup>16</sup></b>	760 months (31 per cent)	822 months (30 per cent)	957 months (36 months)
<b>Average Schedule Slippage per Project</b>	30 months	30 months	35 months
<b>Schedule Slippage (in-year)</b>	72 months (3 per cent)	99 months (4 per cent)	147 months (5 per cent)
<b>Expected Capability Delivery</b>			
<b>High level of confidence that capability will be delivered</b>	94 per cent	91 per cent	95 per cent
<b>Capability under threat, considered manageable</b>	5 per cent	8 per cent	5 per cent
<b>Capability unlikely to be met</b>	1 per cent	1 per cent	0 per cent

Source Major Projects Report 2012-13 p.23

15 Adjusted for the Overlander Vehicles project, which was restructured in 2012-13; see ANAO explanation in the *Major Projects Report 2012-13*, p.24.

16 Months of slippage when compared to the initial prediction when first approved by government and percentage increase since the main investment decision. A comparison of the data across years should be interpreted in this context, i.e. once a project is removed from the MPR, data is removed from the total slippage calculation for all years, but remains within in-year calculations where relevant. *Major Projects Report 2012-13*, p.23, note 2; see also p.65

## Cost performance

- 2.15 According to ANAO, “Within the review period, all projects continued to operate within the total approved budget of \$44.3 billion.” At 30 June 2013, this represented a \$3.8 billion net increase from Second Pass Approval approved budget of \$40.5 billion. This adjustment was attributable to price variation (increase of \$6.7 billion) foreign currency exchange rate movement (decrease of \$3.8 billion) and real variation (increase of \$0.9 billion). Actual expenditure across all 29 projects in 2012-13 was \$2.4 billion.<sup>17</sup>

## Schedule performance

- 2.16 Total schedule slippage (projects behind deadline) at 30 June 2013 is 957 months (a 36% increase) compared to the original schedule first approved by government. ANAO commented that:

Maintaining Major Projects on schedule remains the most significant challenge for the DMO... affecting when the capability is made available for operational release and deployment by the ADF.<sup>18</sup>

- 2.17 DMO agreed that schedule remains an issue:

The DMO’s analysis shows that while projects have been managed within approved budgets, schedule performance, as identified in previous MPRs, continues to be the key issue for DMO and Defence.<sup>19</sup>

- 2.18 According to the ANAO, “the reasons for schedule slippage vary” but are primarily caused by “the underestimation of both the scope and complexity of work, particularly for Australianised MOTS [military off-the-shelf] and Developmental projects.”<sup>20</sup> ANAO noted that most schedule slippage is attributable to projects approved pre-2005, which predated DMO’s demerger from Defence and tended to be developmental in nature.<sup>21</sup>

## Capability performance

- 2.19 Capability is reported using a traffic light system, where Green represents capabilities expected to be met, Amber capabilities under threat and Red capability unlikely to be achieved. According to DMO:
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17 *Major Projects Report 2012-13*, p.24, p.52, p.54 and p.58.

18 *Major Projects Report 2012-13*, p.25.

19 *Major Projects Report 2012-13*, p.113.

20 *Major Projects Report 2012-13*, p.26.

21 *Major Projects Report 2012-13*, p.25.

For the 2012-13 DMO MPR, there are 281 individual Materiel Capability elements across the 29 projects with 269 green, 12 amber and no red. ... A high percentage (96 per cent) of Materiel Capability Performance measures are reported as green.<sup>22</sup>

- 2.20 Delivery of key capabilities is not auditable as this relates to future events. ANAO cautions that "...the conclusion of this review does not provide any assurance in relation to this information."<sup>23</sup>

## Governance and business processes

- 2.21 While ANAO's review and analysis extends to DMO's governance and business systems, this is not mandated by the MPR Guidelines. Nonetheless, the data and information collected to compile and audit the PDSSs relies upon easy access and retrieval from systems established at project management level. ANAO highlighted a multitude of developments and issues, which included:
- Business system weaknesses, such as project offices having inconsistent recordkeeping and methods of tracking project progress;<sup>24</sup>
  - Varying project management skills among DMO and Defence staff;<sup>25</sup>
  - Risks and issues that may affect forecasts not necessarily being reported or regularly reviewed;<sup>26</sup> and
  - DMO having disabled some of its system for reporting project risks.<sup>27</sup>

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22 *Major Projects Report 2012-13*, pp.134-135.

23 *Major Projects Report 2012-13*, p.34.

24 *Major Projects Report 2012-13*, p.88.

25 *Major Projects Report 2012-13*, p.91.

26 *Major Projects Report 2012-13*, p.41.

27 *Major Projects Report 2012-13*, p.41.

## The Committee's Review

### Introduction

3.1 The Committee received evidence on the following issues relating to the 2012-13 Major Projects Report (MPR):

- Cost performance:
  - ⇒ Line of sight with the budget papers;
  - ⇒ Project expenditure reporting;
  - ⇒ Contingency; and
  - ⇒ Sustainment.
- Schedule performance:
- Capability performance:
  - ⇒ Auditable measurements of capability; and
  - ⇒ Project maturity scores.
- Governance and business processes:
  - ⇒ Managing project risks.

3.2 The MPR is an exceptionally detailed publication and the Committee has concentrated its review on overall performance and governance. The Committee's approach is to select themes for focussed attention, rather than to scrutinise individual projects.

### Cost performance

3.3 Reporting on funds budgeted and expended is a key tenet of the MPR's aim to improve transparency and accountability over Major Projects. At

present, the MPR largely achieves this objective, with the exception of three aspects:

- *Line of sight with the budget papers and expenditure reporting over financial year periods:* Information published in the budget papers is currently of variable consistency with the MPR. In particular, reporting of 1 July project budget estimates and 30 June actual expenditure is not seamlessly reported.
- *Sustainment spending:* Once projects have been completed, they move to a sustainment phase (parts, supply, maintenance and some upgrades). At present, a limited amount of information on sustainment spending is publicly available.
- *Contingency:* DMO has undertaken to report when contingency (akin to a reserve of emergency funds) has been utilised in next year's MPR, though not to the extent recommended by the JCPAA in 2013.

3.4 In addition, the Committee has maintained its interest in out-turned budgeting, whereby project budgets are factored to include indexation.

### Line of sight with the budget papers and expenditure reporting

3.5 In preparation for this year's review, the Committee closely analysed and compared financial information reported in the 2012-13 MPR against figures published in the 2012-13 budget papers (the Defence Portfolio Budget Statements and Portfolio Additional Estimates Statements).

3.6 In each project's Project Data Summary Sheet (PDSS), there is a section entitled "in-year budget expenditure variance" (Section 2.2), with a comparison of estimated versus actual expenditure and an explanation of the factors leading to variation. Upon close examination, the Committee found that rather than reporting variance over the entire 2012-13 financial year period, the PDSSs only compared the latest budget estimate against 30 June actual expenditure. This is in accordance with Guidelines as approved by this Committee; nevertheless, the MPR gives an impression of relatively small variation between estimated and actual expenditure. When based on the original (rather than latest) budget estimates, variation is in fact relatively large.

3.7 The Committee analysed individual projects' variance over the entire 2012-13 financial year, using 1 July estimates from the budget papers as the benchmark, instead of the latest estimates. When the 1 July estimates from the budget papers were compared against 30 June actuals, the

- Committee found that in-year variance had, in cases, been sizeable – up to 50 per cent<sup>1</sup> – which was undisclosed and unexplained in the PDSSs.
- 3.8 No single publication currently reports figures for the entire financial year for Major Projects. As such, to fully understand estimates and actuals for a project, a reader would be obliged to consult and compare the budget papers and the MPR. This does not facilitate the MPR's overall aim of improving transparency.
- 3.9 Consider, as an example, the Future Naval Aviation Combat System (AIR 9000 Phase 8) project's estimates and actuals, as published in budget papers and the MPR:
- The Defence Portfolio Budget Statements, at the commencement of the financial year, stated that this project's estimated budget for 2012-13 was \$145 million.<sup>2</sup>
  - The Defence Portfolio Additional Estimates, at mid-financial year, disclosed that the project's budget for 2012-13 had been revised and increased by \$63 million, from \$145 million to \$207 million.<sup>3</sup>
  - At the end of the financial year, in a section titled "In-Year Budget Expenditure Variance", the MPR stated that the project's latest budget estimate was \$204.8 million and actual expenditure was \$212.7 million. The MPR notes a \$7.9 million expenditure excess from the estimate, which was attributed to "unfavourable exchange rates against the US dollar".<sup>4</sup>
  - However, the MPR does not disclose that the project's original estimate at financial year commencement was \$145million, representing a true variance of \$67.7 million over the 2012-13 financial year, nor the reasons for this variance.
- 3.10 ANAO, as part of its review and analysis in Part 1 of the MPR, published a graphical representation (Figure 6)<sup>5</sup> to illustrate the changes between project estimates and actuals. However, Figure 6 is hard to interpret in context, because there are no percentages shown against variances.<sup>6</sup>

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1 For example, Multi-Role Helicopter, Bridging Air Combat Capability, Guided Missile Frigate Upgrade, UHF SATCOM and Artillery Replacement.

2 Defence Portfolio Budget Statements 2012-13, p.154

3 Defence Portfolio Additional Estimates 2012-13, p.141.

4 *Major Projects Report 2012-13*, p.219.

5 *Major Projects Report 2012-13*, p.59.

6 *Major Projects Report 2012-13*, p.59.

