Australian Government

Department of Defence
Defence Materiel
Organisation

DEFENCE MATERIEL ORGANISATION 2010–11 MAJOR PROJECTS REPORT

BROCHURE

DMO

Defence Materiel Organisation – 2010–11 Major Projects Report

Background

The Defence Materiel Organisation (DMO) was established in 2000 through the merger of the then Defence Acquisition Organisation, Support Command Australia and National Support Division. The purpose was to provide a cradle-to-grave acquisition and in-service support organisation.

In March 2003 the Senate Foreign Affairs, Defence and Trade References Committee recommended that the Senate request the Auditor-General to produce an annual report on the progress of major Defence projects detailing cost, time and technical performance data for each project. The Committee recommended that the report be modelled on the United Kingdom National Audit Office annual Major Projects Report ordered by the British House of Commons and produced by the United Kingdom Comptroller and Auditor-General. The Senate supported these recommendations.

In August 2006, the Joint Committee on Public Accounts and Audit (JCPAA) supported the development and submission of an annual Major Capital Equipment Projects Report to Parliament and recommended that the Australian National Audit Office (ANAO) produce an annual report on the progress of the top 30 capital equipment projects.

The ANAO and DMO conduct the Major Projects Report (MPR) under the auspices of a Section 20 Agreement under the Auditor-General Act 1997, which confirms the manner in which the assurance review is to be undertaken. Under this Agreement, the Auditor-General's review is conducted in accordance with the Australian Standard on Assurance Engagements (ASAE) 3000 Assurance Engagements Other then Audits or Reviews of Historical Financial Information (issued by the Auditing and Assurance Standards Board). Within the MPR, each DMO project produces a Project Data Summary Sheet (PDSS), and the Auditor-General provides an assurance report and conclusion based on a review of the PDSS.

The DMO 2010-11 MPR companion Brochure has been updated from the data in the 2010-11 MPR and is current to 31 October 2011

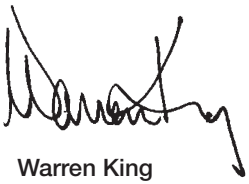
CEO DMO Foreword

I am pleased to present the 2010–11 DMO Major Projects Report (DMO MPR). The first DMO MPR, tabled in Parliament in November 2008, reported on nine of the DMO's major projects. The second DMO MPR was tabled in November 2009 and incorporated an additional six projects, reporting on a total of 15 projects. The third report, tabled in November 2010 was again expanded to cover 22 of the DMO's major projects. In this report a further six projects have been included, bringing the number of projects covered to 28.

I am confident that the maturity of the reporting on the previously reported projects along with the addition of six new projects represents continuing advances in terms of transparency.

I view the DMO MPR as an important report to Parliament because it gives an open and insightful account of how well we are performing in our core business of equipping the Australian Defence Force (ADF). One of the valuable elements of the MPR is the organisational perspective that it provides on major DMO project work and performance. This broad view is important in setting the context for our performance on individual projects. Over time, I expect that one of the most valuable elements of this report will be the increasing quality of trend analysis it can provide on key project performance measures of cost, schedule and materiel capability.

The project data in this report has also been reviewed by Capability Managers and the major contractors for each project, their views have been considered in finalising the report.



Warren King
Chief Executive Officer
14 December 2011

Executive Summary

In 2010-11, the Defence Materiel Organisation (DMO) managed over $10.6b in expenditure across the acquisition projects, sustainment programs and other management services. This represents a total spend of 102 per cent against the revised 2010–11 budget of $10.4b[1], through improved delivery, not overspend. As at 30 June 2011, the DMO managed 281 major and minor acquisition projects with an annual budget of $5.0b, and a sustainment program (comprising 106 sustainment products) with a budget of $4.5b and $0.9b for provision of management services.

In 2010-11, the DMO's budget represented about 33% of the Defence budget and approximately 0.8 per cent of Australia's Gross Domestic Product with approximately 57 per cent (or $6.22b) spent on local Australian suppliers. The Smart Sustainment Stream of the Strategic Reform Program (SRP) achieved the planned savings target of $288m in 2010–11[2].

While this report focuses attention on 28 of the most significant DMO acquisition projects (an increase of six from the previous year's report), it is also important to note the DMO's contribution to supporting Australian Defence Force (ADF) personnel deployed on operations. To meet these needs the DMO is actively engaged in advancing certain projects ahead of previously planned schedules. Some recent examples are the rapid acquisition of a fifth C-17 Globemaster (the new C-17 capability will expand Australia's capacity to deploy personnel and equipment rapidly to operations in the Middle East), Digital Terminal Control Systems and the Counter Rocket, Artillery and Mortar.

Defence industry plays an essential role in supporting ADF capability through supply and maintenance of military equipment and the delivery of a wide range of support services. Growing a competitive local Defence industry capacity whilst ensuring competitiveness is a Government policy objective, as outlined in *Defending Australia in the Asia Pacific Century Force 2030 – Defence White Paper 2009*, and the *2010 Defence Industry Policy Statement*. The DMO supports this objective through a wide range of ongoing programs that invest in skills development and improved productivity.

The large portfolio of projects that the DMO manages is the most complex and technically challenging in the country. Benchmarking undertaken by the Helmsman Institute in 2009 - comparing DMO and industry project levels of complexity - indicates that DMO projects and products are more complex than the average for projects in other industries such as IT, construction, telecommunications, engineering and finance.

1 Portfolio Additional Estimates Statements 2010–11, Defence Portfolio
2 Defence Annual Report 2010–11

DMO Achievements

Within the last year, performance on the key measures of cost and materiel elements of capability have remained steady and a number of key capabilities have been delivered that are now providing operational effect for the ADF. Schedule performance has improved in 2010–11 but requires ongoing effort to manage risk and prevent slippage. An overview of cost and schedule performance is shown in Tables 1 and 2. Significant achievements in 2010–11 include:

- **C-17 Globemaster Heavy Airlift capability:** Four aircraft were delivered under Phase 3 of the AIR 8000 project ahead of schedule and under budget. These aircraft are providing crucial and previously unavailable operational capability to the war fighter engaged in operations as well as humanitarian assistance to communities affected by natural disasters in Australia and overseas including; the Queensland January floods, the Christchurch earthquake, and the tsunami in Japan.
- **Bushmaster:** As of 30 June 2011, 674 Bushmaster Vehicles have been delivered. Many of these vehicles are currently in operation in Afghanistan where they have been instrumental in saving Australian soldiers' lives. To date 31 Bushmasters have been battle damaged by Improvised Explosive Devices. The Government has recently approved the purchase of an additional 101 Bushmaster vehicles. This will take the total inventory to 838 Bushmaster vehicles.
- **Landing Helicopter Dock (LHD) Ships:** Construction of the main hull sections for the second Landing Helicopter Dock is underway. The first hull, LHD01 (to be commissioned HMAS *Canberra*) was launched in Spain in February 2011.
- **Airborne Early Warning and Control (AEW&C):** Following the successful resolution of a range of contractual issues, four AEW&C (Wedgetail) aircraft have been accepted in an 'initial' configuration capable of supporting training and peacetime national tasking. Also worthy of note is the inclusion of the Wedgetail aircraft in a number of military exercises during 2010-11.
- **Armidale-class Patrol Boats:** All 14 of the Armidale-class Patrol Boats have been accepted with engineering and maintenance arrangements established. The Armidale-class Patrol Boats continue to provide an important service to the nation at the forefront of the Government's efforts to protect Australia's northern approaches and offshore maritime interests.
- **F/A-18 Super Hornets:** All 24 F/A-18 Super Hornets have been delivered to their new home base at RAAF Amberley. These aircraft are proving to be a successful replacement for the retired F-111s by providing a more advanced air strike capability. Minister for Defence Materiel, Jason Clare said "They are amongst the best fighter planes in the world and all 24 aircraft have been delivered on budget and ahead of schedule".[3]
- **Armed Reconnaissance Helicopter:** Twenty Tiger aircraft have been accepted. Engineering and maintenance arrangements have also been established.
- **Air to Air Refuelling Capability:** Acceptance of the first KC-30A aircraft was achieved on 1 June 2011 with acceptance of the second aircraft achieved on 22 June 2011. The third Tanker was accepted on 8 November 2011. Acquisition of these tankers will end Australia's dependence on the US to deliver midair refuelling of fighter jets.

3 Air Force News, 27 October 2011

- **Upgraded Adelaide-class Guided Missile Frigate:** Four ships have been accepted with engineering and maintenance established. HMAS *Melbourne* was deployed to the Middle East and African east coast during January 2011 as part of a multi national task force to protect commercial shipping from piracy. HMAS *Melbourne* and its crew effectively carried out their mission and in the process responded to 14 piracy distress calls. [4]
- **Next Generation Satellite Program:** Three of the six satellites have been successfully launched and are being utilised by the ADF.
- **Anzac Anti-Ship Missile Defence:** HMAS *Perth* was the first Anzac-class frigate to undergo upgrades to its missile defence system and carried out successful trials off the coast of Hawaii in June 2011. Minister for Defence Materiel Jason Clare said "the recent trials achieved outstanding results and shows that the new system can defend the ship from modern cruise missile attack".[5] Upgrades will also be carried out on the remaining Anzac-class frigates (eight ships in total). The upgrades are also a success story for Australian industry as the system's cutting edge technology was developed in Australia by CEA Technologies.

Over 2010–11, the DMO has continued to institute a number of organisational business improvements which are directly aimed at enhancing its core business of equipping and sustaining the ADF. Some examples of these include:

- **Establishment of the Independent Project Performance Office:** On 1 July 2011 the Independent Project Performance Office (IPPO) commenced operating, which gave effect to a key procurement reform announcement made by Minister for Defence, Stephen Smith, and Minister for Defence Materiel, Jason Clare .
  - The establishment of the IPPO also implements one of the key outstanding recommendations of the Mortimer Review into Defence Procurement and Sustainment, which called for an office to be established within the DMO to provide independent project performance analysis and advice to the Government on major acquisition projects.
  - The IPPO is responsible for the conduct and management of:
    - » Early Indicators and Warnings,
    - » Gate Reviews, and
    - » Projects of Concern.
- **Early Indicators and Warnings:** The introduction of the Early Indicators and Warning (EI&W)[6] system is designed to identify potential problems with projects early in their lifecycle by revealing any deviation of defined project requirements (scope, schedule, budget/cost) from Government agreed parameters.
- **Gate Reviews:** The Gate Review Board function commenced in 2009 to provide a mechanism for the robust review and assurance of major projects. This enables provision of high quality and reliable advice to Defence and Government as to the health and outlook of major projects. Following the proven value from review of some 50 high value and technically complex projects in 2010–11, the DMO will now conduct Gate Reviews for all major projects "at least annually[7].

