

Project Data Summary Sheet¹²⁴

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
Service	Royal Australian Navy
Government 1st Pass Approval	Feb 10
Government 2nd Pass Approval	Jun 11
Total Approved Budget (Current)	\$3,520.4m
2015–16 Budget	\$293.5m
Project Stage	Initial Materiel Release
Complexity	ACAT II



Section 1 – Project Summary

1.1 Project Description

AIR 9000 Phase 8 is acquiring 24 MH-60R Seahawk naval combat helicopters, associated weapons and support systems to replace the current 16 S-70B-2 Seahawk 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

In-year variance of **\$11.3m** was mainly due to a year to date foreign exchange gain of **\$10.8m** as well as delays in ship integration procurements, facilities related expenditure and non-Foreign Military Sales (FMS) procurements. The underspend has been slightly offset by higher than predicted payments against the MK54 Torpedo FMS case, Hellfire Missile FMS case and the MH-60R Helicopter FMS case.

Project Financial Assurance Statement

As at 30 June 2016, 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.

124 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.

Contingency Statement

The project has not applied contingency in the financial year.

Schedule Performance

The next major milestone will be **Materiel Release Two (MR2)**, defined as **thirteen** aircraft in United States Navy (USN) configuration accepted, with sufficient **logistics support and** Explosive Ordnance (EO) to support **four flights at sea; four modified ANZAC ships for interoperability with MH-60R aircraft; two Tactical Operational Flight Trainers (TOFTs); one Rear Crew Trainer; one Composite Maintenance Trainer; one Avionics Maintenance Trainer incorporating Weapons Loading Part Task Trainer; and sufficient Internal (crew served) Machine Guns to support four flights at sea.**

Project AIR 9000 Phase 8 declared **Initial Operational Release (IOR) and Initial Operational Capability (IOC) on 25 September 2015.** This declaration enables Chief of Navy to deploy MH-60R flights to sea on **modified ANZAC class ships for training and operational requirements.** **Twenty-three** aircraft have now been accepted. **Aircraft six was initially retained** in the USA with industry as the prototype aircraft for ADF Unique Mission System Options – Phase 1 verification activities. **These verification activities have been completed with aircraft six being returned via a RAAF C17 flight to HMAS Albatross in April 2016.**

Materiel Capability Delivery Performance

The MH-60R Seahawk helicopter being procured is a Military Off the Shelf (MOTS) procurement of a USN specification MH-60R Seahawk. 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 USN has accepted **220** MH-60Rs and flown in excess of **376,000** flight hours as at **30 April 2016.** The Australian Defence Force (ADF) has accepted delivery of **23** MH-60R aircraft, as of **30 June 2016** and there are currently no known impediments to the Project achieving the materiel capability performance requirements. The aircraft delivery schedule will result 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 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.

Uniqueness

The Australian MH-60R helicopter is being acquired as a MOTS product, in the same baseline configuration as the USN aircraft. A limited number of Australia unique design modifications will be incorporated after 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 **five** 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 16	Exchange Variation	529.9	
Jun 16	Total Budget	3,520.4	
	Project Expenditure		
Prior to Jul 15	Contract Expenditure – US Government (AT-P-SCF)	(1,443.0)	5
	Contract Expenditure – US Government (AT-P-AHV)	(66.5)	5
	Contract Expenditure – US Government (AT-B-ZBZ)	(19.6)	5
	Contract Expenditure – Navy – Empire Test Pilots' School	(7.4)	6
	Contract Expenditure – US Government (AT-P-GTC)	(3.5)	5
	Other Contract Payments / Internal Expenses	(67.0)	6
		(1,606.9)	
FY to Jun 16	Contract Expenditure – US Government (AT-P-SCF)	(240.9)	5
	Contract Expenditure – US Government (AT-P-AHV)	(21.9)	5
	Contract Expenditure – US Government (AT-B-ZBZ)	(0.7)	5
	Other Contract Payments / Internal Expenses	(18.8)	6
		(282.2)	
Jun 16	Total Expenditure	(1,889.1)	
Jun 16	Remaining Budget	1,631.3	
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.		