- 3.11 However, it should be noted that the presentation of in-year expenditure in the MPR's PDSSs met the requirements of the Guidelines, which were endorsed by the Committee.<sup>7</sup>
- 3.12 Mr Warren King (CEO, DMO) told the Committee: "We have no budget blow-outs in defence on projects on average."<sup>8</sup> Mr King added that DMO oversees around 250 major and minor projects and that "each of those projects makes an assessment of the in-year spend it foreshadows and that is then taken as a portfolio level of money we expect to use in that year."<sup>9</sup> He said that variations among individual projects during the financial year should not be of concern, because:
- Clearly across 250 projects, things eventuate that were not anticipated and that leads to over- and underspends, and that is cash expenditure not budget exceedences in-year. On average, over the last two or three years we have come within one or two per cent of the intended cash expenditure in-year.<sup>10</sup>
- 3.13 Mr King explained that a project's financial year expenditure can be fluid due to the timing of milestone payments: "But those things do not mean that there has been a project blow-out or anything else." He added: "As a portfolio, we come in within one or two per cent."<sup>11</sup> Mr King said that project underspends or overspends "will be re-balanced by finalising that project".<sup>12</sup>
- 3.14 Mr King said that attempting to estimate "how much cash will be needed"<sup>13</sup> is hard to predict. He said:
- What has happened over the last few years is that the amount of money that projects are indicating they require is getting closer and closer to their prediction. ... This year I think we are down to a nearly zero slip – that is, the money that the projects are asking for grossed up is what we will need.<sup>14</sup>

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7 According to the Guidelines applicable to the 2012-13 MPR: "The data needs to present the project's 'Year to Date' performance in financial terms. It must explain the difference between the 'Latest Plan' in the MRS [monthly reporting system] Majors Budget Performance Total report and/or the Five Year Defence Program (FYDP) Summary in CEPPlan [DMO's project level budget management system] and the End of Financial Year Actual Expenditure."

8 Mr King, *Committee Hansard*, 20 March 2014, p.3.

9 Mr King, *Committee Hansard*, 20 March 2014, pp.3-4.

10 Mr King, *Committee Hansard*, 20 March 2014, p.4.

11 Mr King, *Committee Hansard*, 20 March 2014, p.5.

12 Mr King, *Committee Hansard*, 20 March 2014, p.7.

13 Mr King, *Committee Hansard*, 20 March 2014, p.7.

14 Mr King, *Committee Hansard*, 20 March 2014, p.7.



- 3.15 As mentioned above, ANAO has applied its own analysis to produce Figure 6 on page 59 of the MPR, to give a visual indication of variances between estimates and actuals. Mr Michael White (Executive Director, Major Projects Report, ANAO) said that Figure 6 is “not a diagram of flashing lights or problems”, but rather:
- It is more of an indication that the budgets are being constantly managed and, as you get closer to the end of the year, more closely managed, and that the volatility of making estimates for a 12-month period could occur some 15 months out from the final actual result. So a six-monthly revision and more often, as DMO do, is not just important in this day and age; it is absolutely required management to get your end-of-year budgets as close as possible to where you need to be.<sup>15</sup>
- 3.16 Mr Steve Wearn (Chief Finance Officer, DMO) commented that “the original intent of this report [the MPR] was to look at the broader issue of the project approval value over the life of the project.”<sup>16</sup> Mr Wearn said that in addition to the MPR, the budget papers and Defence’s annual reports contain information on Major Projects.<sup>17</sup> He said:
- We still, as part of the portfolio budget statement, produce what the budget is for the top 30 projects...So the Committee actually has access to that information as well.<sup>18</sup>
- 3.17 In the Committee’s experience, however, navigating between the MPR and the budget papers required forensic attention to detail and exceptional patience.
- 3.18 At the beginning of attempting a comparison, the Committee found that:
- Defence and DMO have a practice of interchangeably citing projects by long titles, abbreviated titles or project numbers.
  - The budget papers list the “top 30” Major Projects together, including other Major Projects not included in the MPR.
  - For MPR projects, whilst the budget papers include them, they are in a table outside the “top 30”. The Committee had to work line-by-line to find the remaining MPR projects.
- 3.19 Once the Committee had overcome the above issues, the budget papers presented some anomalies: there were Major Projects given different identities, reported as multiple projects or were altogether omitted.

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15 Mr White, *Committee Hansard*, 20 March 2014, p.9.

16 Mr Wearn, *Committee Hansard*, 20 March 2014, p.13.

17 Mr Wearn, *Committee Hansard*, 20 March 2014, p.13.

18 Mr Wearn, *Committee Hansard*, 20 March 2014, p.13.

- 3.20 For example, when comparing the MPR with the 2012-13 budget papers:
- The Battlefield Command Support System (LAND 75 Phase 3.4) project is re-titled as “Battle Management System” in the PBS and PAES.<sup>19</sup>
  - The Indian Ocean UHF SATCOM Capability (JP 2008 Ph.5A) project is re-titled as “Ultra High Frequency Satellite Communications” in the PBS and PAES.<sup>20</sup>
  - Additional Chinook Helicopter (AIR9000 Phase 5C) project<sup>21</sup> was not reported in either the PBS or PAES; and
  - Anzac Anti Ship Missile Defence (SEA 1448 Phase 2A)<sup>22</sup> was not reported in either the PBS or PAES.
  - The Bridging Air Combat Capability (AIR 5349 Phase 1+2) project is reported as one project in the MPR and as two separate projects in the PBS and PAES.<sup>23</sup>
- 3.21 There were also cases where comparison of the MPR and 2012-13 budget papers suggested project definitions may be artificial. In one case, two related projects have been separated for reporting purposes in the MPR as Anzac Ship Anti-Ship Missile Defence (SEA 1448 Phase 2A) and Anzac Ship Anti-Ship Missile Defence (SEA 1448 Phase 2B):
- Both are reported in the MPR and budget papers as separate projects.
  - Phase 2A relates to installation of an infra-red search and track system.
  - Phase 2B relates to installation of array radar for Anzac Class frigates.
  - The radar provides initial detection and the search and track assists missiles to respond to targets.
- 3.22 In another case, the Bridging Air Combat Capability (AIR 5349 Phase 1 and 2) is reported as one project in the MPR:
- Phase 1 is to deliver 24 Super Hornets. Phase 2 is to provide new weapons and countermeasures for the Super Hornets, “concurrently” with Phase 1.
  - Phases 1 and 2 are reported on the one project in the MPR, with commentary and figures segmented as appropriate.

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19 *Major Projects Report 2012-13*, p.489; Defence Portfolio Budget Statements 2012-13, p.154; Defence Portfolio Additional Estimates 2012-13, p.141.

20 *Major Projects Report 2012-13*, p.401; Defence Portfolio Budget Statements 2012-13, p.154; Defence Portfolio Additional Estimates 2012-13, p.141.

21 *Major Projects Report 2012-13*, p.357.

22 *Major Projects Report 2012-13*, p.451.

23 *Major Projects Report 2012-13*, p.401; Defence Portfolio Budget Statements 2012-13, p.154; Defence Portfolio Additional Estimates 2012-13, p.139 and p.141.

- For reasons unknown, in the budget papers the Bridging Air Combat Capability project is reported as two separate projects.
- 3.23 Whilst possibly unintentional, by packaging or splitting projects, Defence and DMO can influence perceptions of cost and scale. Furthermore, the ability to easily compare the MPR with the budget papers is impaired.

## Out-turned budgeting

- 3.24 Budgets shown in the MPR are in an 'out-turned format'. This is explained in the MPR as follows:

When considering and approving budgets, the Government takes account of the estimated impact of inflation over the life of a project. This forecasting of future inflation impacts in a budgetary construct is known as 'out-turning'. From 1 July 2010, all DMO major capital projects have been managed using out-turned budgets. At the time of project approval, project managers estimate the impact of indices tendered (or estimated) for the life of the project. These estimates are built into the project budget as part of the out turning process.<sup>24</sup>

- 3.25 In 2012-13, there were adjustments to project budgets consistent with the out-turning policy. This means that in practice, when increases and decreases are factored and balanced, the result is a \$6.5 billion (15.5%) increase. There were \$10.4 billion of increased costs (materials and labour \$7.4 billion and \$3 billion of real variation) and a decrease of \$3.9 billion due to foreign exchange rate movement.<sup>25</sup>
- 3.26 The Committee asked DMO to explain why there had been noticeable increases attributable to labour and materials costs. Mr King said:

We are starting to get inflation in the cost of materials and the cost of labour. For example, America is now starting to foreshadow that there will be wage demands. To be clear, the later projects approved by government now approve elements of what we call 'out-turning'. So, although it is shown as an actual change to what is approved, it is not in reality because it has already been projected in the approval that these increases will take place on some scale. Obviously it is a prediction because you do not know. We had some advantages during the global financial crisis when labour rates and material rates did not increase as much as we had anticipated. But when we now go to government for approval we

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24 *Major Projects Report 2012-13*, p.104.

25 *Major Projects Report 2012-13*, p.24.

make an estimate of what we think indexation will do to the end cost of the project.<sup>26</sup>

- 3.27 The out-turning policy, consequently, has had implications for the use of project contingency funds due to the potential for unplanned indexation to impact on project budgets.

## Contingency

- 3.28 A side-effect of moving to out-turned budgeting has been that contingency funds may be relied upon to offset unexpected price increases related to indexation. ANAO commented that “The change in [project budget] supplementation policy has meant that price indexation has emerged as a risk for some projects, and for which contingency funds may need to be drawn upon.”<sup>27</sup> Furthermore

The ANAO notes that the emergence of indexation risk has, to some extent, changed the nature and use of the contingency budget from dealing only with project risk management to including broader price management, and requires project finance staff to have a greater understanding of the factors that influence indices and their likely movement over the life of the project.<sup>28</sup>

- 3.29 Following last year’s MPR review, the JCPAA commented in its report that “the nature and use of contingency funds will be of increasing importance as the out-turned budgets of projects are tested over time.”<sup>29</sup>
- 3.30 Limited information is currently presented in the MPR relating to the use of contingency funds. DMO will only reveal that for all 29 projects from August 1996 to June 2013, “approximately \$1.2 billion (or 2.7% of the total of approved projects budgets of \$44.3 billion) has been applied... to retire project risks.”<sup>30</sup>
- 3.31 ANAO examination of contingency budgets found:
- where projects had used contingency funds, the purpose was within the approved scope of the project;
  - the clarity of the relationship between contingency allocation and identified risks varied; and
  - the method for allocating contingency varied between the expected costs of the risk treatment and a proportionate allocation based on the likelihood of the risk eventuating.<sup>31</sup>

26 Mr King, *Committee Hansard*, 20 March 2014, p.5.

27 *Major Projects Report 2012-13*, p.33.

