

Major Projects Report 2010-11

Introduction

- 2.1 This chapter provides an outline of the 2010-11 MPR, listing the major projects included in the report, the risks these projects face and a summary of the findings with regard to cost, scheduling and capability. It includes a summary of the Auditor-General's conclusion from his review of the MPR. The chapter also provides a summary of the Major Projects Work Plan for 2011-12.
- 2.2 The Major Projects Report is comprised of three parts:
- Part 1: ANAO overview;
 - Part 2: DMO commentary and analysis; and
 - Part 3: Auditor-General's assurance review report; statement by the Chief Executive Officer (CEO) DMO; and the 28 Project Data Summary Sheets (PDSSs).¹
- 2.3 The PDSSs prepared by the DMO have been refined over the years since the first model of the MPR was developed in 2007-08, by the DMO and ANAO and with the support of the JCPAA. Currently the PDSSs provide data covering the following areas:
- project summary;
 - financial performance;
 - schedule performance;

1 Australian National Audit Office (ANAO), *2010-11 Major Projects Report: Defence Materiel Organisation*, Australian National Audit Office, Canberra, p. 29.

- materiel capability performance;
- major risks and issues;
- project maturity;
- lessons learned; and
- project line management.²

2.4 The objective of the MPR is to provide:

- a formal conclusion on the review of the PDSSs by the Auditor-General;
- comprehensive information on the status of projects as reflected in the PDSSs prepared by the DMO;
- ANAO analysis on the three key elements of the MPR: cost, schedule and capability, in particular longitudinal analysis of projects over time; and
- further insights and context by the DMO on issues highlighted during the year (not included in the scope of the review by the ANAO).³

Major projects included in 2010-11

2.5 The 2010-11 MPR reports on 28 major projects, an increase of six projects on the 2009-10 MPR.⁴ The total approved budget for the 28 projects is \$46.1 billion which represents over half of the budget for the DMO's approved major capital investment program.⁵ These projects and their approved budgets appear in Table 2.1

Table 2.1 2010-11 MPR Projects and approved budgets at 30 June 2011

Project	DMO Abbreviation	Approved Budget \$m
Air Warfare Destroyer Build (SEA 4000 Ph 3)	AWD Ships	7 931.8
Airborne Early Warning and Control Aircraft (AIR 5077 Ph 3)	Wedgetail	3 859.5
Multi-Role Helicopter (AIR 9000 Ph 2/4/6)	MRH90 Helicopters	3 753.7
Bridging Air Combat Capability (AIR 5349 Ph 1/2)	Super Hornet	3 578.5
Field Vehicles and Trailers (LAND 121 Ph 3)	Overlander Vehicles	3 263.9
Amphibious Ships (LHD) (JP 2048 Ph 4A/4B)	LHD Ships	3 122.6

2 ANAO, *2010-11 Major Projects Report: Defence Materiel Organisation*, p. 30-31.

3 ANAO, *2010-11 Major Projects Report: Defence Materiel Organisation*, p. 16.

4 ANAO, *2010-11 Major Projects Report: Defence Materiel Organisation*, p. 13.

5 ANAO, *2010-11 Major Projects Report: Defence Materiel Organisation*, p. 13.

New Air Combat Capability (AIR 6000 Ph 2A/2B)	Joint Strike Fighter	2 666.8
Armed Reconnaissance Helicopter (AIR 87 Ph 2)	ARH Tiger Helicopters	2 060.3
F/A-18 Hornet Upgrade (AIR 5376 Ph 2)	Hornet Upgrade	1 917.5
C-17 Globemaster III Heavy Airlifter (AIR 8000 Ph 3)	C-17 Heavy Airlift	1 848.9
Air to Air Refuelling Capability (AIR 5402)	Air to Air Refuel	1 828.5
Guided Missile Frigate Upgrade Implementation (SEA 1390 Ph 2.1)	FFG Upgrade	1 528.9
F/A-18 Hornet Upgrade Structural Refurbishment (AIR 5376 Ph 3.2)	Hornet Refurb	951.3
Bushmaster Protected Mobility Vehicle (LAND 116 Ph 3)	Bushmaster Vehicles	929.8
Next Generation SATCOM Capability (JP 2008 Ph 4)	Next Gen Satellite	880.9
High Frequency Modernisation (JP 2043 Ph 3A)	HF Modernisation	670.8
SM-1 Missile Replacement (SEA 1390 Ph 4B)	SM-2 Missile	612.0
Additional Medium Lift Helicopters (AIR 9000 Ph 5C)	Additional Chinook	584.6
Armidale Class Patrol Boat (SEA 1444 Ph 1)	Armidales	537.2
ANZAC Anti-Ship Missile Defence (SEA 1448 Ph 2B)	ANZAC ASMD 2B	462.0
Collins Replacement Combat System (SEA 1439 Ph 4A)	Collins RCS	450.4
Replacement Heavyweight Torpedo (SEA 1429 Ph 2)	Hw Torpedo	425.4
Collins Class Submarine Reliability and Sustainability (SEA 1439 Ph 3)	Collins R&S	411.4
Indian Ocean Region UHF SATCOM (JP 2008 Ph 5A)	UHF SATCOM	407.2
ANZAC Anti-Ship Missile Defence (SEA 1448 Ph 2A)	ANZAC ASMD 2A	389.5
Follow On Stand Off Weapon (AIR 5418 Ph 1)	Stand Off Weapon	343.3
Artillery Replacement (LAND 17 Ph 1A)	155mm Howitzer	326.1
Battlefield Command Support (LAND 75 Ph 3.4)	Battle Comm. Sys.	325.9
TOTAL		46 068.7