4 Defence Media Release, 18 February 2011
5 Minister for Defence Materiel Jason Clare Press Release, 3 September 2011
6 Minister for Defence Media Release, Strategic Reform Program, 6 May 2011.
7 Minister for Defence Media Release, Strategic Reform Program, 6 May 2011.

- **Strengthening the Projects of Concern Process:** The Minister for Defence and Minister for Defence Materiel have strengthened the Projects of Concern regime to provide increased Ministerial and senior management oversight of identified projects. Formal remediation plans will now be developed for all projects on the Projects of Concern list, together with key milestones that must be achieved before projects are considered for removal.
- **Roll-out of Initial Materiel Release (IMR) and Final Materiel Release (FMR):** The Materiel Acquisition Agreement (MAA) (the principal agreement between the DMO, Capability Managers and Capability Development Group) has been strengthened with the introduction of IMR and FMR. These represent the two key milestones for the DMO to deliver the materiel elements of the Fundamental Inputs to Capability (FIC) to the Capability Managers.
  - Introduction of IMR and FMR milestones provides greater clarity of responsibilities between the DMO and Capability Managers. It marks the delivery and release to the Capability Managers of materiel supplies, which are just one of a number of inputs coordinated by the Capability Manager to realise a capability.
  - Twenty-seven of the 28 projects reported in this MPR had, by early July 2011, incorporated IMR and FMR into their project schedule and included the Capability Manager as a signatory to their MAA. The exception is Hornet Refurb as it is due for completion by December 2011. The DMO is also well advanced in transitioning all remaining Major Capital Acquisition Projects to the revised MAA format.
- **Strengthening the 'DMO Wide Risk Management Framework':** A number of risk management improvement initiatives have been introduced and continue to be rolled out across the DMO, including maturing of the 'DMO Wide Risk Management Framework' and identifying key business control frameworks to better manage risk.

DMO Challenges

The key challenge for the DMO and Defence industry is to reduce schedule slippage. For the 28 projects in this report, the average schedule variance at Final Operational Capability (FOC) is a factor of 1.28 (or an average slippage of 28 per cent). This represents an improvement on the 30 per cent average slippage (for 22 projects) recorded in the 2009–10 MPR. The DMO and Defence industry will continue to focus on improving all aspects of project performance, from initial schedule estimation and planning through to project delivery.

Importantly, this schedule variance calculation, against FOC, relates to the delivery of the whole project as scoped by Defence and agreed by Government. It is not correct to assume that deliveries of 'all elements' of these projects are 28 per cent late. In a number of cases these projects have successfully delivered a wide range of much-needed equipment to the ADF, either to deploy on operations or to use for critical training activities. Completion of the project by Defence (and the calculation of overall project delay) may result from delays with other contributing elements of the fully realised military capability solution.

This 28 per cent slippage is largely driven by an initial underestimation by industry and/or Defence of the technical maturity or complexity of the more highly developmental and large scale system integration projects. Australia is not alone in experiencing this, as reports similar to this MPR in the UK[8] and USA[9] demonstrate. The DMO continues to work in partnership with industry to address the underlying causes through various initiatives, some of which are highlighted in this report.

Key Priorities in 2011–12

The key priorities for the DMO in 2011–12 remain consistent with 2010–11 and are:

- continuing support to ADF operations;
- achieving the Defence Strategic Reform Program targets for the Smart Sustainment and Mortimer streams;
- working with key customers (Navy, Army and Air Force) to reduce the cost of ownership of major Defence fleets and systems;
- implementing reform initiatives announced by Government in 2011 that aim to improve performance on procurement and sustainment; and
- delivering approved Defence Capability Plan (DCP) projects.

Conclusion

The key aspects of this MPR are:

- the report has been expanded to cover an additional six projects, now totalling 28;
- all projects are delivering project scope within the approved budget; and
- the analysis process has identified opportunities for the DMO to further improve schedule performance.

Future MPRs will continue to expand the longitudinal analysis on key project performance measures of cost, schedule and materiel capability.

8 www.nao.org.uk
9 www.gao.gov

Overview of the 28 Projects contained in the 2010–11 MPR

The following six projects are additional to those covered in the 2009-10 MPR:

- 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)
- LAND 75 Phase 3.4 – Battlefield Command Support System (Battle Comm. Sys)

The following 22 projects were reported in the 2009-10 MPR and are reported again in the 2010-11 MPR.

- SEA 4000 Phase 3 – Air Warfare Destroyer (AWD Ships)
- AIR 5077 Phase 3 – Airborne Early Warning and Control Aircraft (Wedgetail)
- AIR 9000 Phase 2, 4, & 6 – Multi Role Helicopter (MRH90 Helicopters)
- AIR 5349 Phase 1 & 2 – Bridging Air Combat Capability (Super Hornet)
- LAND 121 Phase 3 – Field Vehicles and Trailers (Overlander Vehicles)
- JP 2048 Phase 4A/4B – Amphibious Deployment and Sustainment (LHD Ships)
- AIR 87 Phase 2 – Armed Reconnaissance Helicopter (AHR Tiger Helicopters)
- AIR 5376 Phase 2 – F/A-18 Hornet Upgrade (Hornet Upgrade)
- AIR 8000 Phase 3 – C-17 Heavy Airlifter (C-17 Heavy Airlift)
- AIR 5402 – Air to Air Refuelling (Air to Air Refuel)
- SEA 1390 Phase 2.1 – Guided Missile Frigate Upgrade (FFG Upgrade)
- AIR 5376 Phase 3.2 – F/A 18 Hornet Upgrade Structural Refurbishment (Hornet Refurb)
- LAND 116 Phase 3 – Bushmaster Protected Mobility Vehicle (Bushmaster Vehicles)
- JP 2008 Phase 4 – Next Generation SATCOM Capability (Next Gen Satellite)
- JP 2043 Phase 3A – High Frequency Modernisation (HF Modernisation)
- SEA 1444 Phase 1 – Armidale Class Patrol Boat (Armidales)
- SEA 1448 Phase 2B – ANZAC Ship Anti–Ship Missile Defence (Anzac ASMD 2B)
- SEA 1439 Phase 4A – Collins Replacement Combat System (Collins RCS)
- SEA 1429 Phase 2 – Replacement Heavyweight Torpedo (Hw Torpedo)
- SEA 1439 Phase 3 – Collins Reliability and Sustainability (Collins R&S)
- AIR 5418 Phase 1 – Follow-on Stand Off Weapon (Anzac ASMD 2A)
- SEA 1448 Phase 2A – ANZAC Ship Anti–Ship Missile Defence (Stand Off Weapon)

In addition to the new projects listed above, reporting on AIR 5349 Phase 1 – Bridging Air Combat Capability (Super Hornet) has been expanded to incorporate AIR 5349 Phase 2 – Super Hornet Weapons. While the Super Hornet project approval submission to Government included the intention to manage the acquisition as two separate project phases, Government approval was for the whole capability with a defined Final Operational Capability (FOC) milestone of December 2012. Hence, rather than include Super Hornet Weapons as a seventh additional project in this report, it is consolidated into the confederated AIR 5349 Phase 1 & Phase 2 Super Hornet project.

This report is to be the final year for inclusion of the following project:

- AIR 5376 Phase 3.2 – F/A-18 Hornet Upgrade Structural Refurbishment

Tables 1 and 2 provide a 30 June 2011 status on key project performance metrics covering cost and schedule across the 28 projects in this year's MPR.

Table 1 – DMO MPR Project Cost Status

Project	Second Pass Budget $m[10]	Price Indexation $m[11]	Foreign Exchange $m[12]	Scope Changes $m[13]	Transfers $m[14]	Budgetary Adjustments $m[15]	Budgetary Cost Savings $m[16]	Net Variation %[17]	Current Budget $m
AWD Ships	7,207.4	1,173.2	(448.8)	-	-	-	-	0.0%	7,931.8
Wedgetail	3,269.5	994.5[18]	(437.9)	225.6	(18.9)	(173.2)	-	-5.3%	3,859.5
MRH90 Helicopters	957.2	679.8	(241.3)	2,597.0	(239.0)	-	-	0.0%	3,753.7
Super Hornet	3,728.2	391.2	(400.4)	-	(33.0)	-	(107.2)	0.0%	3,578.5
LHD Ships	2,959.9	426.9	(273.5)	-	9.4	-	-	0.0%	3,122.6
Overlander Vehicles	2,745.3	746.8	(217.9)	(14.8)	4.5	-	-	0.0%	3,263.9
Joint Strike Fighter	2,751.6	351.0	(435.8)	-	-	-	-	0.0%	2,666.8
ARH Tiger Helicopters	1,584.0	418.2	149.1	-	(84.3)	(6.7)	-	-0.4%	2,060.3
Hornet Upgrade	1,300.0	323.5	41.0	221.5	35.0	(3.4)	-	-0.3%	1,917.5
C-17 Heavy Airlift	1,864.4	124.0	(139.6)	-	-	-	-	0.0%	1,848.9
Air to Air Refuel	2,076.6	484.1	(443.1)	-	(135.5)	(153.6)	-	-7.4%	1,828.5
FFG Upgrade	1,392.5	215.6	74.2	-	(152.6)	(0.8)	-	-0.1%	1,528.9
Hornet Refurb	156.6	158.8	(36.6)	673.6	-	-	-	-0.7%	951.3
Bushmaster Vehicles	295.0	124.6	(5.2)	515.4	-	-	-	0.0%	929.8
Next Gen Satellite	884.9	132.4	(136.4)	-	-	-	-	0.0%	880.9
HF Modernisation	505.0	148.1	12.2	11.0	(4.7)	(0.8)	-	-0.2%	670.8
SM-2 Missile	552.6	127.9	(66.4)	-	-	(2.1)	-	-0.4%	612.0
Additional Chinook	638.0	46.5	(99.9)	-	-	-	-	0.0%	584.6
Armidales	436.8	74.5	(12.1)	67.1	(29.8)	0.7	-	0.2%	537.2
ANZAC ASMD 2B	248.8	76.1	(11.6)	-	148.7	-	-	0.0%	462.0
Collins RCS	455.3	56.5	(59.7)	-	(0.9)	(0.8)	-	-0.2%	450.4
Hw Torpedo	238.1	99.4	(126.3)	213.3	1.0	(0.2)	-	-0.1%	425.4
Collins R&S	72.0	74.4	(6.2)	310.3	(38.3)	(0.8)	-	-1.1%	411.4
UHF SATCOM	461.0	(3.1)	(50.7)	-	-	-	-	0.0%	407.2
Stand Off Weapon	370.7	62.1	(39.5)	(50.0)	-	-	-	0.0%	343.3
ANZAC ASMD 2A	449.0	101.3	0.9)	-	(159.8)	(0.1)	-	0.0%	389.5
155mm Howitzer	348.2	17.2	(39.3)	-	-	-	-	0.0%	326.1
Battle Comm. Sys.	333.9	14.7	(22.6)	-	-	-	-	0.0%	325.9
Total	38,282.5	7,640.2	(3,475.2)	4,770.0	(698.5)	(342.9)	(107.2)	-0.9%	46,068.7

