# **Project Data Summary Sheet** 133

Project Number	AIR 7000 Phase 2B
Project Name	MARITIME PATROL AND RESPONSE AIRCRAFT SYSTEM
First Year Reported in the MPR	2014-15
Capability Type	Replacement
Acquisition Type	MOTS
Capability Manager	Chief of Air Force
Government 1st Pass Approval	Jul 07
Government 2nd Pass Approval	Feb 14
Total Approved Budget (Current)	\$5,262.5m
2016-17 Budget	\$1,108.6m
Project Stage	Integration and Test
Complexity	ACAT II



## Section 1 - Project Summary

## 1.1 Project Description

AIR 7000 Phase 2B seeks to acquire the materiel elements of the Maritime Patrol and Response Aircraft (MPRA) weapon system, including a Through Life Support (TLS) system, as partial replacement of the AP-3C Orion aircraft.

Twelve P-8A Poseidon aircraft will be purchased for the Royal Australian Air Force (RAAF) through a Cooperative Program (CP) with the United States Navy (USN). The scope of the CP includes the Production, Sustainment and Follow-on Development (PSFD) of the United States Navy and RAAF P-8A Poseidon fleet.

### 1.2 Current Status

#### **Cost Performance**

#### In-year

The project has spent \$1,145.0m as at 30 June 2017 against a planned in-year budget of \$1,108.6m, a variance of (\$36.4m) or 3.3 per cent. This variance is primarily due to re-programming of Air to Air Refuelling Clearance activities payment to Financial Year 2017-18 (\$12.5m) and deferring procurement of Training System support, whilst advancing aircraft payments from Financial Year 2017-18.

## Project Financial Assurance Statement

As at 30 June 17, the AIR 7000 Phase 2B Project Office 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, that 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.

### 133 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.

#### Schedule Performance

In August 2014, an Advanced Acquisition Contract (AAC) was signed by the USN, on behalf of Australia, for the first four RAAF P-8A aircraft. The AAC for the second set of four P-8A aircraft was signed in June 2015. The AAC for the third set of four P-8A aircraft was signed in May 2016. The AAC allows the Prime Contractor, Boeing, to acquire long lead items in order to ensure that all required components are available on time for assembly of the P-8A aircraft. The USN placed the full aircraft production contract for the first four Australian P-8A aircraft with Boeing in August 2015. The contract for the second set of four aircraft, Lot 7, was placed in January 2016 and the third set of four aircraft, Lot 8, was placed in March 2017 (total of 12 aircraft).

The third set of four aircraft was approved by government in February 2016 with a budget of \$1,295.4m. The additional aircraft and budget has increased the AIR 7000 Phase 2B project scope. As a result of the increased scope, an update to the Materiel Acquisition Agreement (MAA) and Schedule has occurred.

The first aircraft, initially scheduled for delivery in January 2017, was delivered in October 2016 (three months ahead of schedule). Since then aircraft two was delivered in February 2017 (six weeks ahead of schedule) and aircraft three in April 2017. The USN have advised that all aircraft, that are currently on contract, are expected to be ready for delivery on time or earlier than required.

#### **Materiel Capability Delivery Performance**

The P-8A Poseidon is being developed under a spiral development program by the USN. The spiral development consists of an evolution of increments, each of which has a number of Engineering Change Proposals (ECP) that define the maturing configurations of the increment. The variant of the first P-8A acquired under the scope of Phase 2B is defined as Increment 2, ECP 2.

AIR 7000 Phase 2C proposes to be the first major upgrade of the aircraft purchased under AIR 7000 Phase 2B (predominantly a Mission System upgrade delivered in the later ECPs of Increment 3)subject to future government approval.

The USN declared Initial Operational Capability (IOC) for the Increment 2, ECP 1 aircraft in October 2014, and declared IOC for the Increment 2 ECP 2 aircraft in August 2016. Through the CP, Australia has had significant insight into, and influence on Search and Rescue Kit and Harpoon 1G integration, the work being undertaken on the Increment 2, ECP 2 configuration, and has high confidence that the aircraft (and supporting systems) will provide the capability required by the MAA.