Source Australian National Audit Office, 2010-11 Major Projects Report, p. 15.

2.6 Twenty-two of the projects were reported in the 2009-10 MPR. The following six projects have been added:

- AIR 6000 Phase 2A/B – New Air Combat Capability (Joint Strike Fighter);
- SEA 1390 Phase 4B – SM-1 Missile Replacement (SM-2 Missile);
- AIR 9000 Phase 5C – Additional Chinook Helicopter (Additional Chinook);
- JP 2008 Phase 5A – Indian Ocean UHF SATCOM Capability (UHF SATCOM);
- LAND 17 Phase 1A – Artillery Replacement (155mm Howitzer); and
- LAND 75 Phase 3.4 – Battlefield Command Support System (Battle Comm. Sys).

Risks

2.7 The DMO identified a number of risks facing major projects including:

- employing and maintaining an appropriately skilled workforce;
- multiple integration challenges for projects;
- overestimating by contractors of the technical maturity of proposed equipment solutions and underestimating the level of effort and complexity required to deliver new equipment;
- unavailability of in-service equipment;
- accelerating the maturity of the maintenance operations and supply chains for new equipment to support the transition to in-service use by Australian Defence Force (ADF) units;
- managing the expectations of [DMO] customers on changes to Government approved scope based on contemporary expectations and requirements that may affect project cost and schedule;
- complying with increasingly demanding certification and regulatory requirements; and
- ensuring access to Intellectual Property to enable continued further enhancement and improvement of systems.⁶

Cost

2.8 The ANAO found that there was a net increase of \$7.8 billion in the total approved budget cost of the 28 major projects compared to their approved budget at Second Pass Approval. The \$7.8 billion was comprised of:

- price variation increases of \$7.6 billion;
- real variation increases of \$3.6 billion; and
- foreign exchange rate movement decreases of \$3.4 billion.⁷

2.9 The ANAO indicate that price variation and foreign exchange movements are 'outside the direct control' of the DMO and that the real variation increases:

... primarily reflect changes in the scope of projects, transfers between projects for approved equipment/capability, and budgetary adjustments such as administrative savings decisions.⁸

2.10 The ANAO conclude that none of the 28 major projects included in this report 'have exceeded their approved budgeted cost'.⁹

6 ANAO, *2010-11 Major Projects Report: Defence Materiel Organisation*, pp. 142-143.

7 ANAO, *2010-11 Major Projects Report: Defence Materiel Organisation*, p. 49.

8 ANAO, *2010-11 Major Projects Report: Defence Materiel Organisation*, p. 52.

9 ANAO, *2010-11 Major Projects Report: Defence Materiel Organisation*, p. 51.

Scheduling

- 2.11 The ANAO found that, of the 28 major projects, 14 had experienced schedule slippage amounting to 760 months, a 31 per cent increase.¹⁰ The ANAO identified a number of reasons for the scheduled slippage including:
- technical factors such as design problems;
 - industry capacity and capability;
 - difficulties in integrating different systems to achieve the required capability;
 - emergent work associated with upgrades; and
 - project ability to gain access to the platform.¹¹
- 2.12 The ANAO analysis of the schedule slippage shows that the slippage is greatest for the initial nine projects reported in the 2007-08 MPR, 463 months or 61 per cent.¹² The ANAO indicate that 88 per cent of the total schedule slippage for the projects included in the 2010-11 MPR 'is made up of projects approved prior to the DMO's demerger from the Department of Defence, in July 2005'.¹³
- 2.13 The ANAO found that the DMO received a total of an additional \$295 million in price indexation (up to 30 June 2011) to account for this slippage.¹⁴

