

Project Data Summary Sheet¹³⁶

Project Number	AIR 9000 Phase 8
Project Name	FUTURE NAVAL AVIATION COMBAT SYSTEM
First Year Reported in the MPR	2011-12
Capability Type	Replacement
Acquisition Type	MOTS
Capability Manager	Chief of Navy
Government 1st Pass Approval	Feb 10
Government 2nd Pass Approval	Jun 11
Total Approved Budget (Current)	\$3,462.5m
2016-17 Budget	\$141.0m
Project Stage	Initial Materiel Release
Complexity	ACAT II



Section 1 – Project Summary

1.1 Project Description

AIR 9000 Phase 8 **has acquired** 24 MH-60R Seahawk **Romeo** naval combat helicopters, associated weapons and support systems to replace the current 16 S-70B-2 Seahawk **Bravo** helicopters and the cancelled SH-2G(A) Seasprite helicopters. The aircraft is equipped with a highly sophisticated avionics suite designed to employ Hellfire air-to-surface missiles and Mark (Mk) 54 anti-submarine torpedoes. The aircraft will provide Navy with a contemporary helicopter with anti-submarine warfare (ASW) and anti-surface warfare capability.

The acquisition of 24 helicopters will enable the Navy to deploy at least eight Seahawks embarked at sea across the ANZAC class frigates and the new *Hobart* class Air Warfare Destroyers (AWD).

1.2 Current Status

Cost Performance

In-year

The underspend of \$17.3m is primarily caused by delays in disbursements and delivery against the MK54 Torpedo FMS case. The Project has also experienced delays in invoicing for Facilities, minor Project related expenditure and ANZAC & AWD ship integrations. This has been partially offset by the increased expenditure on the MH-60R FMS Case and FOREX gains.

Project Financial Assurance Statement

As at **30 June 2017**, project AIR 9000 Phase 8 has reviewed the approved scope and budget for those elements required to be delivered by the project. Having reviewed the current financial and contractual obligations of the project, current known risks and estimated future expenditure, Defence considers, as at the reporting date, there is sufficient budget remaining for the project to complete against the agreed scope.

Contingency Statement

The project has not applied contingency in the financial year.

Schedule Performance

Material Release Two (MR2) milestone was achieved 19 December 2016. The next major milestone will be **Material Release Three (MR3)**, defined as **twenty four** aircraft in United States Navy (USN) configuration accepted, with sufficient logistics support, including **Ships Allowance Limit (SAL), Pack Up Kits (PUKs) and sufficient internal (crew served) machine guns** to support **eight** flights at sea.

Twenty **four** aircraft have now been accepted.

136 Notice to reader

Forecast dates and Sections: 1.2 (Materiel Capability Delivery Performance), 1.3 (Major Risks and Issues), 4.1 (Measures of Materiel Capability Delivery Performance), and 5 (Major Risks and Issues) are excluded from the scope of the ANAO's review of this Project Data Summary Sheet. Information on the scope of the review is provided in the *Independent Assurance Report* by the Auditor-General in **Part 3** of this report.

Materiel Capability Delivery Performance

The MH-60R Seahawk helicopter being procured is a Military Off the Shelf (MOTS) product from the USN. The MH-60R Seahawk has been in service with the USN since 2005 and was first deployed operationally by the USN in early 2010. The Australian Defence Force (ADF) has accepted delivery of 24 MH-60R aircraft, as of 31 March 2017 and there are currently no known impediments to the Project achieving the materiel capability performance requirements. The aircraft delivery schedule resulted in ADF MH-60Rs being delivered earlier than forecast at Second Pass.

Note

Forecast dates and capability assessments are excluded from the scope of the review.

1.3 Project Context

Background

The Defence White Paper 2009 stated that 'As a matter of urgency, the Government will acquire a fleet of at least 24 new naval combat helicopters to provide eight or more aircraft concurrently embarked on ships at sea. These new aircraft will possess advanced ASW capabilities, including sonar systems able to be lowered into the sea and air-launched torpedoes, as well as an ability to fire air-to-surface missiles.'