#### Note

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

#### 1.3 Project Context

#### Background

Project AIR 7000 Phase 2B is an ACAT II project, seeking to acquire the P-8A Poseidon MPRA capability, as partial replacement for the AP-3C Orion capability, under a CP with the USN. IOC is planned for 2018, allowing the withdrawal of the AP-3C Orion to occur around FY18/19.

In December 2011, Government approval was provided to participate in the CP for development of P-8A aircraft and, in March 2012, the Project entered into an initial 10-year Memorandum of Understanding (MoU) with the USN for P-8A PSFD. The MoU defines Australia's contribution towards the joint costs for PSFD, and the separate funding of Australian-unique deliverables and effort.

The Increment 3 Project Arrangement was signed in September 2012 to enable Australia to participate in the incremental upgrade to Phase 2B. This upgrade will be incorporated under AIR 7000 Phase 2C.

In February 2014, Government Second Pass Approval was for the Project to acquire eight P-8A Poseidon aircraft, along with associated support and training systems. The Government approved the acquisition of an additional four (4) aircraft in February 2016.

The Project Office issues Procurement Requests (PRs) to advise the CP of Australia's intent to acquire materiel through the CP. After an appropriate scope, schedule and cost have been advised by the CP, the Project Office issues a Letter of Authority (LOA) which provides Australia's financial commitment for the acquisition. The Project formally submitted its first PR through the CP in June 2014, which covered aircraft, aircrew training devices, aircraft spares, aircraft support and test equipment, transition training and other support elements.

On 4 September 2014, Defence signed a LOA authorising the USN to procure Australian P-8A initial aircraft spares.

In May 2015, the USN signed the contract for Australia's P-8A Aircrew Training Devices to be delivered in 2017-18.

Sustainment and in-service support will provide opportunities for Australian Industry involvement. Further opportunities exist for Australian Industry in facilities and infrastructure development.

In accordance with the approved acquisition strategy, opportunities for Australian Industry participation in the broader USN P-8A Global program will exist on a competitive contracting basis throughout the life-cycle of the P-8A. Opportunities include component manufacture, component repair, and research and design services.

AIR 7000 Phase 2B also seeks to generate Australian industry participation in the acquisition, sustainment and follow-on development phases of the program through the Australian Industry Capability and Boeing Global Supply Chain.

#### Uniqueness

The RAAF P-8A aircraft will be identical to the USN P-8A aircraft, except for minor configuration differences due to national requirements (such as different aircraft marking schemes). Other support elements, such as training devices and spares, will also be kept as common as technically possible.

AIR 7000 Phase 2B is acquiring, and sustaining, the P-8A capability through a Government to Government CP with the USN. This arrangement is distinctly different from the traditional Foreign Military Sales (FMS) or Direct Commercial Sales (DCS) arrangements. The benefits of a CP include significantly enhanced insight and influence over the development of the weapon system, better awareness and control of project costs drivers and risks, better access to technical and sustainment data, and access to the USN wholesale spares warehouse.

# **Project Data Summary Sheets**

### Major Risks and Issues

The Project is currently mitigating the risks associated with the Aircrew Training System, Mk 54 Torpedo and High Altitude Anti-Submarine Weapon Capability (HAAWC).

A number of risks for the effective and efficient sustainment of the P-8A are also currently being treated through efforts to more closely align the US and Australian sustainment processes.

The project has also identified issues with CP process development and aircraft fatigue testing results and are working with the USN to quantify the impact of these issues. The project is also seeking to mitigate the impact of forecast delays in the development and timely installation of Aircrew Training Devices.