10 The portion of Second Pass (or equivalent) budget approved by Government, transferred to the DMO under a MAA with Defence for delivery of the materiel system.
11 The total of price indexation variations between Second Pass budget and the current budget.
12 The total of foreign exchange variations between Second Pass budget and the current budget.
13 The total value of all approved project scope changes between Second Pass budget and the current budget.
14 The total of all transfers to and from other Defence Groups (i.e. Defence Support Group) and DMO projects.
15 The total of all other budgetary adjustments (administrative in nature) outside of price indexation, foreign exchange, scope and transfer variations between Second Pass budget and the current budget.
16 The total of cost savings attributed to any negotiated foreign military sales or commercial contracts. These funds have been handed back to the Defence Portfolio.
17 Net variation accounts for budgetary movements outside of price indexation, foreign exchange, Government approved scope changes and transfer variations to the Second Pass budget as a percentage.
18 Of the $994.5m, $388.1m of this relates to a real cost increase for contract price indexation beyond the supplementation provided by Government.

Table 2 – DMO MPR Project Schedule Status

Project	Original FMR[19]	Current FMR	Variation Factor[20]	Original FOC	2009–10 DMO MPR FOC	Current FOC	Variation Factor
AWD Ships	Dec 17	Dec 18	1.1	Dec-18	Dec-18	Dec 19	1.1
Wedgetail	Nov 12	Nov 12	1.0	Dec-08	Dec-12	Dec 12	1.5
MRH90 Helicopters	Oct 14	Oct 14	1.0	Jul-14	Jul-14	Jul 14	1.0
Super Hornet	Aug 12	Aug 12	1.0	Dec-12	Dec-12	Dec 12	1.0
LHD Ships	Aug 15	Aug 15	1.0	Nov-16	Nov-16	Nov 16	1.0
Overlander Vehicles	Dec 17	Dec 17	1.0	Dec-19	Dec-19	Dec 19	1.0
Joint Strike Fighter	N/A	N/A	N/A	N/A	-	N/A	N/A
ARH Tiger Helicopters	Jul 12	Jul 12	1.0	Jun-09	Dec-12	Dec 12	1.3
Hornet Upgrade	Aug 11	Nov 11	1.0	Aug-11	Nov-11	Jun 12	1.1
C-17 Heavy Airlift	Dec 11	Dec 11	1.0	Mar-11	Dec-12	Dec 11	1.0
Air to Air Refuel	Feb 13	Feb 13	1.0	Dec-11	Jan-11	Dec 13	1.4
FFG Upgrade	Dec 11	Dec 11	1.0	Dec-05	Jul-11	Dec 11	1.9
Hornet Refurb	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Bushranger Vehicles	Feb 14	Feb 14	1.0	Apr-12	Apr-12	Apr 14	1.2
Next Gen Satellite	Sep 13	Sep 13	1.0	Dec-14	Dec-14	Dec 14	1.0
HF Modernisation	Feb 16	Feb 16	1.0	May-05	May-15	Jul 16	2.3
SM-2 Missile	Sep 12	Sep 12	1.0	Dec 12	-	Dec 12	1.0
Additional Chinook	Jan 17	Jan 17	1.0	Jan 17	-	Jan 17	1.0
Armidales	N/A	N/A	N/A	Mar-09	Mar-12	Feb 12	1.5
ANZAC ASMD 2B	Jul 17	Jul 17	1.0	Mar-13	Apr-17	Dec 17	1.6
Collins RCS	Jan 16	Jan 16	1.0	2010	2016	2016	1.7
Hw Torpedo	Nov 13	Nov 13	1.0	Nov-13	Nov-13	Nov 13	1.0
Collins R&S	Oct 22	Oct 22	1.0	Jun-14	Sep-22	Sep 22	1.6
UHF SATCOM	Sep 12	Sep 12	1.0	N/A	-	N/A	N/A
Stand Off Weapon	Dec 12	Dec 12	1.0	Dec-10	Dec-12	Dec 12	1.4
ANZAC ASMD 2A	Jul 17	Jul 17	1.0	Dec-11	Apr-17	Dec 17	1.7
155mm Howitzer	Sep 13	Sep 13	1.0	Dec 13	-	Dec 13	1.0
Battle Comm. Sys.	Apr 13	Apr 13	1.0	Apr 13	-	Apr 13	1.0
						Average Variation	**1.28**

19 Where Final Materiel Release was not included in the original project approval documentation, Original Final Materiel Release is taken from the latest version of the project's Materiel Acquisition Agreement.

20 A schedule variance factor of 1 = on time; >1 = late; and <1 = early.

AIR WARFARE DESTROYER BUILD

SEA 4000 Phase 3

Capability Type: New

Service: Royal Australian Navy

Total Approved Budget (current): $7,931.8m

2010–11 Budget (current): $982.5m

2010–11 Actual Expenditure: $944.5m

Project Stage: Critical Design Review

Project Description

This project will acquire three Hobart-class Air Warfare Destroyers (AWD) and their support system for the ADF. The capability provided by the AWDs will form a critical element of the ADF's joint air warfare defence capability and will contribute to a number of other joint warfare outcomes.

Current Status

Cost Performance

The project remains within its current approved budget. Program expenditure in Financial Year 2010–11 was less than budgeted. The contributing factors were: reduced FMS expenditure; gains in foreign exchange rates; partially offset by increased expenditure against budget for industry participants.

Schedule Performance

In response to delays in hull block fabrication, the AWD Alliance took action to limit a potential two year slippage in the completion of HMAS *Hobart* by relocating the hull blocks among Australian shipyards in December 2010, followed by a further reallocation of blocks between the Australian shipyards and Navantia in May 2011. The AWD Alliance also took action in 2010 to place more shipbuilding experts from Navantia, Bath Iron Works and Lloyds Register into the three shipyards.

Since July 2010, the following major events and activities have occurred:

- Support System Detailed Design Review was successfully completed in August 2010.
- First delivery of FMS Aegis equipment arrived in the ASC Shipyard in September 2010.
- Independent Alliance Project Risk Review was conducted in October 2010 by experts from the US Navy, UK Ministry of Defence, ARMADA, Raytheon US and Navantia.
- AWD System Centre at Techport Australia was opened on 20 December 2010.
- Significant components of the combat system have arrived in Adelaide and over 98 per cent of the Aegis program adaption software is now coded.
- The first three keel blocks have been delivered to Adelaide to start construction on HMAS *Hobart*.
- The three main gun mounts for the AWD have arrived in Adelaide.

Second Pass Government Approval	Initial Materiel Release (IMR)	Final Materiel Release (FMR)
Jun 07	Dec 15	Dec 18

Capability Performance

All significant government specified capability is currently planned to be achieved and, in some warfare areas, the capability will be exceeded. However, Electronic Warfare Radar – Electronic Attack sub-system procurement has been deferred as current technology does not meet the contract and Royal Australian Navy requirements.

AIRBORNE EARLY WARNING AND CONTROL AIRCRAFT (Wedgetail)

AIR 5077 Phase 3

Capability Type: New
Service: Royal Australian Air Force
Total Approved Budget (current): $3,859.5m
2010–11 Budget (current): $217.1m
2010–11 Actual Expenditure: $176.2m
Project Stage: System Integration and Test

Project Description

This project will provide the ADF with an airborne early warning and control (AEW&C) capability, with the provision of six aircraft and associated supplies and support. As an integral part of a layered ADF Air Defence System, the airborne early warning and control capability will enhance surveillance, air defence, fleet support and force coordination operations in defence of Australian sovereignty and national interests.

Current Status

Cost Performance

The project remains within current approved budget. As a result of the commercial settlements reached in November 2009 and April 2011, the Commonwealth received compensation from Boeing for costs incurred as a result of project delays and radar performance shortfalls.

Schedule Performance

As at 30 June 2010, the Commonwealth had accepted three aircraft in an initial configuration, available to the Air Force for training and initial operations. A fourth aircraft was accepted in the initial configuration in December 2010. Boeing failed to deliver the first aircraft in a final operational configuration in December 2010. Boeing planned to deliver additional increments of aircraft capability in June 2011, however this was delayed one month. The first aircraft in a 'final' configuration, capable of supporting all operational tasking short of high-end war fighting is scheduled for delivery in March 2012, in which case the total delay to this milestone against the original contract baseline would be 64 months. However, Defence assesses that there is three months risk to this date.

Second Pass Government Approval	Initial Materiel Release (IMR)	Final Materiel Release (FMR)
Dec 00	Apr 10	Nov 12

Capability Performance

A United States Operational Utility Demonstration was conducted in Hawaii in July 2010 as part of Exercise RIMPAC. The demonstration concluded that the Wedgetail has outstanding potential, but that the integrated system and some subsystems are still maturing.

The Wedgetail test aircraft participated in the Canadian exercise, Trident Fury, during May 2011. The flights showed varying success, with some radar fixes flown showing excellent results. However, there were still issues with system stability, consistency and repeatability which undermined overall mission system utility. Electronic Support Measures (ESM) remains the most significant concern and schedule risk. Reliability, maintainability and supportability are the key ESM issues that have been highlighted during recent testing. The resolution of these ESM issues will be a primary driver of Final Acceptance.

MULTI ROLE HELICOPTER

AIR 9000 Phase 2, 4 and 6

Capability Type: Replacement

Service: Royal Australian Navy and Australian Army

Total Approved Budget (current): $3,753.7m

2010–11 Budget (current): $326.0m

2010–11 Actual Expenditure: $261.5m

Project Stage: Acceptance Testing

Project Description

This project is a key component of the ADF Helicopter Strategic Master Plan that seeks to rationalise the number of helicopter types in ADF service. The MRH will provide the ADF with improved night flying, all weather and lift capability. The MRH will replace the Sea King and Black Hawk helicopters as a common platform for Navy and Army.