First Pass Approval for the acquisition of the Future Naval Aviation Combat System to satisfy this requirement was provided by Government on 24 February 2010.

The selection of the MH-60R followed a competitive solicitation process between a US Government FMS case offering the Sikorsky / Lockheed Martin MH-60R Seahawk and a direct commercial sale from Australian Aerospace (now Airbus Group Australia Pacific (AGAP) offering the NATO Helicopter Industries NH90 NATO Frigate Helicopter. Second Pass Approval for acquisition of the MH-60R was provided by Government on 15 June 2011.

Project SEA 5510 Stage 1 was approved by Government in June 2017, for the purpose of upgrading the MH-60R Seahawk's combat system, sensors, weapons and countermeasures throughout their operational life to maintain commonality and supportability with the United States Navy. AUD \$527.7m has been approved for Stage 1 for the period 2018 to 2028.

Uniqueness

The Australian MH-60R helicopter has been acquired as a MOTS product, in the same baseline configuration as the USN aircraft. A limited number of Australia unique design modifications are being incorporated now that all aircraft have been delivered. The USN will develop the modifications for incorporation in Australian and USN MH-60R aircraft.

The MH-60R is being acquired as a maritime combat capability. It will have limitations in utility roles such as passenger or cargo transfer.

Major Risks and Issues

The Project Office (PO) is currently managing two open risks with the highest level of pre-mitigation risk being medium, whilst also managing two open issues. However, there are currently no major risks or issues in achieving the MH-60R operational capability milestones on schedule.

Other Current Sub-Projects

Project AIR 9000 Phase 7 Helicopter Aircrew Training System (HATS). HATS will be an important link in the training continuum for inductees to the MH-60R training system.

Note

Major risks and issues are excluded from the scope of the review.

Section 2 – Financial Performance

2.1 Project Budget (out-turned) and Expenditure History

Date	Description	\$m	Notes
	Project Budget		
Aug 09	Original Approved	0.3	1
Jun 10	Real Variation – Budgetary Adjustment	9.6	2
Jun 11	Government Second Pass Approval	3,019.7	
Jun 14	Real Variation – Budgetary Adjustment	(39.2)	3
		2,990.1	
Jul 10	Price Indexation	0.1	4
Jun 17	Exchange Variation	471.9	
Jun 17	Total Budget	3,462.5	
	Project Expenditure		
Prior to Jul 16	Contract Expenditure – US Government (AT-P-SCF)	(1,683.9)	5
	Contract Expenditure – US Government (AT-P-AHV)	(88.4)	5
	Contract Expenditure – US Government (AT-B-ZBZ)	(20.2)	5
	Contract Expenditure – Navy – Empire Test Pilots' School	(7.4)	
	Contract Expenditure – US Government (AT-P-GTC)	(3.5)	5
	Other Contract Payments / Internal Expenses	(85.7)	6
		(1,889.1)	
FY to Jun 17	Contract Expenditure – US Government (AT-P-SCF)	(74.7)	5
	Contract Expenditure – US Government (AT-P-AHV)	(7.9)	5
			5
	Other Contract Payments / Internal Expenses	(41.0)	7
	Total Expenditure	(123.7)	
		(2,012.8)	
Jun 17	Remaining Budget	1,449.7	

Notes

1	This amount represents the project Budget prior to achieving Second Pass Approval by Government.
2	Project Development Funds.
3	Facilities Budget Transfer to Defence Support and Reform Group.
4	Up until July 2010, indexation was applied to project budgets on a periodic basis. The cumulative impact of this approach was \$0.1m, applied only to the portion of the budget approved at First Pass. From July 2010 all project budgets were approved by Government in out-turned dollars including AIR 9000 Phase 8.
5	The scope of this contract is explained further in Section 2.3 – Details of Project Major Contracts.
6	Other includes travel, contractor support, legal support, Non-FMS Procurements, ANZAC and AWD Ship Modifications, and general support activities.
7	Other includes procurement of Sonobuoys (\$14.2m), ANZAC, AWD and FFG Ship Modifications (\$8.2m), Facility related expenditure (\$4.8m), Spares (\$4.4m), DSTG (\$3.0m), contractor support (\$2.0m), Technical Services (\$1.6m), Freight (\$1.3m), Resident Project Team (\$0.6m), travel (\$0.5m), legal support and general support activities (\$0.5m).