## **Other Current Sub-Projects**

N/A

Not

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
Date	Project Budget	<b>\$</b>		
Nov 07	Original Approved		144.1	1
1407 07	Oliginal Approved		177.1	•
Jul 10	Real Variation – Real Cost Decrease	(21.7)		2
Dec 11	Real Variation – Transfer	(38.0)		3
Apr 12	Government Intermediate Consideration	83.5		4
Feb 14	Government Second Pass Approval	3,409.8		5
Mar 16	Real Variation - Scope	1,295.4		6
Ivial 10	Trodi Variation Coope	1,200.1	4.729.1	Ü
Jul 10	Price Indexation		20.5	7
Jun 17	Exchange Variation		368.7	,
Jun 17	Total Budget		5.262.5	
Juli 17	Total Budget		3,202.3	
	Project Expenditure			
Prior to Jul 16	Contract Expenditure – Aircraft Acquisition	(413.5)		8
. 1101 10 001 10	Payments – Lot 6	(413.3)		3
	Contract Expenditure –Aircraft Acquisition Payments	(175.3)		
	- Lot 7	(1.3.5)		
	Contract Expenditure – Aircrew Training System	(156.5)		
	Contract Expenditure – Aircraft Acquisition	(139.0)		8
	Payments – Lot 8	(10010)		
	Contract Expenditure – Aircraft Government	(120.4)		
	Furnished Equipment	(1-111)		
	Contract Expenditure – Aircraft Retail Spares	(108.8)		8
	Contract Expenditure – PSFD MoU Contributions	(89.9)		
	Contract Expenditure – Increment 1 Contribution	(66.0)		
	Other Contract Payments/Internal Expenses	(310.9)		8,9
	,	,	(1,580.3)	
FY to	Contract Expenditure – Aircraft Acquisition	(339.1)		8
Jun 17	Payments – Lot 7	, ,		
	Contract Expenditure – Aircraft Acquisition	(80.2)		
	Payments –Lot 8	` '		
	Contract Expenditure – Aircraft Acquisition	(319.5)		
	Payments – Lot 6			
	Contract Expenditure – Aircrew Training System	(94.7)		
	Contract Expenditure – Aircraft Government	(63.4)		
	Furnished Equipment			
	Contract Expenditure – Aircraft Retail Spares	(0.7)		
	Contract Expenditure – PSFD MoU Contributions	(14.2)		
		(00000)		40
	Other Contract Payments/Internal Expenses	(233.2)		10
			(4.44-5)	
			(1,145.0)	
Jun 17	Total Expenditure		(2,725.2)	
Jun 17	Remaining Budget		2,537.2	
			_,	
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Notes	
1	Government First Pass Approval to initiate the Project and progress the project to Intermediate Consideration. At First Pass, AIR 7000 entered the Spiral 1 MoU with the USN for development of the P-8A weapon system.
2	Hand back of contingency funding due to retirement of specific Increment 1 MoU risks.
3	Reallocation of funding to Defence Support and Reform Group to develop AIR 7000 Phase 2B facilities requirements.
4	Government Intermediate Consideration Funding Approval required to progress the project to 2nd Pass Government approval. Includes costs of project planning documentation development and contractor project support services.
5	Government Second Pass Approval to fund the acquisition of eight P-8A aircraft, and associated support systems and sustainment arrangements.
6	Government Second Pass Approval to fund the acquisition of an additional four P-8A aircraft and associated support systems. Whilst funding approval was provided under AIR7000 Phase 2D, funds have been merged with AIR7000 Phase 2B for administration and reporting purposes as it relates to the delivery of one capability.
7	Until July 2010, indexation was applied to project budgets on a periodic basis. The cumulative impact of this approach was \$17.4m. In addition to this amount, the impact on the project budget as a result of out-turning was a further \$3.1m having been applied to the remaining life of the project.
8	The amount for this line item differs from the prior year due to a revalidation of life to date expenditure.
9	Other expenditure to 30 June 2016 was comprised of Increment 3 contributions of \$40.0m, Wholesale Spares Pool of \$39.2m, Maintenance Training Device scoping and acquisition costs of \$36.4m, Mission Support System (MSS) of \$21.2m, MK 54 acquisition costs of \$17.0m, Tactical Operational Centre/Mobile Tactical Operational Centre (MTOC) scoping and acquisition costs of \$14.9m, Support and Test Equipment (S&TE) acquisition costs of \$14.4m, Aircrew Maintenance and Training costs of \$14.4m, DIRCM spares of \$10.9m, Commonwealth Project Personnel (CPP) expenses of \$8.3m, Sonobuoys acquisition cost of \$7.4m, CIOG Single Integration Environment of \$7.2m, ICT Cooperative Solution payment of \$4.9m, Field Service Representative (FSR) payments of \$4.6m, Training System Support Services of \$4.3m and other operating expenditure not attributable to the listed major contracts of \$65.9m.
10	Other expenditure to 30 Jun 2017 was comprised of Operational Loads Monitoring System \$39.0m, Increment 1 Development \$20.8m, Spare Engine \$16.8m, Sonobuoys \$15.3m, Transition Training \$14.7m, Strategic Support Partnership Contract (SSPC) \$13.7m, Search and Rescue (SAR) Kit Integration Services \$8.2m, MK54 acquisition cost of \$7.1m, Training System Spare \$4.6m, TOC/MTOC \$4.6m and other operating expenditure not attributable to the listed major contracts of \$88.4m.