28 *Major Projects Report 2012-13*, p.33.

29 JCPAA *Report 436*, p.17.

30 *Major Projects Report 2012-13*, p.119.

31 *Major Projects Report 2012-13*, p.33.

- 3.32 Additionally, ANAO found that in some cases, contingency was being used as “provision for an anticipated difference between price variation obligations built into supplier contracts and the approved indexation.”<sup>32</sup>
- 3.33 In response to a question on notice from the JCPAA, DMO revealed that in 2011-12 that around 50% of projects utilised contingency funds.<sup>33</sup>
- 3.34 Following last year’s MPR review, the Committee recommended:  
...that, by 20 June 2013, the Defence Materiel Organisation submit a proposal, for incorporation into the 2013-14 Major Projects Report Guidelines, on how project-level contingency fund data could be disclosed in future Major Projects Reports without being significantly prejudicial to taxpayers’ interests. At a minimum, projects that have utilised contingency funds during the previous financial year or are anticipated to use contingency funds in the forthcoming financial year, and the amount of such funds, should be identified in the reports.<sup>34</sup>
- 3.35 Defence gave qualified support for this recommendation and partially agreed to implement the Committee’s recommendation:  
A contingency statement similar to: “As at the 30 June 2014, project [project Number and Phase] has/has not drawn down contingency funds in this financial year” is planned to be included in the PDSS for each individual project.<sup>35</sup>
- 3.36 This means DMO will not report dollar amounts against individual projects; instead publishing an aggregate figure.<sup>36</sup>
- 3.37 DMO has been reluctant to report detail of contingency utilisation, explaining that disclosure might encourage contractors to artificially inflate their billings to access funds readily accessible to project managers.<sup>37</sup> However, DMO has yet to specifically explain to the Committee how reporting of historic contingency information (as recommended in *Report 436*) would be detrimental.

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32 *Major Projects Report 2012-13*, p.33. Whereas price variation is linked to the price of labour and materials, indexation anticipates eventual inflation. Appendix 6 (p.556) of the MPR notes: “However, eventual inflation could be significantly divergent from that anticipated in the out-turning process and this may affect project cost performance accordingly.”

33 JCPAA Review of 2011-12 Major Projects Report, Submission 1, DMO, p.2

34 JCPAA *Report 436* p.18

35 Letter dated 28 February 2014 from Chief of the Defence Force and Secretary of Defence; at <[http://www.aph.gov.au/Parliamentary\\_Business/Committees/House\\_of\\_Representatives/Committees?url=jcpaa/defenceannual1213/corro/corro01.pdf](http://www.aph.gov.au/Parliamentary_Business/Committees/House_of_Representatives/Committees?url=jcpaa/defenceannual1213/corro/corro01.pdf)>. The 2013-14 MPR Guidelines reflect this change.

36 Mr Wearn, *Committee Hansard*, 20 March 2014, p.13.

37 JCPAA, *Committee Hansard*, 13 March 2013, p.3

## Sustainment spending

- 3.38 Once a project has been deemed complete, it moves to the sustainment phase of its lifecycle. Sustainment relates to the provision of ongoing parts, supplies, maintenance and (sometimes) upgrades to Defence systems and assets. While sustainment activities are outside the scope of the MPR,<sup>38</sup> which is focused on acquisition projects, the amount of expenditure on sustainment is too large for the JCPAA to ignore.
- 3.39 In 2012-13, expenditure on capital acquisition (minor and major projects) was \$3.963 billion. In comparison, expenditure on sustainment was \$5.057 billion,<sup>39</sup> although scrutiny and visibility of expenditure is weighted towards projects in the acquisition phase.
- 3.40 Last year, the Committee asked DMO why a greater amount of information could not be reported on sustainment activities. DMO told the Committee that "If we were to do something similar in sustainment in terms of assessing performance against measures in a public fashion, it would be classified."<sup>40</sup> In *Report 436*, the Committee noted DMO's concerns but recommended:
- ...the Department of Defence reports to the Committee on how it intends to achieve greater transparency in relation to its spending on sustainment activities.<sup>41</sup>
- 3.41 In response to that recommendation, Defence advised that:
- The current transparency in relation to its spending on sustainment activities is adequate. The Portfolio Budget Statements 2013-14 presents a greater degree of transparency of sustainment activities than has been reported previously. Defence believes that providing performance details of DMO's sustainment activities consistent with the Major Projects Report would potentially be highly sensitive and of a classified nature.<sup>42</sup>
- 3.42 The Committee notes, however, that the Collins Class Submarine Reliability and Sustainability (SEA 1439 Phase 3) project is reported in the MPR.<sup>43</sup> This project involves various upgrades to the submarines. Reporting of this project appears contrary to DMO's aforementioned

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38 *Major Projects Report 2012-13*, p.21.

39 Department of Defence, 'Annual Report 2012-13', p.182.

40 *Committee Hansard*, 13 March 2013, p.2.

41 JCPAA, *Report 436*, p.31.

42 Department of Defence, Executive Minute on JCPAA *Report 436* p.3; at:

[http://www.aph.gov.au/Parliamentary\\_Business/Committees/House\\_of\\_Representatives/Committees?url=jcpaa/defenceannual1112/govtresponses/govtresponse.pdf](http://www.aph.gov.au/Parliamentary_Business/Committees/House_of_Representatives/Committees?url=jcpaa/defenceannual1112/govtresponses/govtresponse.pdf)

43 *Major Projects Report 2012-13*, p.423.

assertion that sustainment projects must not be reported in the MPR for national security reasons.

- 3.43 The 2013-14 Portfolio Budget Statements list the top 30 sustainment products with estimates of financial year expenditure.<sup>44</sup> Some general information is given against each product line. The information typically includes:
- How much capability is being supported;
  - The name of the principal contractor or supplier;
  - In broad terms, what is planned for replacement, repair or service during the financial year; and
  - Any major developments with contract negotiations or possible efficiencies.<sup>45</sup>
- 3.44 Notably, the total budget of each sustainment product or project is not revealed.
- 3.45 Though sustainment is beyond the scope of the MPR, this sustainment activity is necessary to view a Major Project in its complete context. This is because some Major Projects in the MPR may be completed in stages or batches. As such, while several ships, vehicles or aircraft within a Major Project are operational (and in the sustainment phase), several others within the same project might still be in production.
- 3.46 For example, the Bushmaster Vehicles project in the MPR has been divided into production periods 1 to 5. Vehicles in production period 1 have been operational since December 2010, whereas other vehicles in production period 5 are yet to be acquired and have a forecast final operational capability of December 2016.<sup>46</sup>
- 3.47 Without contextual information, such as the total sustainment budget, a Major Project's total financial commitment is not apparent by consulting the MPR alone. Ms Shireane McKinnie (DMO) told the Committee that DMO is now moving to "long-term performance-based contracts" for sustainment.<sup>47</sup> Given that DMO has moved to long-term sustainment contracts, for some Major Projects the total commitment (when sustainment is included) is likely to be sizeable.
- 3.48 For instance, the Multi-Role Helicopter – MRH90 (AIR 9000 Phases 2/4/6) project has been gradually accepting helicopters into service or operation (21 out of 47 planned). The MPR notes that sustainment contracts are

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44 Defence Portfolio Budget Statements 2013-14, p.176.

45 Defence Portfolio Budget Statements 2013-14, pp.177-187.

46 *Major Projects Report 2012-13*, p.300 and p.305.

47 Ms McKinnie, *Committee Hansard*, 20 March 2014, p.7.

“now currently active” for this project.<sup>48</sup> The value of the sustainment contracts, however, is not disclosed; instead the MPR discloses the total approved project budget of \$3.650 billion (as required by the MPR’s Guidelines). By referring to the Portfolio Budget Statements, as Defence suggested to the Committee, a reader can see that \$121 million is allocated to the MRH90 in 2013-14 for sustainment purposes. This is useful for monitoring financial year trends, but is out of context. A search of the AusTender website’s database for “mrh90 sustainment” showed that there were long-term contracts worth around \$1.351 billion related to this project’s sustainment. The MPR and the PBS, in their current format, do not reveal that the overall amount of money committed to this project is at least \$5 billion when acquisition and sustainment are viewed together.

3.49 In addition, the Committee is having difficulty understanding the financial and budgetary separation between acquisition and sustainment. DMO’s budget is structured three into three programs:

- Program 1.1: management of capability acquisition (\$3.9 billion);
- Program 1.2: management of capability sustainment (\$5 billion); and
- Program 1.3: provision of policy advice and management services (\$113 million).<sup>49</sup>

3.50 DMO’s funds rest in a Special Account.<sup>50</sup> Funds for Program 1.3 are directly appropriated into the Special Account, whereas:

Programs 1.1 and 1.2 were largely funded by payments from Defence for goods and services provided, as set out in the materiel acquisition agreements and materiel sustainment agreements.<sup>51</sup>

3.51 The Committee asked DMO: “All the projects that are reported in here [the MPR] draw on project budgets, aren’t they? There is no sustainment budget involved at all?” Shireane McKinnie (DMO) replied: “No.”<sup>52</sup> However, the history of the C-17 Globemaster 3 Heavy Airlift (AIR 8000 Phase 3) project presents a quandary.

3.52 The C-17 project exited the MPR in 2011-12, having achieved final operational capability (FOC) in December 2011, the last milestone in the acquisition phase.<sup>53</sup> Upon exit from the MPR, the project had \$508.2

48 *Major Projects Report 2012-13*, p.174.

49 *Defence Annual Report 2012-13*, pp.182-183.

50 *Defence Annual Report 2012-13*, pp.180-181; *Financial Management and Accountability Determination 2005/09 – Defence Materiel Special Account Establishment 2005* (Cth).

51 *Defence Annual Report 2012-13*, p.183.

52 Ms McKinnie, *Committee Hansard*, 20 March 2014, p.7.

53 *Major Projects Report 2011-12*, p.328.