2.2A In-year Budget Estimate Variance

Estimate PBS \$m	Estimate PAES \$m	Estimate Final Plan \$m	Explanation of Material Movements
230.0	183.9	141.0	PBS to PAES: Variation is primarily due to reprogramming, slippage of FMS billing, slippage of integration activities, and foreign exchange gain. This has been partially offset by increased requirements for facilities, sonobuoys and other project related costs. PAES to Final Plan: Variation is primarily due to the reprogramming of FMS billing, slippage of integration activities, reduction in facilities remediation due to funding covered by Regional Facilities budget and reduction in other project related activities.
Variance \$m	(46.1)	(42.9)	Total Variance (\$m): (89.0)
Variance %	(20.0)	(23.3)	Total Variance (%): (38.7)

2.2B In-year Budget/Expenditure Variance

Estimate Final Plan \$m	Actual \$m	Variance \$m	Variance Factor	Explanation
			Australian Industry	The variance is primarily caused by delays in disbursements and delivery against the MK54 Torpedo FMS case. The Project has also experienced delays in invoicing for Facilities, minor Project related expenditure and ANZAC & AWD ship integrations. This has been partially offset by the increased expenditure on the MH-60R FMS Case and FOREX gains.
		(11.5)	Foreign Industry	
			Early Processes	
		(5.8)	Defence Processes	
			Foreign Government Negotiations/Payments	
			Cost Saving	
			Effort in Support of Operations	
			Additional Government Approvals	
141.0	123.7	(17.3)	Total Variance	
		(12.3)	% Variance	

2.3 Details of Project Major Contracts

Contractor	Signature Date	Price at		Type (Price Basis)	Form of Contract	Notes
		Signature \$m	30 Jun 17 \$m			
US Government (AT-P-SCF)	Jun 11	2,090.3	2,417.5	Variable	FMS	1, 3
US Government (AT-P-AHV)	Aug 11	168.1	209.1	Variable	FMS	1, 3
US Government (AT-B-ZBZ)	Jan 12	12.3	20.2	Variable	FMS	1, 2, 3
US Government (AT-P-GTC)	Feb 13	10.9	14.3	Variable	FMS	1, 3
Notes						
1	The scope of this contract is explained further below.					
2	Increased quantity of Tactical and Training Missiles in FMS Case.					
3	Contract value as at 30 June 2017 is based on actual expenditure to 30 June 2017 and remaining commitment at current exchange rates, and includes adjustments for indexation (where applicable).					
Contractor	Quantities as at		Scope	Notes		
	Signature	30 Jun 17				
US Government (AT-P-SCF)	24	24	MH-60R, synthetic training devices, and associated mission and support systems			
US Government (AT-P-AHV)	Classified	Classified	Mk 54 Torpedoes			
US Government (AT-P-ZBZ)	Classified	Classified	AGM-114N Hellfire Air to Surface Missiles			
US Government (AT-P-GTC)	N/A	N/A	RAN MH-60R Detachment – Naval Air Station Jacksonville, Florida support			
Major equipment received and quantities to 30 Jun 17						
A quantity of Mk 54 Torpedos delivered in August 2014						
A quantity of Hellfire Missiles delivered in August 2014						
'BRomeo' Seahawk Training Device delivered in October 2014						
Tactical Operational Flight Trainer 1 delivered in February 2015						
Aircraft 1 through 24 were delivered between December 2013 and August 2016						
Rear Crew Trainer delivered in August 2016						
Tactical Operational Flight Trainer 2 delivered in October 2016						
Helicopter Support Facility (HMAS Stirling) was accepted in December 2016						