2.2A In-year Budget Estimate Variance

z.za m-year Budget	Estimate variance		
Estimate	Estimate	Estimate	Explanation of Material Movements
PBS \$m	PAES \$m	Final Plan \$m	
1,046.8	1,089.6	1,108.6	PBS - PAES: The variation is due to earlier than planned payments for equipment, early establishment of the maintenance training contract and increase in Mission support system costs.  PAES - Final Plan: The variance is due to advancing aircraft payments and re-programming of Air to Air Refuelling to Financial Year 2017-18 and the deferral of procurement of Training System support.
Variance \$m	42.9	19.0	Total Variance (\$m): 61.9
Variance %	4.1	1.7	Total Variance (%):5.9

2.2B In-year Budget/Expenditure Variance

Estimate	Actual	Variance	Variance Factor	Explanation
Final Plan \$m	\$m	\$m		
			Australian Industry	This variance is primarily due to
			Foreign Industry	advancing aircraft payments to account
			Early Processes	for in-year slippage of re-programming of
			Defence Processes	Air to Air Refuelling clearance activities
		36.4	Foreign Government	to Financial Year 2017-18 (\$12.5); and
			Negotiations/Payments	deferring procurement of Training
			Cost Saving	System support.
			Effort in Support of Operations	
			Additional Government Approvals	
1,108.6	1,145.0	36.4	Total Variance	
		3.3	% Variance	

Aircraft Government Furnished Equipment (GFE)

(US Government AAC Lot 6 & Lot 8

(US Government)

(US Government) Aircrew Training Systems

Retail Aircraft Spares

Various

Various

Various

Various

Various

Various

Various

Various

components.

2.3 D	etails of Project Major Contract	ts					
		Signature Price		ce at	Type (Price	Form of	
Conti	ractor	Date	Signature \$m	30 Jun 17 \$m	Basis)	Contract	Notes
	O MoU - Contributions Government)	Mar 12	130.4	167.3	Cost Ceiling (Capped)	MoU	1, 8
Equip	aft Government Furnished oment (GFE) Government)	Apr 14	142.9	227.2	Variable	MoU	2,7,8
Lot 6	and Aircraft Production  Government)	Aug 14	159.0	777.2	Variable	MoU	3,7,8,10
Retai	I Aircraft Spares Government)	Sep 14	122.1	111.9	Variable	MoU	4,7,8
Aircre	ew Training Systems Government)	Dec 14	275.4	321.6	Variable	MoU	5,7,8,10
7	and Aircraft Production Lot	Jun 15	182.5	766.4	Variable	MoU	6,7,8
AAC Lot 8	Government) and Aircraft Production Government)	May 16	139.0	762.2	Variable	MoU	8, 9
Notes	,						
1	PSFD MoU shared contributi Participants. Australia is res aircraft in the overall fleet.	ponsible for pay	ying a proportion	n of the total co	sts based on the	relative number o	of Australian
2	Aircraft GFE to be procured aircraft. Price represents the has been obtained. The US purchase.	total value of co	ontracts expected	d to be awarded	and for which Sect	tion 23 Commitme	ent Approval
3	Lot 6 AAC – signature allow fully defined contract arrange 2015.						
4	Retail aircraft spares required inventory or via other US Gov						
5	Aircrew Training Devices - significant and program montract was signed May 201	anagement acti					
6	Lot 7 Aircraft AAC – signature into fully defined contract arra January 2016.						
7	'Contract signature' dates in are issued by the project for satisfy Australian-unique requ	mally authorisin					
8	Contract value as at 30 Jur budget exchange rates.	ne 17 is based	on actual exper	nditure to 30 Jui	ne 2017 and rema	aining commitmer	nt at current
9	9 Lot 8 Aircraft AAC – signature allowed the prime contractor, Boeing, to procure long-lead aircraft components prior to entering into fully defined contract arrangement. Lot 8 production contract for acquisition of the third set of four aircraft was signed in March 2017.						
10	These contract values have changed due to the separation of LOT 6 and LOT 8 contract reporting.						
Conti	ractor	Quantit Signature	ies as at 30 Jun 17	Scope			Notes
	D MoU - Contributions Government)	N/A	N/A	2012-13 to 2 purchase of eig production, development 1	ntribution to shar 2021-22 based o ght aircraft. Include sustainment a for common effor administration cost	on the original s contribution to nd follow-on ts, and project	1