- million remaining in its budget.<sup>54</sup> According to the 2011-12 MPR, the remaining element of the project was commissioning of a Cargo Compartment Trainer and Facility in 2014.<sup>55</sup>
- 3.53 Moving ahead in time to 2013, figures in the 2013-14 Defence Portfolio Budget Statements include the C-17 (AIR 8000 Phase 3) project in a list of acquisition projects. The PBS indicated that the C-17 project's remaining budget was \$500 million (out of a total approved \$1.8 billion) for the purpose of "remaining C-17 sustainment requirements, including spares and the procurement of ancillary items".<sup>56</sup>
- 3.54 In a list of sustainment products, also in the 2013-14 Defence PBS, there is a product titled C-17 Heavy Air Lift Weapons System with \$58 million allocated for the year. The description of the C-17 sustainment product states: "the focus will be on accepting and integrating a new Cargo Compartment trainer to be delivered in early 2014".<sup>57</sup>
- 3.55 When the 2011-12 MPR stated that the approved budget for the C-17 project was \$1.8 billion,<sup>58</sup> the Committee had presumed this was entirely drawn from Program 1.1 for capability acquisition. The Committee had also presumed that once the C-17s moved into sustainment, there would be a separate budget for this purpose sourced from the Program 1.2 for capability sustainment.
- 3.56 However, the C-17 example creates doubt that either presumption is true. At face value, DMO's evidence that there is no sustainment budget involved in MPR projects is hard to reconcile with the case of the C-17 project.

## Committee comment

- 3.57 During the review, the Committee observed that Major Projects' end of financial year actual result had a tendency to vary (sometimes by a wide margin) from the budget estimate. Both DMO and ANAO explained that the estimates are early forecasts based on circumstances that may change.
- 3.58 DMO explained their process for budgeting:
- ...we estimate for the year how much cash a project is going to require in that year. It is not that a project is over or under budget, it is just how much cash it will need to spend in that year within its budget.

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54 *Major Projects Report 2011-12*, p.325.

55 *Major Projects Report 2011-12*, p.327.

56 Defence Portfolio Budget Statements 2013-14, p.165.

57 Defence Portfolio Budget Statements 2013-14, p.179.

58 *Major Projects Report 2011-12*, p.325.

We aggregate that, and then because projects do not always meet their requirements we do a whole-of-portfolio assessment of how much cash will be needed from government.<sup>59</sup>

- 3.59 When asked how its budget estimates are formulated, DMO explained that the method to predict funding requirements is for each Major Project to make an assessment of next year's spend. These are then taken as a whole, to advise how much funding DMO requires. However, the method of expenditure is almost the polar opposite: DMO does not silo or link its funds to individual projects, but rather aggregates funding amongst projects and, instead, aims to ensure spending reaches the limits of available cash on hand during each financial year. This makes good business sense, but appears contrary to the basis on which the funds were originally planned and described in the budget.
- 3.60 The Committee notes the view above, but does not fully agree with DMO's position. From a Parliamentary perspective, the purpose of publishing budget estimates is to assist the Parliament and the public to understand the ultimate destination and timing of an appropriation, before funds are authorised by law.
- 3.61 The statement that project budgets re-balance, at a later date, is not necessarily visible because Major Projects are usually exited from the MPR before all funds have been utilised. For example, the Bridging Air Combat Capability Project (also known as the Super Hornets), which will exit the MPR this year, had \$692.2 million remaining in its budget as at June 2013.<sup>60</sup> Whether this project's financial information is reported in other publications into the future is unclear. There should be clear public disclosure of the fate of these funds and residual funds remaining for other projects that exit the MPR. (Other issues relating to projects exiting the MPR are discussed in Chapter 4 of this report.)
- 3.62 If the key measure is whether projects are completed within their overall approved budget, the final project-level outcomes need to be visible, not solely viewed as a rolling average based on the selection of projects appearing in the MPR at a given point in time.
- 3.63 For the purpose of comparing estimates against actual expenditure, the MPR's financial information is a valuable resource. The Committee has utilised its raw financial data and ANAO's analysis<sup>61</sup> to ascertain that DMO's 30 June actual expenditure tended to vary, sometimes by up to 50%, from its 1 July estimates.
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59 Mr King, *Committee Hansard*, 20 March 2014, p.4.

60 *Major Projects Report 2012-13*, p.190.

61 *Major Projects Report 2012-13*, p.59 (Figure 6).

- 3.64 This led the Committee to discover, among other anomalies, that there was not seamless line of sight between the budget papers and the MPR. Furthermore, the project identities reported in the MPR and budget papers should match to allow easy comparison. Variances from the estimates should be noted and explained.
- 3.65 The Committee requests that Defence and DMO take the necessary administrative action to address the various anomalies the Committee found in the 2012-13 budget papers.
- 3.66 The presentation of 1 July estimates compared to 30 June actuals (and the reasons for variance) is a simple principle of transparency. The Committee makes no comment on whether the reasons for in year or between year variations are valid or otherwise.
- 3.67 There has been insufficient time to effect amendments to the 2013-14 MPR Guidelines to improve reporting of Major Project's financial year budget estimates and expenditure. Nevertheless, the Committee has recommended the DMO and ANAO include deeper analysis of project estimates and actual expenditure in this report (the 2013-14 MPR). The Committee has, however, recommended changes to the Guidelines for the 2014-15 MPR.
- 3.68 Separately, the Committee will monitor the issue of contingency funds and remains aware that a recommendation from *Report 436* remains partially implemented.
- 3.69 At present, sustainment expenditure is outside the scope of the MPR. Nevertheless, the Committee believes there is scope to improve reporting of sustainment expenditure, particularly financial information. DMO has, commendably, started to publish some information in the Portfolio Additional Estimates Statements. However, the fact remains that there is little visibility surrounding \$5 billion of public money spent on sustainment in 2012-13. Further, when a Major Project's acquisition budget is combined with the sustainment budget, only then does the scale of the overall, long-term financial commitment become apparent. The MPR and the budget papers do not presently disclose this information.
- 3.70 Notwithstanding evidence from DMO, the case of the C-17 project suggests there is an unclear distinction between capability acquisition and capability sustainment. In the 2013-14 MPR, to avoid any misunderstanding, the Committee encourages DMO to explain the distinctions between acquisition and sustainment, the meaning of project closure, how project budgets are sourced, and what happens to savings.
- 3.71 In the future, the Committee may decide that a separate inquiry into sustainment expenditure and reporting is necessary. The Committee

requests that DMO advise on a suitable and separate methodology of reporting sustainment activity.

### **Recommendation 1**

3.72 The Committee recommends that starting from the 2013-14 Major Projects Report, the Defence Materiel Organisation and the Australian National Audit Office publish expanded information on each Major Project's budget estimates and actual expenditure during the financial year. Additional details for each Major Project could include:

- Comparison of variation citing specific dollar amounts;
- Percentage of variance; and
- Overall totals and averages, where calculable.

Additionally, ANAO should analyse DMO's reasons and explanations for projects' in-year budget variance.

### **Recommendation 2**

3.73 The Committee recommends that the Australian National Audit Office and Defence Materiel Organisation consult as necessary and amend Section 2.2 of the PDSSs, in time for submission of the draft 2014-15 MPR Guidelines to the JCPAA, to ensure that the following are reported:

- (a) each Major Project's 1 July budget estimates, as published in the Portfolio Budget Statements;
- (b) mid-year estimates, as published in the Portfolio Additional Estimates Statements;
- (c) if necessary, any more subsequent estimates since the mid-year estimates; and
- (d) 30 June actual expenditure; along with
- (d) explanations of variance between each of the above.

### Recommendation 3

- 3.74 **The Committee recommends that Defence and the Defence Materiel Organisation take the necessary actions to ensure there is improved line of sight between the Major Projects Report and the Portfolio Budget Statements and Portfolio Budget Estimates Statements. For example, by improving the consistency of project names and groupings between the documents.**

### Recommendation 4

**The Committee recommends that the Defence Materiel Organisation prepares a suitable and separate methodology for reporting sustainment activity and expenditure, and that this methodology be reported to the Committee within six months of the tabling of this report.**

## Schedule performance

- 3.75 Schedule slippage (projects behind their original deadline for completion) has been an ongoing theme since the inception of the MPR. Slippage translates into delayed entry into service and potentially creates gaps in Defence's strategic capability.
- 3.76 ANAO analysis in the MPR shows that slippage continues to accrue most noticeably among projects that are categorised as developmental or Australianised military-off-the-shelf (AMOTS), particularly those approved pre-2005. The Committee asked Mr King why certain projects continue to accrue slippage. He said:

The answer is that a great number of these projects have materially delivered all the things they are going to deliver.<sup>62</sup>

- 3.77 He continued:

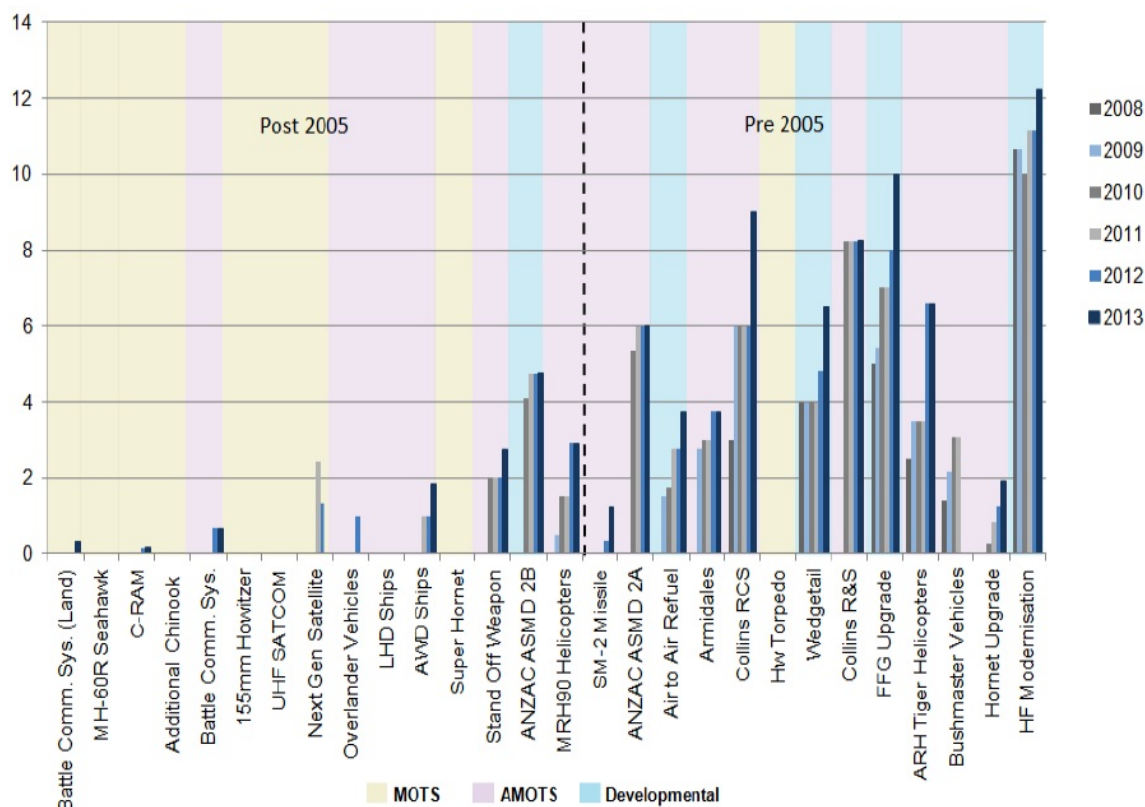
Finalising their operational acceptance is down to very minor elements of the projects, not all material, because there can be other inputs to that such as the trained people, the facilities and everything else. Every year that those projects remain here until those last minor elements are corrected will appear like another year's slip when, in fact, the vast majority of all those capabilities

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62 Mr King, *Committee Hansard*, 20 March 2014, p.9.

are delivered and are in service. I do not think that gives the committee a good view of how DMO is performing.<sup>63</sup>

Figure 1 – Total slippage post Second Pass Approval and acquisition type by approval date (months)



Source 2012-13 Major Projects Report, p. 64, (Figure 8)

3.78 DMO has highlighted a consultant report that has “benchmarked DMO’s performance favourably against the commercial industry.”<sup>64</sup> However, this statement should be considered in conjunction with ANAO findings in Audit Report No.6 (2013-14) *Capability Development Reform*, which concluded that “the results in the report cannot be independently verified.”<sup>65</sup> Having examined data in the consultant’s report, ANAO found that the DMO claim was based on 25 selected projects. Based on this same sample, ANAO was of the view that “the data indicates that DMO projects generally take longer than comparable industry projects”.<sup>66</sup>

63 Mr King, *Committee Hansard*, 20 March 2014, p.9.

64 DMO, Submission No.3, p.2; JCPAA, *Report 436*, p.19.

65 Audit Report No.6 (2013-14), *Capability Development Reform*, p.292.

66 Audit Report No.6 (2013-14), *Capability Development Reform*, p.293.

## Committee comment

- 3.79 On a positive note, the Committee believes that reporting of project slippage is transparent in the MPR. ANAO's review and analysis of slippage has also assisted.
- 3.80 The Committee will continue to monitor DMO actions to minimise slippage and address any systemic causes.
- 3.81 DMO should take due care when citing findings from consultant reports or other internal sources that can't be independently verified or are based on a selective or small sample size, or, to avoid any possibility of a misunderstanding, release full documentation to the Committee.

## Recommendation 5

- 3.82 **That starting from the 2013-14 Major Projects Report, ANAO publish a similar version of Figure 8 (on page 64 of the 2012-13 MPR), relating to Major Project total slippage post Second Pass Approval and acquisition type by approval date.**

## Capability performance

- 3.83 Along with cost and schedule, capability is a key component of the MPR. Reporting of capability should provide confidence that a project will operate in the field as planned. At present, the MPR provides a forecast of expected capabilities. The MPR's reporting of capability performance does not distinguish between capabilities already achieved and those yet to be achieved; and for capabilities not yet achieved, there is no indication of whether the capability will be met on schedule.

## Capability forecasts

- 3.84 Within each PDSS in the MPR, progress towards achieving capability is reported as a pie chart in traffic light colours showing a percentage breakdown of materiel capability performance (PDSS Section 5.1). Currently, capability progress is reported as a DMO forecast only, which means ANAO cannot properly audit this information.
- 3.85 In the 2012-13 MPR, ANAO described DMO's capability performance reporting as "inconsistent", with forecasts having "subjectivity" and

“inherent uncertainty”.<sup>67</sup> DMO’s own commentary similarly describes this reporting as “subjective” and “indicative” of progress.<sup>68</sup> In the 2011-12 MPR, ANAO warned that DMO’s estimates of capability had a “lack of rigour as a data system” with a “high level of uncertainty in forecasting outcomes.”<sup>69</sup>

3.86 Mr Michael White (ANAO) said:

We have done quite a bit of work with the DMO in terms of whether or not the capability section within the PDSSs could move to a more real-time and hence more easily auditable representation of information.<sup>70</sup>

3.87 He added that with the time ANAO has available to cover the 29 projects in the MPR, capability information would need to be drawn from “either a central system or a central repository”.<sup>71</sup> He noted that ANAO conducts performance audits of individual Major Projects, which are more focussed.<sup>72</sup> He concluded that:

It is something that we continue to work on with DMO, but there is no ready answer for an up-to-date auditable piece of information at this point in time.<sup>73</sup>

3.88 Mr Warren King (DMO) agreed that:

Landing on a method to have an easily auditable statement of what the capability is that we have delivered is really a complex issue and still there is, I think, work to be done.

3.89 Mr King noted that capability reporting can lead to discussion of “sensitive matters” and that one project has “about 10,000 items of performance”. He said that any one of these items could “represent a significant impact on capability”.<sup>74</sup>

3.90 The Committee notes this point, however believes that the presentation of this information in the MPR is the significant issue.

3.91 For example, the Air Warfare Destroyer (AWD) Ships project has a pie chart coloured 100% Green, indicating capability is forecast to be achieved.<sup>75</sup>

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67 *Major Projects Report 2012-13*, p.42.

68 *Major Projects Report 2012-13*, p.134.

69 *Major Projects Report 2011-12*, p.82.

70 Mr White, *Committee Hansard*, 20 March 2014, p.1.

71 Mr White, *Committee Hansard*, 20 March 2014, p.2.

72 Mr White, *Committee Hansard*, 20 March 2014, p.3.

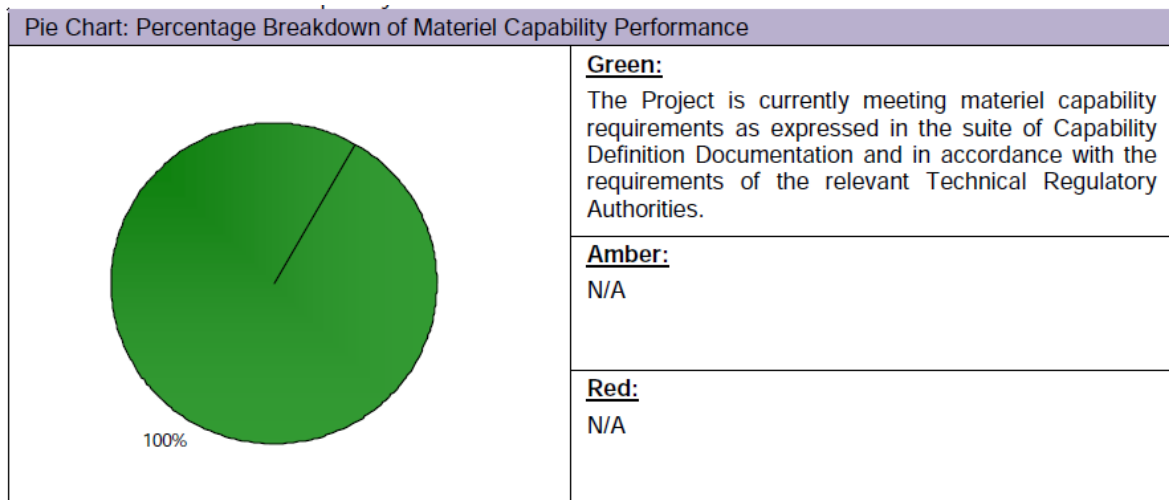
73 Mr White, *Committee Hansard*, 20 March 2014, p.3.

74 Mr King, *Committee Hansard*, 20 March 2014, pp.1-2.

75 *Major Projects Report 2012-13*, p.155.



Figure 2 – Materiel Capability Performance – Air Warfare Destroyer Ships



Source 2012-13 Major Projects Report p. 155.

3.92 In practice, the AWD Ships remain under construction. The MPR forecast does not indicate whether these capabilities will be achieved within cost and schedule. Nor is there any distinction between capabilities achieved (or capability exceeded) from capability yet to be achieved.

3.93 In a recent audit report on the AWD Ships, ANAO found:

Despite the contractual arrangements put in place to manage the project, the AWD Program has experienced a range of delivery issues, including significant immaturity in detailed design documentation, major block construction problems and substantially lower than anticipated construction productivity. The design and construction issues have led to extensive, time-consuming and costly rework.<sup>76</sup>

3.94 And further:

As mentioned above, the continuing detailed design, construction and productivity issues present a significant risk of further overruns in the cost of the project, as well as in the delivery schedule, and will require an ongoing management focus. Further, the program is approaching the complex stage of systems integration when, historically, cost and schedule risks tend to rise.<sup>77</sup>

<sup>76</sup> Audit Report No.22 (2013-14) *Air Warfare Destroyer Program*, p.21.

<sup>77</sup> Audit Report No.22 (2013-14) *Air Warfare Destroyer Program*, pp.22-23.