Section 3 – Schedule Performance

3.1 Design Review Progress

Review	Major System / Platform Variant	Original Planned	Current Planned	Achieved /Forecast	Variance (Months)	Notes
System Requirements	MH-60R Helicopter	N/A	N/A	N/A	N/A	1
	ADF Mission System Options – Phase 1	Jan 14	Jan 14	Apr 14	3	2
	ADF Mission System Options – Phase 2	Nov 14	Nov 14	Nov 14	0	2
	Air Warfare Destroyer	Dec 14	Dec 14	Jan 15	1	3
Preliminary Design	MH-60R Helicopter	N/A	N/A	N/A	N/A	1
	ADF Mission System Options – Phase 1	Mar 14	Mar 14	Jun 14	3	2
	ADF Mission System Options – Phase 2	Mar 15	Mar 15	Apr 15	1	2
	Air Warfare Destroyer	Dec 15	May 17	May 17	17	3
Critical Design	MH-60R Helicopter	N/A	N/A	N/A	N/A	1
	ADF Mission System Options – Phase 1	Jun 14	Jun 14	Jun 14	0	2
	ADF Mission System Options – Phase 2	May 15	May 15	May 15	0	2
	Air Warfare Destroyer	Dec 16	Dec 17	Dec 17	12	3
Notes						
1	MH-60R helicopter system requirements and design reviews were not required as it a MOTS helicopter procured through FMS.					
2	The ADF Mission System Options were split into two phases. Phase 1 Statements of Work (SOWs) for ADF Unique Mission System Options were agreed by the PO, USN, Sikorsky and Lockheed Martin. Director General Technical Airworthiness has endorsed SOWs in accordance with Technical Airworthiness Regulations. Dates are reflective of Phase 1 design reviews. SOW for Phase 2 was released as part of USN request for tender 26 February 2014, with contract signature with Lockheed Martin achieved in October 2014.					
3	The AWD requires modification to enable the MH-60R aircraft to operate at full capability as the AWD certification baseline is based on a classic Seahawk aircraft. The modification works required to integrate the MH-60R aircraft will be conducted following the delivery of each AWD. With the reorganisation of the AWD Alliance the aviation upgrade effort has been delayed.					

3.2 Contractor Test and Evaluation Progress

Test and Evaluation	Major System / Platform Variant	Original Planned	Current Planned	Achieved /Forecast	Variance (Months)	Notes
System Integration	ADF Mission System Options – Phase 1	Aug 15	Aug 15	Aug 15	0	1
	ADF Mission System Options – Phase 2	Sep 18	Jun 19	Jun 19	9	1
	Air Warfare Destroyer	TBA	TBA	TBA	TBA	
Acceptance	ADF Mission System Options – Phase 1	Aug 16	Aug 16	Sep 16	1	1
	ADF Mission System Options – Phase 2	Sep 18	Dec 18	Dec 18	3	1
	Acceptance of first MH-60R	Jun 14	Dec 13	Dec 13	(6)	
	Acceptance of final MH-60R	Sep 18	Aug 16	Aug 16	(25)	
	Air Warfare Destroyer	TBA	TBA	TBA	TBA	
Notes						
1	The ADF Mission System Options were split into two phases. Phase 1 SOW for ADF Unique Mission System Options was agreed by the PO, USN, Sikorsky and Lockheed Martin. SOW for Phase 2 was released as part of USN request for tender 26 February 2014, and contract signature with Lockheed Martin was achieved in October 2014. Schedule delays have been experienced with Phase 2, due in part to the Commonwealth having limited control over the development schedule with numerous schedule movements to the right being experienced.					

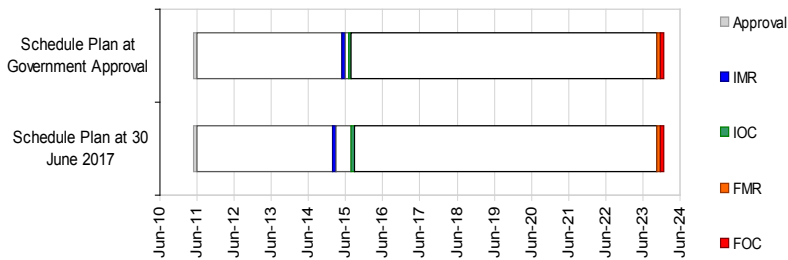
3.3 Progress Toward Materiel Release and Operational Capability Milestones