2.2A In-year Budget Estimate Variance

Estimate PBS \$m	Estimate PAES \$m	Estimate Final Plan \$m	Explanation of Material Movements
546.2	343.5	293.5	PBS to PAES: primarily due to the reduction in the FMS case termination liability reduction for the MH-60R Seahawk Helicopters as well as the acceleration of FMS case payments into the 2014-15 Financial Year. PAES to Final Plan: primarily due to reprogramming of FMS case payments based on improved budget and schedule information from the US Government and foreign exchange updates.
Variance \$m	(202.7)	(50.0)	Total Variance (\$m): (252.7)
Variance %	(37.1)	(14.6)	Total Variance (%): (46.3)

2.2B In-year Budget/Expenditure Variance

Estimate Final Plan \$m	Actual \$m	Variance \$m	Variance Factor	Explanation
		(12.1)	Australian Industry	Year end variance primarily caused by FOREX gain and delays in Weapons LOA signing. There are also delays/slow billing against: * AWD/ANZAC ship integration procurements * Facilities expenditure * Non-FMS procurements * Contractor support * ICT, Travel and other procurements. This has been offset by higher than expected payments against the Torpedo FMS case, MH-60R Helicopter FMS case and the missile FMS case.
		11.5	Foreign Industry	
			Early Processes	
		(10.8)	Defence Processes	
			Foreign Government Negotiations/Payments	
			Cost Saving	
			Effort in Support of Operations	
			Additional Government Approvals	
293.5	282.2	(11.3)	Total Variance	
		(3.8)	% Variance	

2.3 Details of Project Major Contracts

Contractor	Signature Date	Price at		Type (Price Basis)	Form of Contract	Notes
		Signature \$m	30 Jun 16 \$m			
US Government (AT-P-SCF)	Jun 11	2,090.3	2473.7	Variable	FMS	1, 3
US Government (AT-P-AHV)	Aug 11	168.1	218.3	Variable	FMS	1, 3
US Government (AT-B-ZBZ)	Jan 12	12.3	21.8	Variable	FMS	1, 2, 3
US Government (AT-P-GTC)	Feb 13	10.9	15.1	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 2016 is based on actual expenditure to 30 June 2016 and remaining commitment at current exchange rates, and includes adjustments for indexation (where applicable).					
Contractor	Quantities as at		Scope			Notes
	Signature	30 Jun 16				
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			

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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 16				
Spares and Support Equipment deliveries Aircraft 1 and 2 delivered in December 2013 Aircraft 3 and 4 delivered in February 2014 A quantity of Mk 54 Torpedos delivered in August 2014 A quantity of Hellfire Missiles delivered in August 2014 Aircraft 5 delivered in October 2014 'BRomeo' Seahawk Training Device delivered in October 2014 Aircraft 7 and 8 delivered in January 2015 Tactical Operational Flight Trainer 1 delivered in February 2015 Aircraft 9 and 10 were accepted in January 2015 Aircraft 11 and 12 were accepted in April 2015 Aircraft 13 and 14 were accepted in July 2015 Aircraft 15 and 16 were accepted in November 2015 Aircraft 17 and 18 were accepted in January and February 2016 Aircraft 6 and 19 were accepted in March 2016 Aircraft 20 was accepted in April 2016 Aircraft 21 was accepted in May 2016 Aircraft 22 was accepted in June 2016 Aircraft 23 was accepted in June 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	Dec 16	Feb 17	14	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	Jun 17	Aug 17	8	3

Notes	
1	MH-60R helicopter system requirements and design reviews not required as it is a MOTS helicopter procured through FMS.
2	The ADF Mission System Options have been split into two phases. Phase 1 Statements of Work (SOWs) for ADF Unique Mission System Options have been 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, and contract signature with Lockheed Martin being 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.