Current Status

Cost Performance

The project is currently progressing within the approved budget and the capability is anticipated to be delivered within the approved budget. Some payment milestones have been replanned to reflect the progressive delivery of capability.

Schedule Performance

Thirteen aircraft have been accepted with six aircraft based with the Army's 5th Aviation Regiment in Townsville, three aircraft based with Navy's 808 Squadron in Nowra and four aircraft with the Army Aviation Training Centre in Oakey. These first thirteen aircraft will require an in-service retrofit (at Contractor expense) to bring them up to the full Phase 2/4/6 capability baseline. The first fully compliant Phase 2/4/6 aircraft are due for delivery in the second quarter 2012.

The project stopped accepting aircraft in November 2010 as the aircraft did not meet all contractual requirements. A renegotiated Deed will permit resumption of aircraft delivery in late November 2011. This delay has impacted the achievement of capability milestones from 2010–11 to later financial years. The final aircraft is now scheduled to be delivered in mid 2015, however this timeframe may be affected by the current non conformance delays. As a result of the Contractor's inability to present conforming supplies, it is likely that the Initial Operational Capability (IOC) milestones for both Navy and Army will be delayed up to 25 months later than the original Government approval.

Second Pass Government Approval		Initial Materiel Release (IMR)		Final Materiel Release (FMR)	
Phase 2	Aug 04	IMR (Navy)	May 12	FMR (Navy)	Dec 14
Phase 4/6	Apr 06	IMR (Army)	May 13	FMR (Army)	Dec 14

Capability Performance

Following achievement of In-Service Date (ISD) with agreed partial achievement of the contracted MRH capabilities, there has been significant work by both Industry and the project to define and implement a series of capability block enhancements to bring the MRH to contracted standards. This includes a retrofit program, at no additional cost to the Commonwealth, to progressively bring all aircraft up to the contracted standard.

BRIDGING AIR COMBAT CAPABILITY

AIR 5349 Phase 1 and 2

Capability Type: Replacement

Service: Royal Australian Air Force

Total Approved Budget (current): $3,578.5m

2010–11 Budget (current): $426.4m

2010–11 Actual Expenditure: $380.5m

Project Stage: Phase 1 Service Release, Phase 2 Integration and Test

Project Description

This project will acquire 24 Boeing F/A-18F Super Hornets, associated weapons, support, and training systems to establish a bridging air combat capability.

Phase 1 of the project will acquire the aircraft platform, and associated support and training systems and Phase 2 of the project will acquire the associated missile suite.

Current Status

Cost Performance

The project remains within its current approved budget.

Schedule Performance

The project remains on schedule in order to meet FOC by December 2012. Air 5349 Phase 1 achieved a number of significant milestones in this reporting period including the declaration of IOC with 20 mission capable aircraft delivered. Since 30 June 2011, the final delivery of four Super Hornets has occurred, bringing the total accepted aircraft to 24. All 24 aircraft were delivered on budget and ahead of schedule. The necessary engineering, maintenance, supply and training arrangements to support aircraft operations and aircrew training within Australia have also been established.

Second Pass Government Approval		Initial Materiel Release (IMR)		Final Materiel Release (FMR)	
Phase 1	Mar 07	Phase 1	Mar 10	Phase 1	Oct 11
Phase 2	Mar 07	Phase 2	Dec 10	Phase 2	Aug 12

Capability Performance

The Super Hornets have been granted Australian Military Type Certification and all 24 aircraft have been entered on the State Register and released from the DMO to the RAAF for service. The aircraft have a comprehensive electronic warfare suite (the towed decoy jammer, ALE-55, is planned for delivery prior to December 2012), advanced infra-red/laser pods, external fuel tanks, aerial refuelling stores and an Active Electronically Scanned Array (AESA) radar. The Super Hornets are able to employ the AIM-9X and AMRAAM C5 air-to-air missiles, and JSOW-C weapons being procured under Phase 2 of the project along with a range of weapons already in the Air Force's weapons inventory.

Two tactical flight simulators and two cockpit procedural trainers have been delivered and service released during 2010 to provide aircrew training.

OVERLANDER
LAND 121 Phase 3

Capability Type: Replacement

Service: Australian Army

Total Approved Budget (current): $3,263.9m

2010–11 Budget (current): $77.1m

2010–11 Actual Expenditure: $58.5m

Project Stage: Second Pass

Project Description

This project will replace the current fleet of ADF field vehicles, modules and trailers. These vehicles will enhance the ground mobility of the ADF through the provision of Field Vehicles, Modules and Trailers (FVM&T).

The project seeks to acquire the following:

- Light/Lightweight Capability (LLC):1,200 unprotected vehicles, 315 modules, 973 trailers and six prototype trailers (currently in contract).
- Medium/Heavy Capability (MHC): (current formal Basis of Provisioning (BOP)) 1,506 protected vehicles, 1,189 unprotected vehicles;4,661 modules (1,785 modules and 2,876 flatracks) and 1,915 trailers.

Current Status

Cost Performance

The Project remains within its current approved budget.

Schedule Performance

LLC: The project is on schedule to deliver against its MAA milestone date of December 2011 for First Delivery to Units. Eleven prototype vehicles were delivered in early February 2010 and all 30 Batch 0 production vehicles were delivered in February and March 2011 to enable training. The remaining batches of G-Wagons for LLC remain on schedule.

MHC: Introduction into Service Date (ISD) for the MHC vehicles and trailers will be subject to contract negotiations. An estimated date for contract signature will be determined following a down selection decision being made. A down selection decision is expected to be announced in late 2011.

Second Pass Government Approval	Initial Materiel Release (IMR)	Final Materiel Release (FMR)
Aug 07	Dec 11	Dec 17

Capability Performance

LLC: there are currently no issues that will affect Materiel Capability Performance. The need to retrofit cabling for C4I systems onto selected vehicles is being actively addressed with a likely requirement to retrofit batches 0 to 3.

MHC: Affordability will impact the overall capability, with costs being managed by maximising off-the-shelf solutions. The MHC tender assessment has revealed that the originally sought Basis of Provisioning is not affordable.

AMPHIBIOUS DEPLOYMENT AND SUSTAINMENT

JP 2048 Phase 4A/4B

Capability Type: New

Service: Joint Services

Total Approved Budget (current): $3,122.6m

2010–11 Budget (current): $497.8m

2010–11 Actual Expenditure: $557.5m

Project Stage: Critical Design Review

Project Description

This project will provide the ADF with an increased amphibious deployment and sustainment capability through the acquisition of two Landing Helicopter Docks (LHDs) and associated supplies and support. These 27,000 tonne LHDs will be able to land a force of over 2,000 personnel by helicopter and watercraft, along with all their weapons, ammunition, vehicles and stores.

Current Status

Cost Performance

The project remains within its current approved budget. The 2010–11 expenditure variance is attributed to the early completion and payment of key milestones for Build Sequence 1 and 2 for LHD 2, which has been brought forward from 2011-12.

Schedule Performance

The project remains on track for delivering the two LHDs by planned dates of 2014 and 2015. Minor changes to the Preliminary and Detailed Design reviews dates are not expected to impact on the final delivery dates. Since 30 June 2010 the project has achieved the launch of LHD01 Hull and commencement of LHD02 Hull erection has started.

Other project milestones achieved since 30 June 2010 include:

- Communications Systems Equipment Factory Acceptance Test and Delivery;
- Combat Systems Equipment Factory Acceptance Test and Delivery;

Second Pass Government Approval	Initial Materiel Release (IMR)		Final Materiel Release (FMR)
Jun 07	LHD 1	Feb 14	Aug 15
	LHD 2	Aug 15	

Capability Performance

The project is on track for delivering the following capabilities:

- Carriage, in addition to the crew, of approximately 1,200 personnel in the force ashore with a further 800 personnel providing helicopter operations, logistics, command and intelligence as well as other supporting units;
- Space and deck strength sufficient to carry around 100 armoured vehicles, including tanks, and 200 other vehicles (approximately 2400 lane metres);
- Hangar space for at least 12 helicopters and an equal number of landing spots to allow a company group to be simultaneously landed;
- 45 days endurance for crew and embarked force including sustainment, medical, rotary wing and operational maintenance and repair support to these forces whilst ashore for 10 days; and
- Command and control of the land, sea and air elements of a Joint Task Force.

NEW AIR COMBAT CAPABILITY

AIR 6000 Phase 2A/2B

Capability Type: Replacement

Service: Royal Australian Air Force

Total Approved Budget Stage 1 (current): $2,666.8m

2010–11 Budget (current): $78.3m

2010–11 Actual Expenditure: $71.0m

Project Stage: Enter Contract

Project Description

This project aims to introduce a new air combat capability that will meet Australia's air combat needs out to 2030 and beyond. On current plans, AIR 6000 Phase 2A/B program will acquire no fewer than 72 Conventional Take Off and Landing (CTOL) Joint Strike Fighter (JSF) aircraft to establish three operational squadrons, a training squadron and necessary supporting/enabling elements to replace the F/A-18A/B Hornet capability.

Stage 1 of the project will acquire an initial tranche of 14 CTOL F-35 JSF aircraft and associated support and enabling elements. Ten aircraft will remain in the United States (US) for a number of years for pilot and maintainer training and operational test activities. The remaining four aircraft are planned to arrive in Australia in 2017.

Current Status

Cost Performance

The Project remains within approved budget guidance for Stage 1 (first 14 aircraft and support).

Schedule Performance

A Technical Baseline Review (TBR) of the US JSF Program was completed in November 2010, which has led to the JSF Program undergoing a Schedule Risk Assessment (SRA) and an Integrated Baseline Review (IBR). The outcomes of the SRA/IBR, including any changes to program scope, cost and schedule impacts are expected to be released (publically) in early 2012.

In October 2010, the Commonwealth formally submitted a Partner Procurement Request to the US Government for Australia's first two aircraft and associated support systems. Ongoing reviews and restructuring of the US JSF Program have resulted in significant delays (6 months plus) to the annual JSF contracting cycle. However, the long lead contract signature for Australia's first two aircraft was achieved in August 2011. This will enable delivery of aircraft and training to commence in 2014 as planned.

Second Pass Government Approval	Initial Materiel Release (IMR)	Final Materiel Release (FMR)
Nov 09	TBC	TBC

Capability Performance

As a consequence of the TBR conducted on the US JSF Program, the US has extended the development and operational test schedules. A key element of materiel Capability Performance and a major schedule driver is software development. The current planned Block 3 version of software is considered sufficient for Australia's IOC performance requirements. Potential changes to software scope, development and/or releasability constraints could threaten this consideration.