Item	Original Planned	Achieved /Forecast	Variance (Months)	Notes
In-Service Date (ISD)	Jun 14	Jan 14	(5)	1
Initial Materiel Release (IMR)	Jun 15	Mar 15	(3)	2
Initial Operational Capability (IOC)	Aug 15	Sep 15	1	3
Materiel Release 2 (MR2)	Dec 16	Dec 16	0	4
Materiel Release 3 (MR3)	Jun 19	Jun 19	0	
Materiel Release 4 (MR4)	Dec 20	Dec 20	0	
Final Materiel Release (FMR)	Dec 23	Dec 23	0	
Final Operational Capability (FOC)	Dec 23	Dec 23	0	

Notes

1	Revised aircraft delivery schedule.
2	The project declared IMR in March 2015, three months ahead of schedule and the Capability Manager signed-off IMR in July 2015.
3	The Capability Manager declared IOC on 25 September 2015, 25 days later than originally scheduled. Navy linked MH-60R IOC to Anzac Class ship aviation upgrades, which resulted in extra technical assessments that resulted in the minor delay.
4	The project achieved MR2 in December 2016 on schedule.

Schedule Status at 30 June 2017



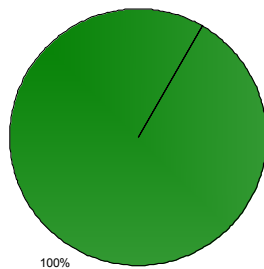
Note

Forecast dates in Section 3 are excluded from the scope of the review.

Section 4 – Materiel Capability Delivery Performance

4.1 Measures of Materiel Capability Delivery Performance

1. Pie Chart: Percentage Breakdown of Materiel Capability Delivery Performance



Green:

The project **is currently meeting** capability requirements as expressed in the Materiel Acquisition Agreement and supporting suite of Capability Definition Documentation and in accordance with the requirements of the relevant Technical Regulatory Authorities.

Amber:

N/A

Red:

N/A

Note

This Pie Chart represents Defence's expected capability delivery. Capability assessments and forecast dates are excluded from the scope of the review

Project Data Summary Sheets

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2016–17 Major Projects Report

4.2 Constitution of Initial Materiel Release and Final Materiel Release

Item	Explanation	Achievement
Initial Materiel Release (IMR)	1. Five aircraft in USN configuration, Tactical Operational Flight Trainer and supporting systems, 2. Establishment of key Sustainment organisations, 3. Initial stock of Mk 54 Torpedoes and Hellfire Missiles, and 4. Modification of one ANZAC class ship for interoperability with MH-60R Seahawk helicopter.	Achieved
Final Materiel Release (FMR)	1. All 24 aircraft delivered and Australian Mission System Options implemented, 2. Full EO fit-out and all Mk 54 Torpedos and Hellfire Missiles delivered, 3. All ANZAC class ships and Air Warfare Destroyers modified for interoperability with MH-60R Seahawk helicopter, and 4. Final Training Management Package. Achievement is scheduled for December 2023.	Not yet achieved

Section 5 – Major Risks and Issues

5.1 Major Project Risks

Identified Risks (risk identified by standard project risk management processes)	
Description	Remedial Action
N/A	N/A
Emergent Risks (risk not previously identified but has emerged during 2016-17)	
Description	Remedial Action
N/A	N/A