- 3.95 In contrast, on AWD Ships capability the 2012-13 MPR stated:
- All significant government specified capability is currently planned to be achieved and in some warfare areas, the capability will be exceeded.<sup>78</sup>
- 3.96 When comparing the statement and the pie chart in the MPR against the conclusion of ANAO's project-level audit on AWD Ships, it is difficult to determine which source more accurately portrays the situation.

### Project maturity scores

- 3.97 As well as the overall forecast of capability progress, each project in the MPR is given a project maturity score, based upon progress towards milestone benchmarks (PDSS Section 7.1). Project maturity scores measure performance against key project management milestones. When a project does not reach anticipated maturity, according to ANAO, this may "trigger management attention or provide confidence that progress is satisfactory."<sup>79</sup>
- 3.98 For the aforementioned reasons, maturity scores are an important measure of capability.
- 3.99 In previous MPRs, ANAO have used the maturity scores to produce analysis DMO has disagreed with. In particular, Figure 3 on page 51 of the 2012-13 MPR shows that for some projects, maturity vastly exceeds budget expended (for example, the Joint Strike Fighter and Additional Chinook projects).<sup>80</sup> ANAO believes that budget expenditure should be "broadly in line" with maturity, "which is expected in an acquisition environment predominantly based on milestone payments."<sup>81</sup>
- 3.100 ANAO has also observed that projects are automatically awarded 50% maturity at Second Pass Approval,<sup>82</sup> which equates only to project definition being finalised (before any design, build, or testing has started).<sup>83</sup> The trend apparent in this analysis suggests DMO over-estimates project maturity.
- 3.101 The Committee sought comment from DMO on this issue during last year's review. A DMO submission to the Committee stated that they "would not analyse project maturity scores in this way as the analysis

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78 *Major Projects Report 2012-13*, p.148.

79 *Major Projects Report 2012-13*, p.38.

80 *Major Projects Report 2012-13*, p.51.

81 *Major Projects Report 2012-13*, p.49.

82 *Major Projects Report 2012-13*, p.49.

83 *Major Projects Report 2012-13*, p.552.

implies a direct linear relationship between the time elapsed and the maturity score.”<sup>84</sup> DMO also pointed out in the current MPR that:

...the percentage of budget spent is dependent on the nature of the project and the level of early investment that may be required for project start-up and nonrecurring engineering effort.<sup>85</sup>

3.102 The Department of Defence has indicated to the Committee that maturity scores will be included in the 2013-14 MPR, but has not guaranteed retaining maturity scores into the long-term.<sup>86</sup> The Committee asked ANAO to comment on the value of maturity scores. Mr Michael White (ANAO) said:

We are not critical of maturity scores as a process. We have over the years raised a number of issues in terms of the difficulty in including it within the review, because we see some overly optimistic results at times. ... I think the MPR would lose a great deal if it were not included anymore, but, again, we are not the drivers of the Guidelines. Certainly we need to understand the practical realities of the work that DMO is doing on an ongoing basis.<sup>87</sup>

3.103 Mr White added that maturity scores are a composite indicator, which Engineers Australia had identified as representing “better practice”.<sup>88</sup>

3.104 DMO’s position was that maturity scores have outlived their usefulness. Ms Shireane McKinnie (General Manager, Joint Systems and Air, DMO) said:

The initial intention of project maturity scores was to provide a numerical indicator of the risk associated with pursuing a particular project. ... Over time, however, the meaning of those maturity scores started to be lost, and individuals were not really fully understanding what a maturity score of 35 actually meant in terms of the implementation of the project. To make that clearer for ministers when they were considering submissions for approval, we introduced a materiel implementation risk

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84 JCPAA Review of DMO Major Projects Report 2011-12, Submission 1, DMO, p.3; at <[http://www.aph.gov.au/Parliamentary\\_Business/Committees/House\\_of\\_Representatives/Committees?url=jcpaa/defenceannual1112/subs/sub001.pdf](http://www.aph.gov.au/Parliamentary_Business/Committees/House_of_Representatives/Committees?url=jcpaa/defenceannual1112/subs/sub001.pdf)>

85 *Major Projects Report 2012-13*, p.117.

86 Letter dated 28 February 2014 from Secretary of Defence and Chief of the Defence Force; at <[http://www.aph.gov.au/Parliamentary\\_Business/Committees/House\\_of\\_Representatives/Committees?url=jcpaa/defenceannual1213/corro/corro01.pdf](http://www.aph.gov.au/Parliamentary_Business/Committees/House_of_Representatives/Committees?url=jcpaa/defenceannual1213/corro/corro01.pdf)>

87 Mr White, *Committee Hansard*, 20 March 2014, p.3.

88 Mr White, *Committee Hansard*, 20 March 2014, p.3.

assessment. That risk assessment is a narrative of the key risks to implement the project which is included into the submission.<sup>89</sup>

3.105 She continued:

With that clear articulation of what the DMO see as being the materiel implementation risks, the value of the maturity score has really gone. ... Over time, although it seemed like a good initiative initially, it has gone into disuse because the materiel implementation risk assessment is seen as a better way of doing it by us.<sup>90</sup>

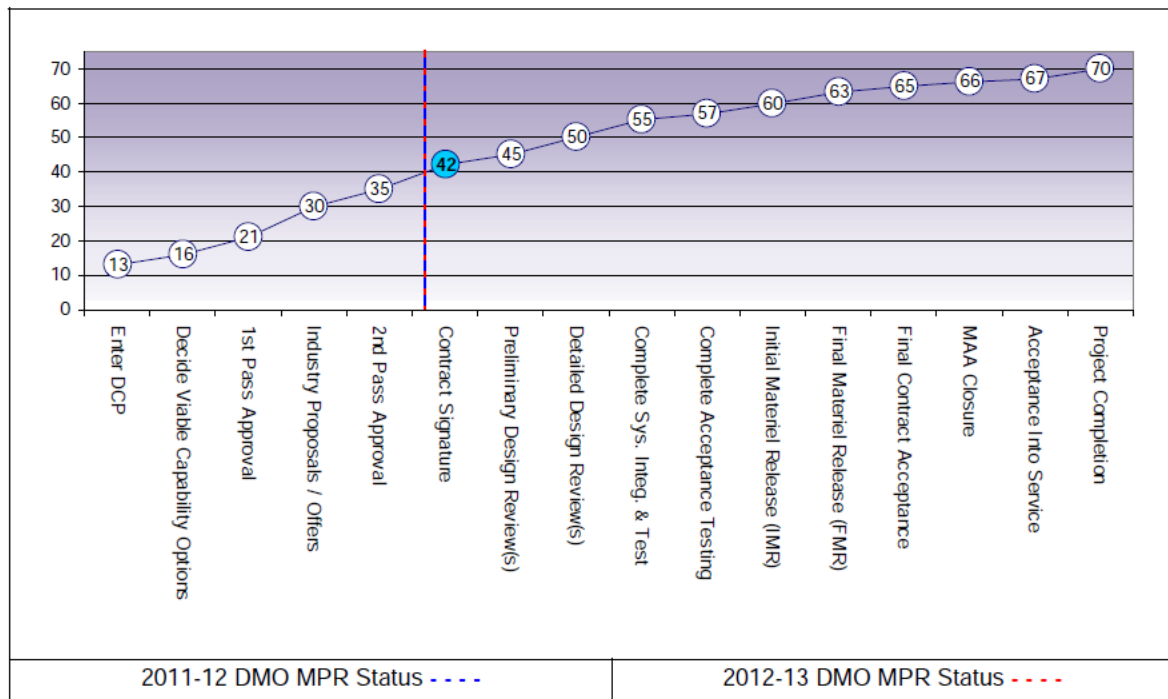
3.106 An example of Project Maturity Score reporting is included for information.

Figure 3 – Project Maturity Score and benchmark – Joint Strike Fighter

Maturity Score		Attributes							Total
		Schedule	Cost	Requirement	Technical Understanding	Technical Difficulty	Commercial	Operations and Support	
Project Stage	Benchmark	6	6	6	6	6	6	6	42
Enter Contract	Project Status	6	5	6	6	7	5	5	40
	Explanation	<ul style="list-style-type: none"> <li>• <b>Cost:</b> The cost maturity will remain immature whilst the US maintains annual contracting cycles. However, the recently negotiated LRIP 5 price does give some degree of cost confidence.</li> <li>• <b>Technical Difficulty:</b> The JSF aircraft is an extremely complex weapon system, and whilst the platform is now relatively mature, significant challenges remain in developing the mature (Block 3) software.</li> <li>• <b>Commercial:</b> JPO has increased their management oversight of Lockheed Martin (LM) including via a revised SDD contract structure which rewards measurable progress. Despite LM and JPO having successfully negotiated a fixed price incentive contract for LRIP 5, delays by the US Government have meant that finalisation of the contract for Australia's first two aircraft (LRIP 6) has still not been achieved.</li> <li>• <b>Operations and Support:</b> Global sustainment arrangements are still relatively immature, however they are now becoming a focus for the US Project Office and Lockheed Martin. The NACC Project is refining its own sustainment costs based on JPO analysis and through a series of scenario-based 'war games'.</li> </ul>							

89 Ms McKinnie, *Committee Hansard*, 20 March 2014, p.3.

90 Ms McKinnie, *Committee Hansard*, 20 March 2014, p.3.



Source 2012-13 Major Projects Report, p. 238-9

## Committee Comment

- 3.107 Achieving planned capability is a key measure of DMO's performance. Presently, this information is based on a forecast of future events. The Committee is concerned that, consequently, around one-third of the MPR is considered by the ANAO to be inconsistently compiled, is subjective and inherently uncertain, and is also not auditable. Section 5.1 in the PDSSs, in the Committee's view, in its current form could be improved. Capability benchmarks are essential to ascertain whether a project that may not meet expectations still represents value for money.
- 3.108 The comment that a project could have 10,000 items of performance is noted, as are comments from ANAO that covering all aspects as part of an assurance audit would be challenging. However, the Committee would prefer to see a more objective measure developed for future MPRs. This could distinguish:
- Capability achieved to date;
  - Capability yet to be achieved;
  - Capability exceeding requirements; and
  - Capability unlikely to be achieved.
- 3.109 In the interim, capability forecasts and supporting statements in Section 5.1 and 1.2 of each PDSS should be appropriately clarified and qualified to highlight that they do not necessarily represent capability achieved. Sections 1.2 and 5.1 in each PDSS should also disclose that the capability assessments and forecasts are not subject to ANAO's assurance audit.