Capability

- 2.14 Capability performance falls outside the scope of the ANAO's assurance audit as the data 'concerns forecasting future achievements'.¹⁵ Operational capability, as defined by the ADF, determines when a project has the capacity to be operationally effective and is made up of eight Fundamental Inputs to Capability (FIC):
- organisation;
 - personnel;
 - collective training;
 - materiel systems;
 - supplies;

10 ANAO, *2010-11 Major Projects Report: Defence Materiel Organisation*, p. 62.

11 ANAO, *2010-11 Major Projects Report: Defence Materiel Organisation*, p. 62.

12 ANAO, *2010-11 Major Projects Report: Defence Materiel Organisation*, p. 67.

13 ANAO, *2010-11 Major Projects Report: Defence Materiel Organisation*, p. 69.

14 ANAO, *2010-11 Major Projects Report: Defence Materiel Organisation*, p. 51.

15 ANAO, *2010-11 Major Projects Report: Defence Materiel Organisation*, p. 24.

- facilities;
- support;
- command; and
- management.¹⁶

2.15 Of the 28 major projects in the 2010-11 MPR, DMO consider that 17 projects will deliver their key capability requirements, six projects are at risk but will meet their key capability requirements and three are unlikely to meet their key capability requirements.¹⁷

Australian National Audit Office review

2.16 Although the ANAO conducts an assurance audit of the MPR, it cautions that the level of assurance is more limited than for a regular performance audit.¹⁸ A number of sections of the PDSSs are excluded from the audit review's scope due to their 'inherent uncertainty' as they record future dates and events, risks and issues.¹⁹

2.17 After examining the PDSS data the ANAO concluded that, except for the issue of reporting financial performance in base date dollars (to be discussed in detail in Chapter 3):

... nothing has come to the attention of the ANAO that causes us to believe that the information in the PDSSs, within the scope of our review, has not been prepared, in all material respects, in accordance with the guidelines on completing the PDSSs.²⁰

Major Projects Report Work Plan

2.18 In addition to reviewing the MPR, the Committee considers and endorses the MPR Work Plan annually. The MPR Work Plan includes the list of projects to be added or removed from the MPR and the Guidelines for the PDSSs. The MPR Work Plan for 2011-12, presented to the Committee in September 2011, included:

16 ANAO, *2010-11 Major Projects Report: Defence Materiel Organisation*, pp. 71 and 111.

17 ANAO, *2010-11 Major Projects Report: Defence Materiel Organisation*, pp. 168-170.

18 ANAO, *2010-11 Major Projects Report: Defence Materiel Organisation*, p. 16.

19 ANAO, *2010-11 Major Projects Report: Defence Materiel Organisation*, p. 32.

20 ANAO, *2010-11 Major Projects Report: Defence Materiel Organisation*, p. 17.

- the criteria for project selection and the list of projects selected for the 2011-12 MPR;
- the role and responsibilities of the DMO in the production and review of the DMO 2011-12 MPR;
- the guidelines for producing the PDSSs;
- the PDSS Template; and
- an indicative Program Schedule in support of a mid November 2012 Tabling.

Guidelines for the Project Data Summary Sheets

- 2.19 The DMO in consultation with the ANAO have developed a set of Guidelines for the production of the PDSSs. The Guidelines have been enhanced and refined over previous years to improve both the type and presentation of data to improve transparency and accountability. The Committee has contributed to this process with its annual review of the MPR and final approval process.
- 2.20 The DMO in conjunction with the ANAO has provided the Committee with the revised Guidelines for the 2011-12 MPR. The proposed revisions to the Guidelines include:
- an additional 'Assurance Statement' on the project's budget performance in Section 1;
 - further refinement to financial performance in Section 2;
 - a graphical representation of 'Project Status' at 30 June in Section 4.

Major Projects Work Plan 2011-12

- 2.21 In addition to the 27 'repeat' projects listed in the 2010-11 MPR, the 2011-12 MPR will include the following two 'new' projects:
- Future Naval Aviation Combat system Helicopter – AIR 9000 Phase 8; and
 - Counter Rocket, Artillery and Mortar (C-RAM) – LAND 19 Phase 7A.²¹
- 2.22 One project has been removed from the 2011-12 MPR:
- Hornet Structural Refurbishment – AIR 5376 Phase 3.2.²²

21 Defence Materiel Organisation, *DMO 2011-12 Major Projects Report Guidelines*, p. 3.

22 Defence Materiel Organisation, *DMO 2011-12 Major Projects Report Guidelines*, p. 4.