ARMED RECONNAISSANCE HELICOPTER

AIR 87 Phase 2

Capability Type: New

Service: Australian Army

Total Approved Budget (current): $2,060.3m

2010–11 Budget (current): $117.3m

2010–11 Actual Expenditure: $96.1m

Project Stage: Acceptance Testing

Project Description

This project will provide a reconnaissance and fire support capability for the ADF. The Project has contracted for delivery of 22 aircraft including an instrumented aircraft, a Full Flight and Mission Simulator, two Cockpit Procedures Trainers, Groundcrew Training Devices, Electronic Warfare Mission Support System, and Ground Mission Equipment, with supporting stores, facilities, and ammunition.

Current Status

Cost Performance

The project is expected to deliver the required capability within the approved budget.

Schedule Performance

The Australian Government and Australian Aerospace reached agreement in September 2010 to allow a delay in the delivery of the 22nd final configuration aircraft to July 2011 in return for additional capability, which will further enhance the capabilities of the ARH.

In February 2011, Australian Aerospace advised it would not be able to deliver all 22 ARH by July 2011 as currently contracted and that a potential further five month delay was likely. The Australian Government is agreeing to a number of initiatives with Australian Aerospace to minimise the operational impact to Army's Introduction into Service.

The major contract milestone of Pre-Operationally Capable Helicopter was also not achieved by the contracted date of 26 May 2011. Australian Aerospace is currently forecasting achievement of the milestone by 5 December 2011 following the acceptance of the 19th final configuration aircraft.

Second Pass Government Approval	Initial Materiel Release (IMR)	Final Materiel Release (FMR)
Mar 99	Sep 09	Jul 12

Capability Performance

As at 30 June 2011, 20 ARH have been Accepted by the Commonwealth; four are undergoing retrofit to the Initial Operational Test and Evaluation Readiness configuration; five are being used for training, one of which is also being used to support the remaining Type Acceptance test activities; and 11 are being used for collective training and Operational Evaluation in the operational squadron in Darwin. All three simulators have now been Accepted and are being used for aircrew training in Oakey and Darwin. Nine aircraft have had the enhanced anti-collision light modification incorporated and four aircraft have had the additional ballistic protection modification incorporated.

The rebaselined schedule includes all planned engineering activities required to deliver a fully compliant ARH System.

F/A-18 HORNET UPGRADE

AIR 5376 Phase 2

Capability Type: Upgrade

Service: Royal Australian Air Force

Total Approved Budget (current): $1,917.5m

2010–11 Budget (current): $73.1m

2010–11 Actual Expenditure: $70.1m

Project Stage: Acceptance Testing

Project Description

This project will upgrade the F/A-18 fleet to incorporate enhancements which will allow the aircraft to more effectively perform its air defence strategic concept tasks. This capability is being implemented in three distinct stages, the first enabling the aircraft to more effectively perform its air defence role, the second enhancing pilot situational awareness, and the final stage providing additional aircraft self protection.

In addition to the physical upgrade of the F/A-18 Fleet, each stage includes an upgrade to the aircraft software to enable the upgraded hardware and commensurate upgrades to ground support and training systems.

Current Status

Cost Performance

Phase 2.1, 2.2 and Hornet Air Aircrew Training System (HACTS) have been delivered within budget. Phase 2.3 is in progress and remains within its current approved budget.

Schedule Performance

Phase 2.1 was completed ahead of schedule, while phase 2.2 and HACTS were delivered on schedule. IMR providing an interim Electronic Warfare capability for Phase 2.3 was delivered on schedule. Major elements of Materiel Release 2 are now in place to support IOC. Additionally, significant progress has been made with the elements of FMR to support FOC.

Second Pass Government Approval	Initial Materiel Release (IMR)	Final Materiel Release (FMR)
May 98	Jul 06	Mar 12

Capability Performance

Capability for Phase 2.1 and 2.2 have been accepted into service. Ongoing upgrades are required to HACTS to introduce emerging Hornet capabilities being introduced by other Hornet and weapon upgrades. The radar warning receiver and data recorder elements for Phase 2.3 have demonstrated their fitness for purpose and have been released for service. Acceptance and operational test and evaluation for the BOL-518 Counter Measures Dispenser System and the EL/L-8222 Electronic Counter Measures (ECM) pods indicates that these systems are also fit for purpose.

C-17 GLOBEMASTER III HEAVY AIRLIFT

AIR 8000 Phase 3

Capability Type: New

Service: Royal Australian Air Force

Total Approved Budget (current): $1,848.9m

2010–11 Budget (current): $6.7m

2010–11 Actual Expenditure: $5.4m

Project Stage: Service Release

Project Description

This project is to provide the ADF with a global heavy airlift capability based upon four Boeing C-17 Globemaster III heavy lift aircraft. The project also includes the acquisition of associated logistics support provisions, role equipment, training devices and facilities required to completely attain the Heavy Airlift capability.

Current Status

Cost Performance

All four C-17 Globemaster aircraft have been delivered within budget.

Schedule Performance

All four C-17 Globemaster aircraft have been delivered ahead of schedule. Associated support equipment is being delivered to schedule.

FMR is planned for December 2011.

FOC will be achieved when permanent C-17 Globemaster facilities have been established at major RAAF bases, and the training systems (minus the Cargo Compartment Trainer) have been set up in Australia. This is planned for December 2011.

Second Pass Government Approval	Initial Materiel Release (IMR)	Final Materiel Release (FMR)
Mar 06	Aug 07	Dec 11

Capability Performance

Significant project activity remains to deliver outstanding long lead-time logistics support provisions, role equipment, a Cargo Compartment Training (CCT) system, Ground Support Equipment and facilities required to completely attain the Heavy Air Lift capability.

AIR TO AIR REFUELLING CAPABILITY

AIR 5402

Capability Type: New

Service: Royal Australian Air Force

Total Approved Budget (current): $1,828.5m

2010–11 Budget (current): $326.0m

2010–11 Actual Expenditure: $275.5m

Project Stage: Acceptance Testing

Project Description

This project will provide the ADF with five new generation Airbus A330 Multi Role Tanker Transport aircraft (MRTT). The MRTT will be equipped with both hose & drogue and boom refuelling systems capable of in-flight refuelling of current and future aircraft. The MRTT will also provide significant Air Logistics Services capability for carriage of up to 270 passengers and cargo.

Current Status

Cost Performance

The project remains within its current approved budget.

Schedule Performance

The re-baselined dates for contractual acceptance of the first two aircraft (October and November 2010 respectively) were not met due to delays in completion of testing, approval of technical documentation and delivery of support systems. The first aircraft was contractually accepted on 1 June 2011 and the second aircraft on 22 June 2011; approximately 29 months behind the original contract date and 7 months behind the re-baselined contract date. The first two aircraft have been delivered and accepted in an initial configuration, with acceptance conditional on remediation of a number of non-conformances. The prototype aircraft, was inducted into a refurbishment program in February 2011. Conversion of the fourth aircraft at the Qantas Brisbane Conversion Centre has progressed to the re-baselined schedule with delivery and acceptance occuring October 2011. The final commercial A330 was delivered to the Australian Conversion Centre in May 2011. Since 30 June 2011, the MRTT has completed its first flight in RAAF Service with personnel now beginning an intensive Operational Test and Evaluation flying program for the aircraft.

Second Pass Government Approval	Initial Materiel Release (IMR)	Final Materiel Release (FMR)
May 03	Oct 12	Dec 13

Capability Performance

The DMO has worked closely with Airbus Military to ensure that the initial configuration at acceptance provides essential capability for Air Logistics Support and pods air to air refuelling. A suitable framework to enable contractual acceptance of aircraft with non-critical non-conformances has been established. This framework also ensures that full compliance will be achieved by FMR in order to achieve FOC. All issues identified to date have suitable processes in place to reduce the operational impact. While delivery of an operational boom refuelling system has been significantly delayed, the capability impact is not considered significant provided FOC can be achieved prior to the JSF aircraft entering RAAF service.

GUIDED MISSILE FRIGATE UPGRADE IMPLEMENTATION

SEA 1390 Phase 2.1

Capability Type: Upgrade

Service: Royal Australian Navy

Total Approved Budget (current): $1,528.9m

2010–11 Budget (current): $21.1m

2010–11 Actual Expenditure: $5.3m

Project Stage: Final Contract Acceptance

Project Description

This project seeks to regain a comparative regional maritime capability by upgrading four (originally six) Adelaide-class FFGs, and to ensure that they remain effective and supportable until their removal from service between 2015 and 2021. Each FFG is receiving an improved Anti-Ship Missile Defence (ASMD) system; an On Board Training System; an Electronic Support System; an upgraded Underwater Warfare System, upgraded diesel generators and other ship systems. The project is also establishing a shore-based Operator and Team Trainer system and a Warfare System Support Centre (WSSC).

Current Status

Cost Performance

Project cost estimate remains within the current approved Project budget. The 2010-11 underspend is primarily attributable to funds originally programmed against the project being transferred to the FFG Fleet Sustainment program, and cost savings.

Schedule Performance

The Prime Contractor has continued to perform to the revised schedule approved in June 2006 and has met the majority of its obligations under the Contract.

A Contract Close Out Deed was executed in June 2010 that specifies the Prime Contractor's remaining obligations under the Contract. The FFG Upgrade Prime Contract was successfully completed 2 March 2011 with the Prime Contractor satisfying all its final obligations under the FFG Upgrade Prime Contract by 28 February 2011.

Second Pass Government Approval	Initial Materiel Release (IMR)	Final Materiel Release (FMR)
Jun 99	Jan 10	Dec 11

Capability Performance

All four FFGs have now received their upgraded equipment, are in operation with Navy and are now endorsed for Initial Operational Release (IOR) with the Torpedo Defence System (TDS) and LeScut decoy excluded. Contractual acceptance of HMA Ships *Sydney* and *Darwin* and upgraded software was achieved in November 2008. Contractual Acceptance of HMAS *Melbourne* was achieved in December 2008. HMAS *Newcastle* achieved Provisional Acceptance by the DMO and was handed back to Navy in May 2009. The Team Trainer also achieved Acceptance in September 2009 and the WSSC achieved Acceptance in December 2009.

A three phased 'incremental' approach for IOR and Operational Release (OR) has been agreed by the DMO and Navy as the means by which to bring the FFG class to full operational employment. Phase 3 was achieved in January 2010 and IOR by Navy for the FFG Class has been achieved except the TDS and by association the Le Scut decoy system, which were both rejected for IOR. Mitigation for the rejected TDS has included the installation of an underwater active decoy system (AN/SLQ-25C, NIXIE) IN HMA Ships *Melbourne* and *Newcastle*.