- 3.110 The Committee notes the evidence from DMO explaining why project maturity scores have fallen out of favour within the organisation.<sup>91</sup> Their retention has been guaranteed by DMO for 2013-14, but not beyond this time. As the body responsible for the approval of the MPR guidelines, the Committee would be highly concerned if decisions were made within DMO or Defence that precluded project maturity scores from being published without the Committee's endorsement.
- 3.111 Should the Committee endorse that project maturity scores be omitted, they should be replaced with a measure equal to or better than current arrangements. In the meantime, the JCPAA insists upon project maturity scores remaining in future MPRs in line with the current guidelines. If project maturity scores were omitted, the only measure of capability would be DMO's pie chart forecast of project capability, which ANAO has found to be inconsistent and not auditable.
- 3.112 The Committee would welcome any joint proposal from the ANAO and DMO to improve project maturity-type reporting in the MPR – especially if this more closely aligns with DMO's internal management systems while maintaining transparency.

### **Recommendation 6**

- 3.113 **That the Australian National Audit Office and Defence Materiel Organisation consult as necessary to ensure that statements or graphs relating to capability in the PDSSs, particularly Section 1.2 and 5.1, be appropriately qualified in the 2013-14 Major Projects Report, by noting that:**
- **The graphs in Section 5.1 do not necessarily represent capability achieved; and**
  - **The capability assessments and forecasts in the PDSSs are not subject to ANAO's assurance audit.**

### **Recommendation 7**

- 3.114 **To improve the robustness of capability performance information, that the Australian National Audit Office and Defence Materiel Organisation consult as necessary and propose amendments to Section 5.1 and 1.2 in the 2014-15 MPR Guidelines, to:**

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91 Ms McKinnie, *Committee Hansard*, 20 March 2014, p.3.

- Apply a more objective method to assessing capability performance; and
- Distinguish capability achieved from capability yet to be achieved, capability unlikely to be achieved, and capability exceeded.

**ANAO and DMO should provide a specific proposal to the Committee preferably by the end of August 2014 in line with submission of the 2014-15 MPR Guidelines.**

### **Recommendation 8**

- 3.115 That DMO maintain the ability to publish project maturity scores in future Major Projects Reports until these are no longer required by the guidelines endorsed by the Joint Committee of Public Accounts and Audit.**

## **Governance and business processes**

- 3.116 In the 2012-13 MPR, ANAO highlighted a multitude of developments and issues, which included:
- Business system weaknesses, such as project offices having inconsistent recordkeeping and methods of tracking project progress;<sup>92</sup>
  - Varying project management skills among DMO and Defence staff;<sup>93</sup>
  - Risks and issues that may affect forecasts not necessarily being reported or regularly reviewed;<sup>94</sup> and
  - DMO having disabled some of its system for reporting project risks.<sup>95</sup>
- 3.117 In particular, ANAO found that internal reporting of project risks should occur at key milestones during the acquisition phase, which is required by the DMO Project Risk Management Manual. However, 46% of reporting fields in a system known as the Enterprise Risk Management Framework were disabled during 2012-13. ANAO found that "...few projects review their risks and issues regularly, with other projects only conducting their

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92 *Major Projects Report 2012-13*, p.88.

93 *Major Projects Report 2012-13*, p.91.

94 *Major Projects Report 2012-13*, p.41.

95 *Major Projects Report 2012-13*, p.41.

reviews annually prior to scheduled Gate Reviews or ANAO site visits in relation to the MPR.”<sup>96</sup>

3.118 The Committee asked DMO to explain these developments. Ms Shireane McKinnie (DMO) said:

The removal of risks from the monthly reporting system was a decision to avoid duplication, because projects were keeping risk records at the project level and they were putting them into the MRS, but at any particular time there could be inconsistencies between the two. We also, as part of an agreement with the minister, in terms of the monthly reports that we were providing to him at the time, agreed that we would have a simplified reporting structure that no longer required those risks to be captured in the monthly reporting system.<sup>97</sup>

3.119 She continued:

Each project then also has a risk management plan, and that risk management plan by the project is required to identify how it is going to go about managing and reviewing its risks. ... So, rather than having a one-size-fits-all approach, we tailor how we are going to look at risks in each project through an individual project risk management plan.<sup>98</sup>

3.120 Mr Michael White (ANAO) said that there is “sufficient information within the PDSSs to support the risks that are shown,” and that ANAO’s comments in the MPR were “a process question... that we are raising.”<sup>99</sup>

## Committee comment

3.121 The Committee believes that DMO should continue to invest in project management systems designed to identify project risks. Though not an area of focus this year, the Committee may revisit this theme in detail in the future.

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96 *Major Projects Report 2012-13*, p.41.

97 Ms McKinnie, *Committee Hansard*, 20 March 2014, p.2.

98 Ms McKinnie, *Committee Hansard*, 20 March 2014, p.2.

99 Mr White, *Committee Hansard*, 20 March 2014, p.2.



## Other matters

### Scrutiny of 'super-sized' Major Projects

- 3.122 The value, strategic significance and acquisition risk classification of projects reported in the MPR can be variable. The most expensive project in the MPR is the AWD Ships, priced at \$7.869 billion; the cheapest is the C-RAM at \$253.9 million. Some projects represent a new capability, whereas others are replacements or upgrades. Projects also range in acquisition category (ACAT) from 1 to 4, with 1 representing the most complex projects. The Joint Strike Fighter is characterised as a developmental project in ACAT 1, whereas the Additional Chinook is a military-off-the-shelf project in ACAT 3.<sup>100</sup>
- 3.123 All projects, regardless of the above characteristics, are given identical treatment of reporting in the MPR. This means that a cheaper, low-risk, off-the-shelf purchased project is given the same level of scrutiny as an expensive, strategically critical, high-risk developmental project.
- 3.124 From time to time, ANAO undertakes performance audits of individual projects, as was recently done for the AWD Ships,<sup>101</sup> which supplements the information in the MPR. While these audits capture progress at a singular point in time, the MPR provides ongoing, longitudinal information.

### Committee comment

- 3.125 In the future, the Committee may consider that the MPR Guidelines be amended to include supplementary reporting requirements for the top two or three Major Projects, based on value, strategic significance and acquisition risk profile.
- 3.126 The Committee invites suggestions from DMO or ANAO on ways to increase the level of reporting on 'super-sized' projects in future MPRs.

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<sup>100</sup> *Major Projects Report 2012-13*, pp.114-116.

<sup>101</sup> Audit Report No.22 (2013-14) *Air Warfare Destroyer Program*.



# Guidelines for the 2013-14 Major Projects Report

## Introduction

- 4.1 As mentioned earlier in this report, the JCPAA endorses Guidelines prior to each year's Major Projects Report (MPR) being prepared and published. The Guidelines, amongst other things, include templates of Project Data Summary Sheets (PDSSs), which determines the content and format of reporting applicable to all included projects. The MPR Guidelines include:
- criteria for project selection and removal (or 'entry' and 'exit');
  - a list of projects proposed for inclusion or removal from the MPR;
  - the roles and responsibilities of the DMO in the production and review of the MPR;
  - guidelines for the preparation of the PDSSs;
  - a PDSS template; and
  - an indicative audit program.
- 4.2 The Guidelines for 2012-13 are contained in Appendix 1 of the MPR on page 515. In *Report 429*, the JCPAA stated:

The Committee considers that the Guidelines are now a stable document, reflecting the requirements of the MPR. The Committee believes that the Guidelines should continue to be developed jointly by the DMO and ANAO. However, as the Guidelines provide the basis for the ANAO audit, the Committee recommends that, in the interests of administrative efficiency, the

ANAO should take administrative responsibility for updating the Guidelines and their submission to the JCPAA for endorsement.<sup>1</sup>

- 4.3 The Committee endorsed the Guidelines for the 2013-14 MPR on 27 March 2014, with two changes.

## Changes to the Guidelines

- 4.4 Before endorsing the Guidelines, the Committee had to seek clarification of some matters arising from the Executive Minute response to *Report 436*, which led to some delay. This has been an issue in the past, with the Committee expressing strong concerns about the quality of responses, and seeking an improvement in the quality of those responses in *Report 429*.<sup>2</sup>
- 4.5 The two changes made to the Guidelines in 2013-14 were as follows:
- A photo of each project must be inserted for illustrative purposes in each PDSS. Photos have been used in previous years though were not mandated in the Guidelines.
  - A statement must be included against each project to note whether a project has or has not applied contingency funds during the year. Exact dollar amounts applied, or whether the applied contingency funds have actually been expended, will not have to be disclosed.

## New projects and exiting projects

- 4.6 The following projects will exit the MPR in 2013-14:
- Bridging Air Combat Capability (AIR 5349 Phase 1/2), also known as the Super Hornet project;
  - Armidale Class Patrol Boat (SEA 1444 Phase 1); and
  - Counter - Rocket Artillery and Mortar (CRAM) (LAND 19 Phase 7A).
- 4.7 The following projects will enter the MPR in 2013-14, increasing coverage from 29 projects to 30 projects:
- Field Vehicles Modules and Trailers (Medium/Heavy Capability) (LAND 121 Phase 3B). In 2011, the Overlander Vehicles project was re-structured into two projects: Lightweight/Light Capability (Phase 3A) and Medium/Heavy Capability (Phase 3B). Both Phases 3A and 3B were resubmitted for Second Pass Approval. Phase 3B's approval did

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1 JCPAA, *Report 429*, p.29.