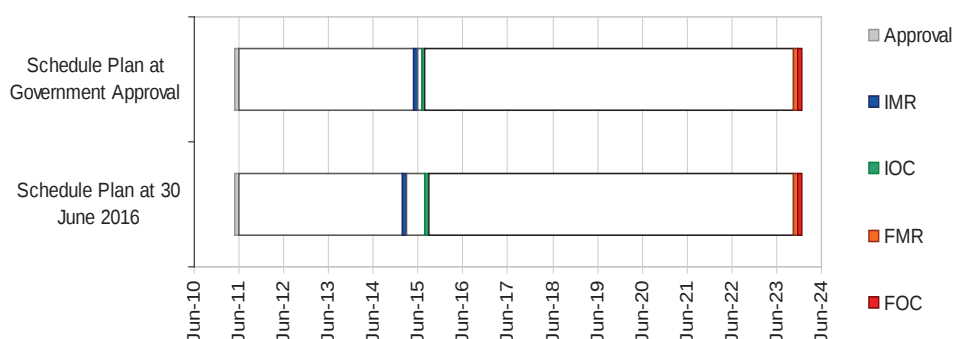
3.2 Contractor Test and Evaluation Progress

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	Sep 18	Sep 18	TBA	1
	Air Warfare Destroyer	TBA	TBA	TBA	TBA	
Acceptance	ADF Mission System Options – Phase 1	Aug 16	Aug 16	Aug 16	0	1
	ADF Mission System Options – Phase 2	Sep 18	Sep 18	Sep 18	TBA	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 have been split into two phases. Phase 1 SOW for ADF Unique Mission System Options have been 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 being achieved in October 2014.					

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	
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.			

Schedule Status at 30 June 2016

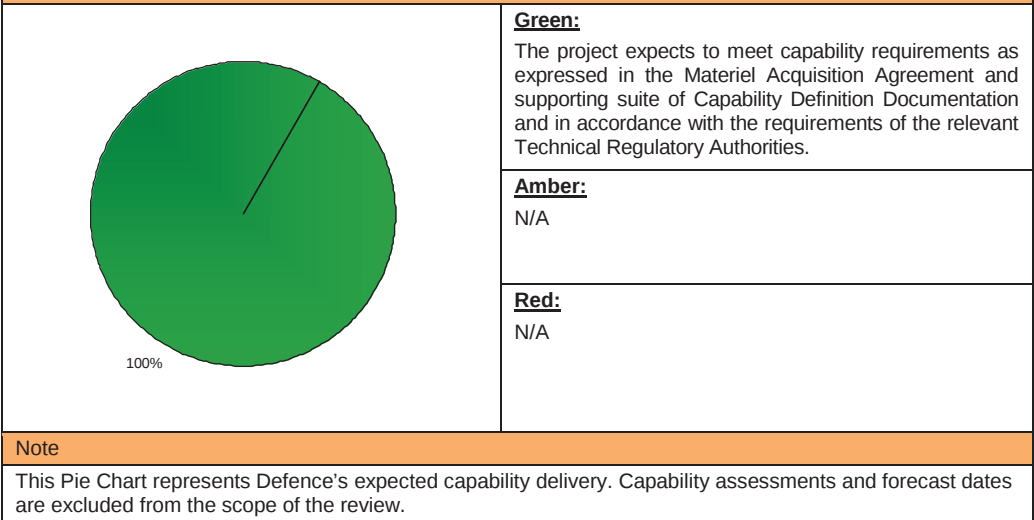
**Note**

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

Pie Chart: Percentage Breakdown of Materiel Capability Delivery Performance



4.2 Constitution of Initial Materiel Release and Final Materiel Release

Item	Explanation	Achievement
Initial Materiel Release (IMR)	- Five aircraft in USN configuration, Tactical Operational Flight Trainer and supporting systems, - Establishment of key Sustainment organisations, - Initial stock of Mk 54 Torpedos and Hellfire Missiles, and - Modification of one ANZAC class ship for interoperability with MH-60R Seahawk helicopter.	Achieved
Final Materiel Release (FMR)	- All 24 aircraft delivered and Australian Mission System Options implemented, - Full EO fit-out and all Mk 54 Torpedos and Hellfire Missiles delivered, - All ANZAC class ships and Air Warfare Destroyers modified for interoperability with MH-60R Seahawk helicopter, and - 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 2015-16)	
Description	Remedial Action
N/A	N/A