F/A-18 HORNET UPGRADE STRUCTURAL REFURBISHMENT

AIR 5376 Phase 3.2

Capability Type: Upgrade

Service: Royal Australian Air Force

Total Approved Budget (current): $951.3m

2010–11 Budget (current): $16.9m

2010–11 Actual Expenditure: $10.6m

Project Stage: Service Release

Project Description

The F/A-18 Hornet Upgrade Air 5376 Phase 3.2 project is a structural modification project that is required to address structural deficiencies identified during the F-18 International Follow-On Structural Test Program. The project is divided into two structural refurbishment programs, each providing a different amount of fatigue life to the aircraft to allow the Hornet fleet to reach its Planned Withdrawal Date as explained below:

- A number of aircraft will have their centre barrels (the primary load bearing structure in the aircraft) replaced along with other discrete modifications and inspections providing continued airworthiness from 85 per cent to 100 per cent of the intended structural fatigue life. This program is called Structural Refurbishment Program (SRP) 2.

The remainder of the Hornet fleet will undergo a range of other discrete structural modifications providing continued airworthiness from 78 per cent to 85 per cent of the intended structural fatigue life. This program is called SRP1D.

Current Status

Cost Performance

32 of 59 aircraft (54 per cent) have been modified to SRP1D configuration and 10 aircraft (100 per cent) have been modified to SRP2 configuration. All modified aircraft have been accepted within project budget.

Schedule Performance

All modified aircraft have been accepted within project schedule. The remaining aircraft to be modified are scheduled for completion by August 2013 for SRP1D. SRP2 is complete with the tenth and final aircraft delivered in June 2010.

The management and incorporation of remaining modifications have been approved for transition to the in-service sustainment support system. As a result residual project scope and budget has been transferred to the relevant F/A-18 Hornet Materiel Support Agreements.

Second Pass Government Approval	Initial Materiel Release (IMR)	Final Materiel Release (FMR)
Oct 03	Not Applicable	Not Applicable

Capability Performance

Modified aircraft meet the project technical specification and have been accepted back into service.

BUSHMASTER PROTECTED MOBILITY VEHICLE

LAND 116 Phase 3

Capability Type: Replacement

Service: Australian Army and Royal Australian Air Force

Total Approved Budget (current): $929.8m

2010–11 Budget (current): $109m

2010–11 Actual Expenditure: $115.6m

Project Stage: Acceptance Testing

Project Description

This project is to deliver 807 vehicles in seven variants; troop, command, mortar, assault pioneer, direct fire weapon, air defence and ambulance as well as up to 184 trailers. These vehicles will provide protected land mobility to Army units and RAAF Airfield Defence Guards. In addition to the acquisition of the vehicles through the Approved Major Capability Investment Program, a number of enhancements are being made to the vehicles through the Rapid Acquisition process. These enhancements do not form part of the Project Land 116 Phase 3.

Current Status

Cost Performance

The project remains within approved budget. Some Signal Onboard Two-Wire Audio System internet protocol (SOTASip) payments to the contractor which had been rescheduled as a result of delays have now been paid as a result of the SOTASip contract amendment being signed.

Schedule Performance

All Production Period 1 (PP1) and PP2 vehicle deliveries are now complete. The project is currently procuring 293 vehicles for PP3, as of 30 June 2011, 230 of these had been delivered. The delivery of PP3 vehicles to the Commonwealth is on schedule. Delivery of 70 PP4 vehicles will commence in May 2012 and conclude in the first quarter of 2013.

Second Pass Government Approval	Initial Materiel Release (IMR)	Final Materiel Release (FMR)
Nov 98	Dec 04	Feb 14

Capability Performance

All variants are meeting their required specifications. The prototype for the Air Defence variant was completed by Thales and accepted by the project in October 2010.

The project is currently in contract with Thales for the Detailed Design of an External Composite Armour (ECA) solution. Thales delivered ECA Detailed Design in late September 2011, this is currently being reviewed by the Project

All Bushmaster vehicles in service in Afghanistan have been upgraded with new seating and flooring, to provide better protection against IED attacks. Four Bushmaster ambulances have also been delivered to Air Force Health Services Wing at RAAF Base Amberley.

NEXT GENERATION SATCOM CAPABILITY

JP 2008 Phase 4

Capability Type: New

Service: Joint Services

Total Approved Budget (current): $880.9m

2010–11 Budget (current): $189.3m

2010–11 Actual Expenditure: $174.4m

Project Stage: System Integration and Test

Project Description

This project seeks to deliver high priority components of the next generation (NEXTGEN) satellite communication (SATCOM) system that will support the ADF from 2008 onwards. The NEXTGEN SATCOM system will introduce a flexible and sustainable SATCOM capability that supports a network centric ADF operating independently or as part of a coalition.

Current Status

Cost Performance

This project remains within current approved budget.

Schedule Performance

The milestones achieved so far include: Wideband Global SATCOM (WGS) System Service IOC; Interim Anchor Capability (backhaul); Situational Awareness Tools & Infrastructure training; Interim Anchoring Station (IAS) - West and establish WGS Training for ADF personnel. Interim Anchor Capability FOC (Backhaul & Aust IA Station(s)) is 29 months behind schedule. No change is anticipated to the Project Completion Date.

Second Pass Government Approval	Initial Materiel Release (IMR)	Final Materiel Release (FMR)
Sep 07	Jun 08	Sep 13

Capability Performance

The first three satellites are meeting their operational requirements. Australia used United States (US) infrastructure from June 2008 via the Simpson Trunk (undersea cables) to gain access to the first WGS satellites. This capability was augmented incrementally through the placement of Australian equipment in US satellite anchor stations (offshore anchoring) situated in Hawaii and Landstuhl (Germany) to support increased levels of capability. The mature offshore anchoring capability was set to work October 2009. The IAS – West has been set to work and is available for operational use.

HIGH FREQUENCY MODERNISATION

JP 2043 Phase 3A

Capability Type: Upgrade

Service: Joint Services

Total Approved Budget (current): $670.8m

2010–11 Budget (current): $19.4m

2010–11 Actual Expenditure: $17.2m

Project Stage: Acceptance Testing

Project Description

This project will procure a Modernised High Frequency (HF) Communications System for Defence long-range communications. The Fixed Network component comprises four HF stations across Australia with primary and backup Network Management Facilities in Canberra. The project will also provide upgrades to selected ADF sea, land and air mobile platforms to make them compatible with the capabilities of the modernised network.

Current Status

Cost Performance

The project remains within its current approved budget. The contractor has achieved all major contracted milestones and has received payment against this achievement including the Contract Complete milestone.

Schedule Performance

The delays experienced in achieving Final System acceptance under the Prime Contract have led Defence to re-assess the scope of the Mobile platform upgrade program and to submit a proposal to Government for a change of scope. Subject to Government approval the Mobiles program will extend FOC to 2016.

The Black Hawk and Army Land Strategic HF platforms not subject to the proposed change of scope are currently being progressed.

Second Pass Government Approval	Initial Materiel Release (IMR)	Final Materiel Release (FMR)
Aug 96	Nov 04	Feb 16

Capability Performance

Capability includes a Core System and the Final System (incorporating the upgraded Fixed Network and Mobiles Upgrades).

Operators and maintenance personnel report a good degree of satisfaction with the Final Fixed Network System. The installation of two software maintenance builds has remedied outstanding issues and the system is now providing a reliable service.

The impact of the delays on the mobile platform upgrades is being addressed externally in Defence. This is likely to lead to changes in scope to the Mobiles Upgrade program. Issues being addressed include remaining Life of Type of in-scope platforms and the current need for either a full or partial modernised HF communications capability upgrade. Government approval of changes is currently being sought by Defence.

SM-1 MISSILE REPLACEMENT

SEA 1390 Phase 4B

Capability Type: Replacement

Service: Royal Australian Navy

Total Approved Budget (current): $612.0m

2010–11 Budget (current): $27.9m

2010–11 Actual Expenditure: $22.0m

Project Stage: Acceptance Testing

Project Description

This project will replace the Standard Missile-1 (SM-1) with a modern variant of the Standard Missile-2 (SM-2) and improve the air defence capability of the Guided Missile Frigate (FFG) fleet, adding to the capability delivered by the FFG Upgrade project.

Current Status

Cost Performance

Significant savings have been identified to be incorporated in a real cost decrease to the current approved Project budget. Government approved an $88.4m decrease on 29 August 2011. A further $120m has also been identified as a cost saving for hand back to the Defence Capability Plan.

Schedule Performance

Procurement and delivery of missiles was completed in February 2010. FFG SM-2 missile Stage 1 Home-All-the-Way (HAW) Material Release (May 2010), IOR (July 2010) and IOC (August 2010) have now been achieved. Stage 2 (final stage) Mid Course Guidance (MCG) capability Material Release occurred with Stage 2 software installation onboard HMAS *Sydney* in May 2011.

Combined Acceptance Test and Operational Test & Evaluation live-fire events for the SM-2 missile test program were successfully conducted off Hawaii during June 2011. FMR and FOC (Ship and shore based systems) are on schedule to complete in the third and fourth quarters 2012 respectively.

Second Pass Government Approval	Initial Materiel Release (IMR)	Final Materiel Release (FMR)
Jul 04	Dec 09	Sep 12

Capability Performance

FFG SM-2 Stage 1 HAW capability baseline was established in May 2010 and has been installed in all four FFGs and the land based Team Trainer. An operational firing event aboard HMAS *Newcastle* was conducted successfully in July 2010, and on 25 August 2010 Chief of Navy (CN) approved IOR of the FFG SM-2 HAW capability. The IOC was achieved coincident with HMAS *Melbourne* deployment in August 2010. The FFG SM-2 stage 2 MCG capability software baseline was established in May 2011 and installed in HMAS *Sydney* in preparation for combined Acceptance Test and Operational Test & Evaluation live-fire events that were successfully conducted off Hawaii in June 2011. The SM-2 stage 2 final software baseline and operational capability is scheduled for delivery first quarter 2012.

ADDITIONAL MEDIUM LIFT HELICOPTERS

AIR 9000 Phase 5C

Capability Type: Replacement

Service: Australian Army

Total Approved Budget (current): $584.6m

2010–11 Budget (current): $6.2m

2010–11 Actual Expenditure: $1.7m

Project Stage: Enter Contract

Project Description

This project seeks to replace the extant ADF Medium Lift Helicopter capability of five CH-47D Chinook helicopters with seven new modernised CH-47F Chinook helicopters, two Transportable Flight Proficiency Simulators and associated supporting systems.