2 JCPAA, *Report 429*, p.32.

not occur until July 2013, too late for the 2012-13 MPR; hence Phase 3B was excluded and will re-appear in 2013-14;<sup>3</sup>

- EA-18G Growler Airborne Electronic Attack Capability (AIR 5349 Phase 3);
- Battlefield Airlift (Caribou Replacement) (AIR 8000 Phase 2); and
- Amphibious Watercraft Replacement (JNT 2048 Phase 3).

4.8 These inclusions and removals follow from assessments by the DMO of these projects against the criteria in the guidelines.

4.9 The Committee has carefully considered the merits of allowing the Armidales project to exit the MPR. As Mr King noted, “we do have problems at the moment with the maintenance of the Armidales” due to “structural matters” and “cracking”.<sup>4</sup> This has also been the subject of recent media coverage.<sup>5</sup>

4.10 Although the Committee endorsed the exit of this project, DMO has been requested to separately provide information to the Committee on developments over the 2013-14 financial year. The Committee may publish this information when received.

## Project selection

4.11 To be selected for entry into the MPR, a project must meet the eligibility criteria in the MPR Guidelines.

The inclusion of projects in the MPR is based on the projects included in the Defence Capability Plan and subject to the following criteria:

- projects only admitted one year after Year of Decision;
- a total approved project budget of > \$150m;
- a project should have at least three years of asset delivery remaining;
- a project must have at least \$50m or 10% (whichever is greater) of their budget remaining over the next two years; and
- a maximum of eight new projects in any one year.<sup>6</sup>

4.12 Having at least met these criteria, entry is then dependent upon JCPAA endorsement:

All projects for inclusion in the MPR will be proposed by the DMO, based on the above criteria, and provided to the JCPAA by

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3 *Major Projects Report 2012-13*, p.24.

4 Mr King, *Committee Hansard*, 20 March 2014, p.8.

5 *The Australian*, ‘Time’s Up For Navy Asylum Fleet’, 24 March 2014, p.1.

6 *Major Projects Report 2012-13*, p.518.

the ANAO by 31 August in the year to which the MPR relates, for endorsement.<sup>7</sup>

## Project exit criteria

4.13 A project should meet the following criteria to exit the MPR, as stated in the MPR Guidelines:

1.9 The removal of projects from the MPR is based on a post Final Materiel Release (FMR) risk assessment of the timely achievement of Final Operational Capability (FOC) and is subject to the following criteria:

- the outstanding deliverables post FMR, against the relevant Materiel Acquisition Agreement (MAA) and/or Joint Project Directive (JPD);
- the remaining schedule post FMR, against the relevant MAA and/or JPD;
- the remaining budget post FMR, against the relevant Materiel Acquisition Agreement MAA and/or JPD;
- the remaining project risks and issues; and
- the Capability Manager's assessment including overall risk rating and the extent to which this risk rating relates to DMO's responsibilities.

1.10 All projects selected for removal from the MPR will be proposed by the DMO, based on the above criteria, and provided to the JCPAA by the ANAO by 31 August in the year to which the MPR relates, for endorsement.

1.11 Projects which are anticipated to achieve both FMR and FOC within a twelve month period are to be automatically proposed for removal to the Committee.

1.12 Once projects have met the exit criteria, they should be removed from the PDSSs in subsequent years. For each project which has been removed, the lessons learned at both the project level and the whole-of-organisation level should be included as a separate section in the following MPR.

4.14 The three projects listed for exit have qualified according to the above criteria. DMO has encouraged the Committee to exit other projects. In his opening statement to the Committee at the public hearing on the MPR in March 2013, Mr Warren King (CEO, DMO) said:

I also want to raise the issue of the value of continuing to report on some of the older projects from the MPR for the next reporting

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7 Major Projects Report 2012-13, p.518.

year and beyond. In particular, I am referring to projects such as the high frequency modernisation project, the FFG upgrade [Guided Missile Frigate Upgrade Implementation] and the Armidale patrol boats, which are substantially in service. These projects, while still open, are now in operational service and my observation is that both the value in reporting on them and the window of opportunity to learn from these three projects and apply lessons to the way that we manage projects has now largely passed by.<sup>8</sup>

- 4.15 This year, Mr King named several Major Projects he said “have materially delivered all the things they are going to deliver” with “very minor elements” preventing final acceptance.<sup>9</sup> Specifically, DMO named the FFG Upgrade, Bushmaster Vehicles, F/A18 Hornet Upgrade and HF Modernisation as being “legacy” projects.<sup>10</sup> In his 2014 opening statement, Mr King added:

If these projects, which are already delivering capability, are removed, then it would enable the Committee to introduce new projects into the report. I am, therefore, asking the Committee to consider whether there is value in including these older, legacy, projects in the MPR.<sup>11</sup>

- 4.16 However, there is a risk that once removed from the MPR, Defence and DMO may not report a Major Project’s final cost, schedule and capability statistics in other publications.

## Reporting on projects post-MPR

- 4.17 The Defence Annual Report<sup>12</sup> and Portfolio Budget Statements<sup>13</sup> report information on Major Projects (MPR projects and others), including budgets, some schedule information and limited detail of capability issues. Once a project is deemed complete, having achieved final operational capability (FOC), it moves into the sustainment phase. The C-17 Globemaster 3 (AIR 8000 Phase 3) has been reported in budget papers and the annual report since exiting the MPR in 2011-12.

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8 JCPAA *Committee Hansard*, 13 March 2013, p.1

9 Mr King, *Committee Hansard*, 20 March 2014, p.9.

10 DMO, Submission No.3, p.2.

11 DMO, Submission No.3, p.2.

12 Department of Defence, ‘Annual Report 2012-13’, p.184

13 Defence Portfolio Budget Statements 2013-14, p.151

- 4.18 Whether information about a Major Project is included in these publications is a matter for Defence and DMO. The final results for this project may (or may not) be visible in the future.
- 4.19 There is currently a short “lessons learnt” summary in the appendices of the MPR, but this item focuses on management processes and acquisition concepts, not financial outcomes or timelines in final capacity achieved.<sup>14</sup>
- 4.20 Last year, the Committee noted its intention to monitor the process used to exit projects from the MPR:
- The Committee suggests that if the agreed process for the removal of projects from the MPR is not producing an appropriately balanced outcome, then it will consider any proposal put forward to improve those criteria during its next annual review and endorsement of the MPR Guidelines.<sup>15</sup>
- 4.21 In 2012, the Committee also stated its intention to modify the Guidelines to incorporate post-MPR reporting:
- ...any future ‘post-FMR’ [final materiel release] reporting format should also be included in the MPR Guidelines endorsed by the Committee, even if separate to the PDSSs, in order to maintain an appropriate level of transparency and accountability.<sup>16</sup>
- 4.22 In response, the exit criteria noted above were developed taking a risk-based approach. The rationale of this approach was to ensure riskier projects were retained in the MPR. By allowing older projects to exit, this would create space for newer projects to enter the MPR.

### Committee comment

- 4.23 Reporting of Major Projects after they have exited the MPR is less detailed, though basic information is usually made available. As this information is published according to the preferences of Defence or DMO, there is no certainty that particular projects will remain visible after exit. A Major Project’s final outcomes for cost, schedule and capability may (or may not) be revealed. However, the Committee is also conscious of ensuring that the MPR does not balloon into an unwieldy publication from retained Major Projects.
- 4.24 The Committee is prepared to consider changes to the exit criteria in conjunction with options for reporting on projects post-MPR. The Committee’s preference is to use transparent exit criteria to assist

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14 *Major Projects Report 2012-13*, p.553-555.

15 JCPAA, *Report 436*, p.37.

16 JCPAA, *Report 429*, pp.28-29.



decisions as to which projects should exit from official PDSS reporting in the MPR. Although only recently established, the Committee would be prepared to consider changes to the criteria. If formal criteria inhibit more strategic changes to MPR reporting, the Committee is prepared to consider a detailed proposal from DMO and the ANAO.

- 4.25 For completeness, the Committee believes there should be certainty that Major Projects can be tracked once exited from the MPR. The Committee is open to suggestions from DMO and ANAO, though one option would be to include a special section in the MPR for post-exit projects. Information could be in an abridged format, similar to Tables 2.1 to 2.3 on pages 114 to 116 of the MPR. The Guidelines could be amended to require inclusion of this information. In the interim, for 2013-14 MPR, the Committee has recommended DMO voluntarily include additional information on recently exited Major Projects.

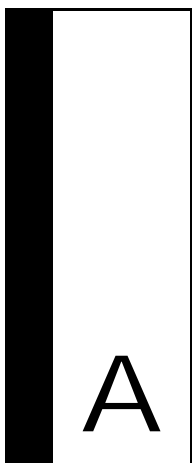
### **Recommendation 9**

- 4.26 **That all future Major Projects Reports, including the 2013-14 Major Project Report, include information on recently exited Major Projects, at a level similar to Tables 2.1 to 2.3 on pages 114 to 116 of the 2012-13 Major Project Report.**

### **Recommendation 10**

- 4.27 **The Australian National Audit Office and Defence Materiel Organisation consult as necessary to propose amendments to the 2014-15 MPR Guidelines to make provision for information on exited Major Projects.**

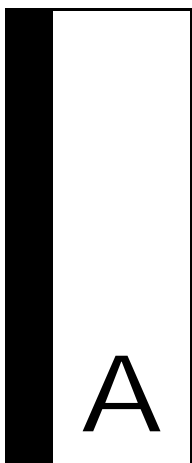




## Appendix A - Submissions

- 1 Mr E J Bushell
- 2 Australian National Audit Office
- 3 Defence Materiel Organisation





## Appendix B – Public Hearings

Canberra, 20 March 2014

### **Australian National Audit Office**

Mr Steve Chapman, Deputy Auditor-General

Mr Michael White, Executive Director, Major Projects Report

Ms Michelle Page, Senior Director, Major Projects Report

### **Defence Materiel Organisation**

Mr Warren King, Chief Executive Officer

Mr Steve Wearn, Chief Financial Officer

Ms Shireane McKinnie, General Manager, Joint Systems and Air

Mr Paul Way, Chief Audit Executive