5.2 Major Project Issues

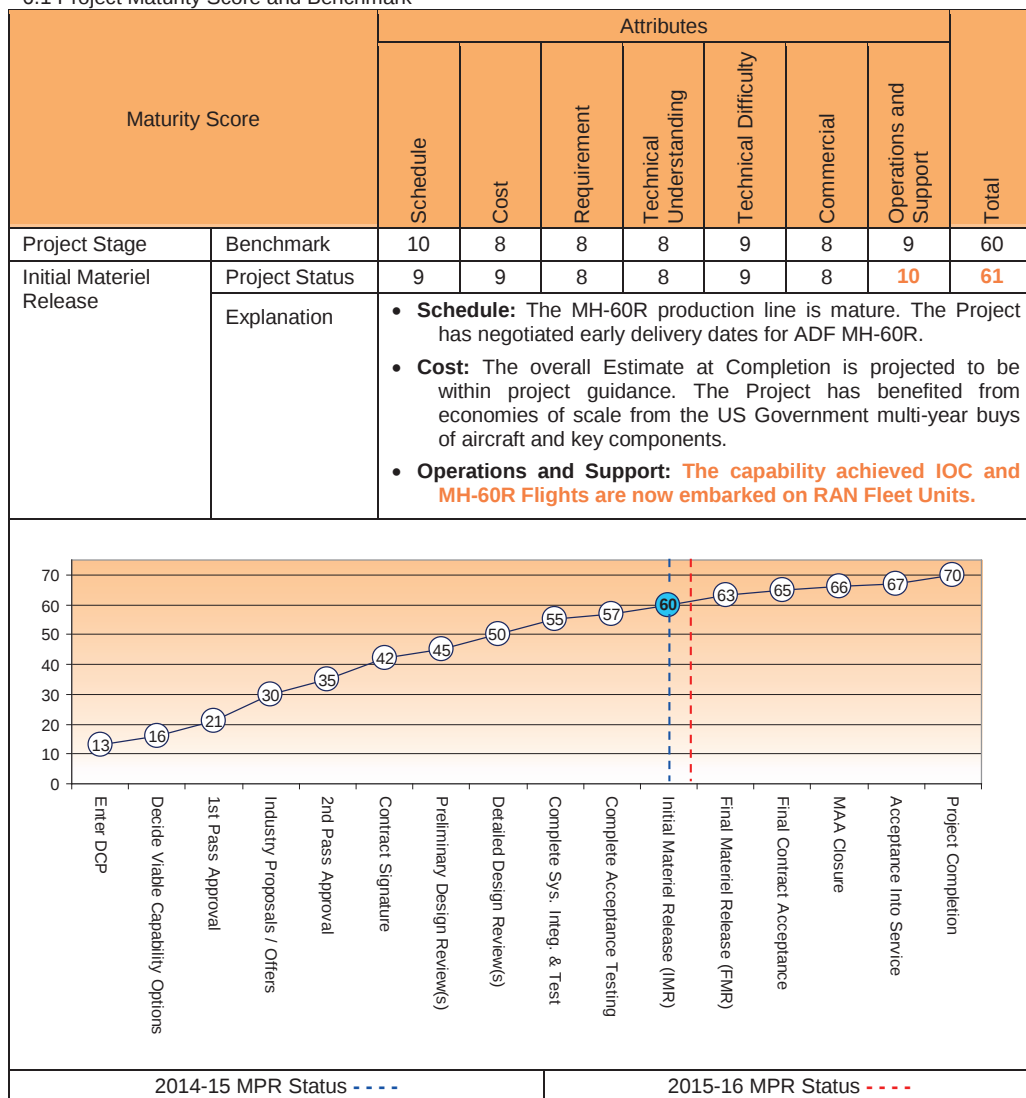
Description	Remedial Action
N/A	N/A

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



Section 7 – Lessons Learned

7.1 Key Lessons Learned

Project Lesson	Categories of Systemic Lessons
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. 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. 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.	Contract Management
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.	Resourcing
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.	Off-The-Shelf Equipment

Section 8 – Project Line Management

8.1 Project Line Management in 2015-16

Position	Name
Division Head	RADM Tony Dalton (to Oct 15) MAJGEN Andrew Mathewson (Oct 15-current)
Branch Head	CDRE Colin Lawrence (to Dec 15) CDRE Scott Lockey (Dec 15-current)
Project Director	CAPT Peter Ashworth
Project Manager	CMDR Michael Rainey