Current Status

Cost Performance

The project remains within its current approved budget. An amendment to the Foreign Military Sales (FMS) case is currently under development and will add further fidelity to FMS expenditure forecasts.

Schedule Performance

The Project successfully achieved Government Second Pass approval on schedule in February 2010. Shortly thereafter and ahead of schedule, an FMS case was signed with the United States Government in March 2010. The next major milestone will see all contracts in place and all remaining Project plans completed no later than December 2012. All these activities are expected to be completed ahead of schedule. There are currently no impediments to the Project achieving all future milestones.

Second Pass Government Approval	Initial Materiel Release (IMR)	Final Materiel Release (FMR)
Feb 10	Jan 16	Jan 17

Capability Performance

The CH-47F Chinook helicopter being acquired is a Military Off The Shelf (MOTS) procurement of a US specification CH47F Chinook, with only minimal essential ADF unique modifications. The CH-47F Chinook has been employed operationally by the US Army for over two years and the capability has achieved outstanding results in Iraq and in particular the Afghanistan theatre, where its hot and high altitude performance are unmatched by any other rotary wing aircraft. The ADF has yet to take delivery of any aircraft however there are currently no impediments to the Project achieving the materiel Capability Performance requirements.

ARMIDALE CLASS PATROL BOAT

SEA 1444 Phase 1

Capability Type: Replacement

Service: Royal Australian Navy

Total Approved Budget (current): $537.2m

2010–11 Budget (current): $7.2m

2010–11 Actual Expenditure: $5.8m

Project Stage: Service Release

Project Description

This project is to deliver 14 Armidale-class patrol boats (ACPB) and provide 15 years in-service support. In addition the project is providing funding to DSG to deliver patrol boat facilities at Cairns and Darwin.

The new patrol boats will improve the Navy's capability to intercept and apprehend vessels suspected of illegal fishing, quarantine, customs or immigration offences and will provide 3,500 days availability with the scope to surge up to 600 days per annum.

Current Status

Cost Performance

The project remains within its current approved budget.

Schedule Performance

Progress continues towards achievement of FOC, which remains dependent on rectification of outstanding build defects.

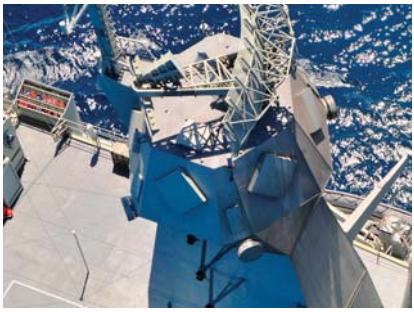
Second Pass Government Approval	Initial Materiel Release (IMR)	Final Materiel Release (FMR)
Oct 02	Jun 05	Nov 07

Capability Performance

All vessels continue to meet the Navy's operational requirements. The Patrol Boat Systems Program Office continues to close extant issues. HMAS *Glenelg*, representing the ACPB capability, achieved Operational Release (OR) on 19 May 2010. The final vessel will achieve OR after the completion of the rectification work at the end of 2011. Closure of the acquisition phase of the project will commence after FOC is achieved in February 2012.

ANTI-SHIP MISSILE DEFENCE

SEA 1448 Phase 2B



Capability Type: Upgrade

Service: Royal Australian Navy

Total Approved Budget (current): $462.0m

2010–11 Budget (current): $73.8m

2010–11 Actual Expenditure: $57.9m

Project Stage: Acceptance Testing

Project Description

This project will provide the Anzac-class Frigates with an enhanced level of self-defence against modern anti-ship missiles.

There are two sub-phases of SEA1448 Phase 2. Phase 2B introduces an indigenous, leading edge technology, phased array radar (CEAFAR) and missile illuminator (CEAMOUNT) – collectively referred to as the phased array radar (PAR) System. The PAR System delivers enhanced target detection and tracking that allows Evolved Sea Sparrow Missiles (ESSM) to engage multiple targets simultaneously. A new dual ship-set I-Band Navigation radar will coincidentally be provided under this phase to replace the navigation function performed by the Target Indication Radar (TIR), at the same time replacing the obsolescent Krupp Atlas 9600.

Current Status

Cost Performance

Lead ship (HMAS *Perth*) testing and acceptance was completed to cost under the revised acquisition strategy for SEA 1448 Phase 2, approved by Government in July 2009, with Initial Materiel Release being achieved on 16 August 2011. Government will consider a real cost increase to this phase of the Project to upgrade ships 2-8 during the last quarter of 2011.

Schedule Performance

Based on the revised acquisition strategy approved by Government in July 2009, the systems being delivered in Phase 2B are currently on schedule. The overall variance from the original Second Pass (eight ships) Government approval of the project in September 2005 is 19 months. Lead ship (HMAS *Perth*) testing and acceptance was completed to schedule under the revised acquisition strategy.

Second Pass Government Approval	Initial Materiel Release (IMR)	Final Materiel Release (FMR)
Sep 05	Jun 11	Jul 17

Capability Performance

Chief of Navy conducted successful early operational test and evaluation during June 2011. Based on this testing Chief of Navy formally released HMAS *Perth* into Initial Operational Release on 16 August 2011.

COLLINS REPLACEMENT COMBAT SYSTEM

SEA 1439 Phase 4A

Capability Type: Upgrade

Service: Royal Australian Navy

Total Approved Budget (current): $450.4m

2010–11 Budget (current): $4.8m

2010–11 Actual Expenditure: $3.2m

Project Stage: Service Release

Project Description

This project has been established to provide each of the RAN COLLINS Class submarines with the United States (US) Navy Tactical Command and Control System, minor improvements to the combat system augmentation sonar, and shore facilities for integration, testing and training.

Current Status

Cost Performance

The project remains within its current approved budget.

Schedule Performance

Planned boat installations are consistent with the approved Materiel Acquisition Agreement (MAA) schedule; however, each installation is dependent on the Full Cycle Docking (FCD) program, consequently completion dates may vary according to boat availability. The RCS schedule has also been impacted by emergent work during each submarine docking. The final boat installation is scheduled for completion in 2015, with FMR in January 2016.

Second Pass Government Approval	Initial Materiel Release (IMR)	Final Materiel Release (FMR)
Sep 02	Dec 09	Jan 16

Capability Performance

The RCS baseline (CS04) installed in HMA Submarines *Waller* and *Farncomb* was approved for IOR by Chief of Navy in May 2008 and September 2009 respectively. Chief of Navy subsequently approved Operational Release (OR) of that baseline in December 2009. The capability delivered in *Waller* and *Farncomb* is consistent with that identified in the project. Sonar towed array trials scheduled for *Dechaineux* were completed with OR of the COLLINS Towed Array Processor (CTAP) being awarded in January 2011.

Installations and Harbour Acceptance Testing for the upgraded combat system baseline (CS05) installed in *Dechaineux* were completed in February 2010. Installation of CS05 baseline in HMA Submarine *Sheean* is progressing consistent with the FCD schedule. The project schedule is dependent on the FCD schedule, consequently the completion date may vary. IOR of the CS05 baseline as installed in *Dechaineux*, scheduled for December 2010, was finalised by the project office in August 2010. With completion of the external review process IOR approval occurred on 8 March 2011.

REPLACEMENT HEAVYWEIGHT TORPEDO

SEA 1429 Phase 2

Capability Type: Replacement

Service: Royal Australian Navy

Total Approved Budget (current): $425.4m

2010–11 Budget (current): $19.2m

2010–11 Actual Expenditure: $17.8m

Project Stage: Acceptance Testing

Project Description

This project is acquiring a HWT for the Collins-class submarine to replace the US Navy Mk 48 Mod 4 HWT currently in service with the RAN. The project is also acquiring associated logistic support, weapon system interface equipment, and operational support and test equipment.

Current Status

Cost Performance

The project remains within its approved budget.

Schedule Performance

The HWT consists of two separate components to deliver the full HWT capability to the RAN. The first component is the modification of each submarine to accommodate and launch the HWT; the second component is the spiral development of the HWT software.

Planned boat installations are consistent with the approved Materiel Acquisition Agreement schedule; however, each installation is dependent on the Full Cycle Docking (FCD) program. Consequently, completion dates may vary according to boat availability. The HWT schedule has also been impacted by emergent work, not related to HWT, during each submarine docking. Development of the HWT software is progressing to schedule and the Spiral 1 software baseline has achieved Operational Release. The next software baseline to be implemented by the Navy will be Advanced Processor Build (APB) 4 and that development is progressing to schedule.

The Torpedo deliveries from the US have been slower than planned but have had no schedule impact.

Second Pass Government Approval	Initial Materiel Release (IMR)	Final Materiel Release (FMR)
Jul 01	Mar 08	Nov 13

Capability Performance

The replacement HWT with Spiral 1 software and the integration modifications to Collins-class Submarines were approved for Operational Release by the Chief of Navy on 10 March 2010.

The replacement HWT with APB 4 software was approved for IOR by Chief of Navy on 8 March 2011.

Operational Release is the milestone which represents the In-Service date at which Chief of Navy is satisfied that the equipment is in all respects ready for operational service.

COLLINS CLASS SUBMARINE RELIABILITY AND SUSTAINABILITY

SEA 1439 Phase 3

Capability Type: Upgrade

Service: Royal Australian Navy

Total Approved Budget (current): $411.4m

2010–11 Budget (current): $16.9m

2010–11 Actual Expenditure: $13.7m

Project Stage: Critical Design Review

Project Description

SEA 1439 Phase 3 is a program of upgrades to Collins-class platform systems and shore infrastructure to improve the reliability, sustainability, safety and capability of Australia's submarines.

Current Status

Cost Performance

The Through Life Support Agreement with ASC, when combined with an annual contracting methodology, creates the main concern for the completion of the project within the existing budget. Recent financial years have realised improvements in the annual cost estimation process for programming of work and achieving financial performance outcomes. However, overall cost over the life of the project has suffered through previous inaccurate estimation of work content, and the inability to control implementation schedules. Improvement is expected in future, now that the majority of engineering design work has been completed.

Schedule Performance

Current scheduled dates will not be achieved due to changes in the Submarine Full Cycle Docking (FCD) program, which is beyond the control of the project. Installation of engineering enhancements on HMA Submarines *Sheean* and *Rankin* will also be subject to FCD delays.