5.2 Major Project Issues

Description	Remedial Action
N/A	N/A

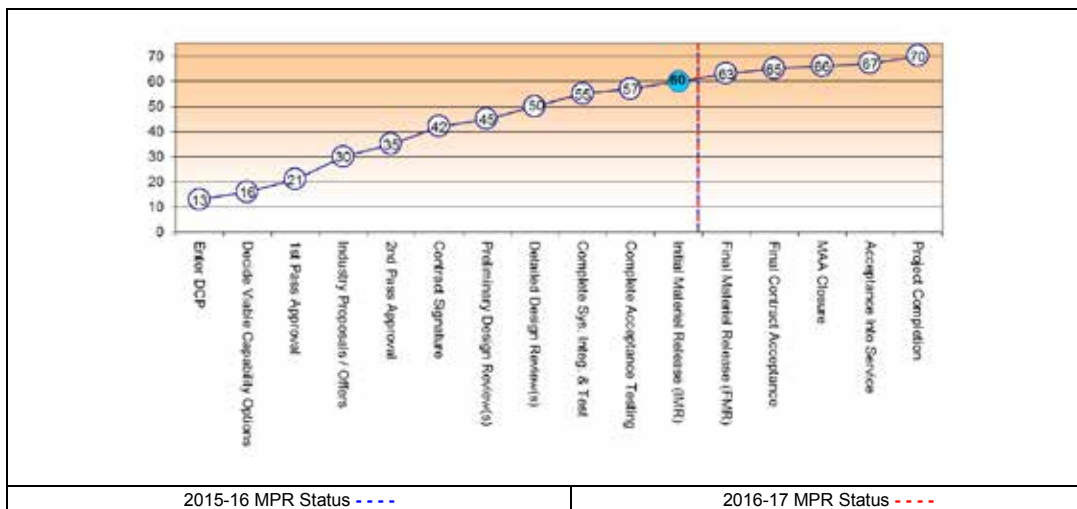
Note

Major risks and issues in Section 5 are excluded from the scope of the review.

Section 6 – Project Maturity

6.1 Project Maturity Score and Benchmark

Maturity Score		Attributes							Total
		Schedule	Cost	Requirement	Technical Understanding	Technical Difficulty	Commercial	Operations and Support	
Project Stage	Benchmark	10	8	8	8	9	8	9	60
Initial Materiel Release	Project Status	9	9	8	8	9	8	10	61
	Explanation	<ul style="list-style-type: none"> Schedule: The MH-60R production line is mature. The Project negotiated early delivery dates for ADF MH-60R. Cost: The overall Estimate at Completion is projected to be within project guidance. The Project has benefited from economies of scale from the US Government multi-year buys of aircraft and key components. Operations and Support: The capability achieved IOC and MH-60R Flights are now embarked on RAN Fleet Units. 							



Section 7 – Lessons Learned

7.1 Key Lessons Learned

Project Lesson	Categories of Systemic Lessons
<p>Whilst an FMS program affords a number of advantages, the transfer of a significant amount of project management and engineering functions to the US Government implementing agency (NAVAIR PMA-299) and the weak bargaining position of the Commonwealth, increases the project's exposure to risk (technical, schedule and cost). The resultant level of risk and complexity is often understated and poorly understood.</p> <p>The level of Commonwealth contract and financial management involvement and oversight of industry is very low in comparison to that mandated for Direct Commercial Sale contracts, yet both procurement methods confront similar issues.</p> <p>Adequate Commonwealth participation in key project management and technical oversight activities in the US, as provided for in the Government Second Pass submission, is critical to provide the required level of contract management.</p>	<p>Contract Management</p>
<p>The recruitment process lead times for candidates not already within the ADF or APS can create significant extended vacancies within the Project workforce, and this is exacerbated by the relatively short notice that Defence personnel are obliged to provide for internal transfers.</p>	<p>Resourcing</p>
<p>By procuring MOTS equipment, adhering to the project's clearly defined scope as detailed by government at Second Pass, and effectively using the Program Management Steering Group to prevent potential scope creep, the project has been able to meet or exceed its financial and schedule obligations as detailed within the project's Materiel Acquisition Agreement.</p>	<p>Off-The-Shelf Equipment</p>

Section 8 – Project Line Management

8.1 Project Line Management in 2016-17

Position	Name
Division Head	MAJGEN Andrew Mathewson AM
Branch Head	CDRE Scott Locky CSC RAN
Project Director	CAPT Peter Ashworth RAN (to Nov 16) CAPT Malcolm Wright RANR (Nov 16 current)
Project Manager	CMDR Michael Rainey RAN