Harbour and Sea Verification Trials of the Torpedo Decoy were successfully completed in HMA Submarine *Dechaineux* over June and July 2010.

Second Pass Government Approval	Initial Materiel Release (IMR)	Final Materiel Release (FMR)
Sep 00	Jan 11	Oct 22

Capability Performance

Only two sub-projects provide new capabilities; Special Forces Upgrade and the Torpedo Decoy. The remaining sub-projects are medium to low complexity engineering enhancements. The Special Forces Upgrade provides three capabilities. Two have achieved Operational Release, while the remaining capability has been delayed due to the requirement to implement safety modifications identified during the manned Sea Verification Trial. These modifications are planned to be implemented in HMA Submarine *Dechaineux* during its next docking in the first half of 2012. Torpedo Decoy Operational Test and Evaluation (OT&E) has slipped due to delays in achieving IOR for reasons outside of Project's control (revisions in Navy Regulations).

Five engineering enhancements have been completed by the project. The remaining enhancements will be implemented progressively until 2022 subject to submarine availability and the FCD program.

INDIAN OCEAN REGION UHF-SATCOM

JP 2008 Phase 5A

Capability Type: Upgrade

Service: Joint Services

Total Approved Budget (current): $407.2

2010–11 Budget (current): $110.9m

2010–11 Actual Expenditure: $122.5m

Project Stage: System Integration and Test

Project Description

This project will provide the ADF with twenty 25kHz UHF SATCOM channels on a hosted payload on a commercial Intelsat satellite (IS-22), to provide coverage of the Indian Ocean Region, and associated ground infrastructure to provide network control upgrades and data channel increases.

Current Status

Cost Performance

Project remains within its current total approved budget. The 2010–11 expenditure variance is attributed to the payment of a milestone ahead of schedule and brought forward from 2011–12.

Schedule Performance

The IS-22 satellite remains on schedule for a launch in March 2012.

Second Pass Government Approval	Initial Materiel Release (IMR)	Final Materiel Release (FMR)
Mar 09 and Mar 10	Jun 16	Dec 18

Capability Performance

The IS-22 satellite is currently meeting all performance measures, including:

- the hosted payload,
- the Communications System Monitor.

The Network Control Systems requirements are currently under review but are not likely to impact the overall capability provided by the IS-22 satellite.

FOLLOW-ON STAND OFF WEAPON

AIR 5418 Phase 1

Capability Type: New

Service: Royal Australian Air Force

Total Approved Budget (current): $343.3m

2010–11 Budget (current): $48.4m

2010–11 Actual Expenditure: $44.2m

Project Stage: Acceptance Testing

Project Description

The AIR 5418 Phase 1 Follow-on Standoff Weapon (FOSOW) Project will acquire the Lockheed Martin AGM-158A-4 Joint Air-to-Surface Standoff Missile (JASSM) and support systems, and integrate the JASSM onto the RAAF F/A-18 A/B Hornet aircraft. The FOSOW system will increase aircraft survivability and weapon effectiveness against defended targets from launch ranges in excess of those afforded using air delivered weapons currently in the ADF inventory. The FOSOW system will provide the capability to successfully, and effectively, conduct stand-off strike operations against a range of targets.

Current Status

Cost Performance

The project remains within its current approved budget. A Submission to hand back $50m from funding allocated to the moving target capability was noted by Government in May 2011. The remaining project scope will be delivered within the decreased project budget.

Schedule Performance

The project is meeting the revised schedule noted by Government in May 2011. Initial Operational Capability and Final Operational Capability dates were revised to account for delays in the US JASSM program and the JASSM to F/A-18A/B Hornet aircraft integration. Government also noted the introduction of Initial Materiel Release and Final Materiel Release dates associated with this project.

Second Pass Government Approval	Initial Materiel Release (IMR)	Final Materiel Release (FMR)
Dec 05	Jul 11	Dec 12

Capability Performance

The United States Navy provided formal aircraft Operational Flight Program certification on 28 February 2011. Delivery to Australia of missiles required for Initial Operational Capability is now complete. A Submission advising the removal of the maritime strike (moving target) capability from project scope on the basis of technical feasibility and associated cost and schedule was noted by Government in May 2011.

ANTI SHIP MISSLE DEFENCE

SEA 1448 Phase 2A

Capability Type: Upgrade

Service: Royal Australian Navy

Total Approved Budget (current): $389.5m

2010–11 Budget (current): $41.4m

2010–11 Actual Expenditure: $41.2m

Project Stage: Acceptance Testing

Project Description

The Anti-Ship Missile Defence (ASMD) upgrade SEA1448 Phase 2 project will provide the Anzac-class Frigates with an enhanced level of self defence against modern anti-ship missiles. There are two sub-phases of SEA1448 Phase 2. Phase 2A of the ASMD Project will upgrade the Anzac-class Ship's existing Anzac-class Combat Management Systems (CMS) and fire control systems, and install an Infra-Red Search and Track (IRST) System that will provide improved detection of low level aircraft and anti-ship missiles when the ship is close to land. Phase 2B will complement Phase 2A with the installation of a leading edge technology, Australian designed, active phased array radar, that will further increase the ships ASMD capability.

Current Status

Cost Performance

This phase of the ASMD Project is currently progressing within the approved budget and the capability is anticipated to be delivered within the approved budget.

Schedule Performance

The systems being provided under Phase 2A are being delivered to schedule. Overall though, due to the linking of Phase 2A with Phase 2B and the Government approving a change of acquisition strategy for Phase 2B in July 2009, there is a 38 month variance to the original delivery of the capability. Lead ship (HMAS *Perth*) testing and acceptance was completed to schedule under the revised acquisition strategy, with HMAS *Perth* having achieved Initial Materiel Release on 16 August 2011.

Second Pass Government Approval	Initial Materiel Release (IMR)	Final Materiel Release (FMR)
Nov 03	Jun 11	Jul 17

Capability Performance

Chief of Navy conducted successful early operational test and evaluation during June 2011. Based on this testing Chief of Navy formally released HMAS *Perth* into Initial Operational Release on 16 August 2011.

ARTILLERY REPLACEMENT PROJECT

LAND 17 Phase 1A

Capability Type: Replacement

Service: Australian Army

Total Approved Budget (current): $326.1m

2010–11 Budget (current): $64.5m

2010–11 Actual Expenditure: $79.3m

Project Stage: System Integration & Test

Project Description

This project will deliver 35 M777A2 Lightweight Towed 155mm Howitzers (LW155) and the Advanced Field Artillery Tactical Data System (AFATDS) as the Battle Management System - Fires (Command and Control) (BMS-F (C2)). It will be acquired under Foreign Military Sales (FMS) arrangements with the United States Government. It will replace major systems of the current fleet of 105mm and 155mm Howitzers. It is also acquiring the XM1156 Precision Guidance Kit as the Course Correcting Fuze (CCF) capability.

Current Status

Cost Performance

The project remains within its current total approved budget. The 2010-11 expenditure variance is primarily attributable to accelerated FMS payments for the Lightweight Towed Howitzers and radio payments brought forward from 2011–12.

Schedule Performance

LW155 and BMS-F (C2) capabilities: The project is on track to deliver the required Mission System and Support System materiel for the IMR of November 2011 and FMR in August/September 2013.

The CCF capability is currently not available through FMS. In February 2011, the US Government advised that the CCF will be subjected to a further program of testing prior to reaching a production milestone decision, which is now planned for December 2012. Based on the US Government's advice of an 18 month hardware delivery timeframe, achievement of the December 2013 FOC that includes the CCF capability is at risk.

Second Pass Government Approval	Initial Materiel Release (IMR)	Final Materiel Release (FMR)
Jun 09	Nov 11	Aug/Sep 13

Capability Performance

- The LW155 capability will provide Army with a digitised, mobile, medium indirect fire platform.
- The BMS-F (C2) capability will provide Army with a digitally networked, interoperable command and control system that will allow for automated transmission of digital calls for fire from combat units and the rapid calculation of ballistic solutions and effects for firing; and
- The CCF capability will provide Army with improved ammunition precision to minimise collateral damage, avoid incidents of friendly fire and increase lethality against high value targets.

The Project is on track to deliver the LW155 and BMS-F (C2) capabilities; the CCF capability is currently not available for sale through FMS. The US Government has advised that as a result of tests successfully concluded in August 2011, the CCF capability remains on schedule for the December 2012 production decision milestone.

BATTLEFIELD COMMAND SUPPORT

LAND 75 Phase 3.4

Capability Type: New Capability

Service: Australian Army

Total Approved Budget (current): $325.9m

2010–11 Budget (current): $58.5m

2010–11 Actual Expenditure: $57.0m

Project Stage: Critical Design Review

Project Description

This project will provide a digital command and control support system to enhance combat capability of the Australian Army through supporting timely and quality decision-making in the land tactical environment. The BCSS project will also deliver Battle Management Systems (BMS) to over 1000 field vehicles, including; Bushmaster Protected Mobility Vehicles (PMV), M113 Armoured Personnel Carriers (APC), G-Wagons, Macks and Unimogs. The BMS is a computer-based command and control system designed to enhance the tactical commanders Situational Awareness and ability to execute operations. The BMS consists of software that is simple and intuitive to use; and hardware that can survive in the land tactical [combat] environment.

The BMS is the central component of the Battle Group and Below Command, Control and Communications System (BGC3) that is being jointly delivered by the Land 75 Phase 3.4, Land 125 Phase 3A and JP 2072 Phase 1 projects, and will incorporate a mobile, data capable communications system and be able to exchange combat information with BCSS and other BMS. The BGC3 will form the basis of a land combat identification system by providing commanders with a 'real-time' Situational Awareness display of friendly force locations.

Current Status

Cost Performance

This Project remains within its current approved budget.

Schedule Performance

The project remains on schedule with delivery of equipment and training for IMR planned for June 2011, which will meet Army's requirement to conduct IOC in July 2011. To date the project has achieved System Design Review (SDR), Preliminary Design Review (PDR) and Detailed Design Review (DDR) on a number of platforms. IMR was achieved on 14 June 2011. Bushmaster vehicles fitted with the system are scheduled for delivery to 7 Brigade by early 2012. Major contract milestones remain on schedule with FMR planned for April 2013 and FOC in April 2013.

Second Pass Government Approval	Initial Materiel Release (IMR)	Final Materiel Release (FMR)
Jun 07	Jun 16	Dec 18

Capability Performance

The BMS designs have been agreed through the DDR conducted in November 2010. The Contractor (Elbit Systems Ltd) has commenced production of the initial systems for delivery to the Commonwealth to achieve IMR.

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