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Items to be procured in support of production of Lot 6 (aircraft 1-4), Lot 7 (aircraft 5-8) and Lot 8

Four Lot 6 aircraft and long-lead P-8A aircraft

Training Systems Support Centre, Weapons

Initial spares buy for the first eight aircraft.

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(US Government)				Tactics Trainers, Part Task Trainer, Operational Flight Trainers, Mission Systems Desktop Trainers and Training Support.	
AAC Lot 7		Various	Various	Four Lot 7 aircraft and long-lead P-8A aircraft	4
(US Government	)			components.	
AAC Lot 8		Various	Various	Four Lot 8 aircraft and long-lead P-8A aircraft	5
(US Governmen	t)			components.	
Major equipment	received and quan	tities to 30 Jun	17		
To date, 3 aircra	ft and 2 MTOCs h	ave been delive	ered.		
Notes					
1	No equipment de	elivered as part o	of this MOU.		
2	GFE delivery will be to prime contractor for aircraft production.				
3	The contract for acquisition of the first four aircraft was signed in August 2015. To date, three aircraft have been delivered.				
4	No equipment has been delivered as part of this contract. The contract for acquisition of the second four aircraft was signed in January 2016.			four aircraft	
5	No equipment has been delivered as part of this contract. The contract for the acquisition of the third's of four aircraft was signed in March 2017			e third set	

# Section 3 - Schedule Performance

3.1 Design Review Progress

Revi	ew	Major System/Platform Variant	Original Planned	Current Planned	Achieved/Forecast	Variance (Months)	Notes	
Com	ponent	Multi-Mission Maritime Aircraft	N/A	N/A	2002	N/A	1	
Adva	ance	(subsequently called the P-8A						
Deve	elopment	Poseidon)						
Syst	em Design	P-8A SDD	May 04	May 04	May 04	0	2	
	elopment							
(SDI	,							
	stone B							
Desi		P-8A SDD	Jul 07	Aug 07	Aug 07	1		
	diness							
Revi								
	stone C	P-8A SDD	May 10	Aug 10	Aug 10	3	3	
	Decision	P-8A Increment 2	Apr 13	Dec 13	Jan 14	8	4,5	
Note								
1		Advance Development was a compe				ve Multi Missio	n Aircraft	
	concept system architectures and evaluate associated risks and proposed mitigations.							
2	SDD phase was used to design, develop and test the P-8A system.							
3	Milestone C represents Low Rate Initial Production (LRIP) Approval and entry into the Production and Deployment Phase.							
4	US Defense Acquisition Board approved the deferral of the Full Rate Production (FRP) decision from the original planned to allow for completion of the testing and subsequent reporting as well as adding an additional LRIP (Lot IV).							

3.2 Contractor Test and Evaluation Progress

AIR 7000 Phase 2B relies on the Design Review processes of the USN.

Test and Evaluation	Major System/Platform Variant	Original Planned	Current Planned	Achieved/ Forecast	Variance (Months)	Notes
System Integration	Fleet Release 30 (Increment 2 ECP 1)	Apr 14	Dec 14	Dec 14	8	1
	Fleet Release 40 (Increment 2 ECP 2)	Aug 15	Aug 16	Aug 16	12	1,2
	Fleet Release 46 (Increment 2 ECP 3)	Apr 17	Oct 17	Oct 17	6	1,3
Acceptance	Accept and deliver Lot 6 Aircraft (1-4)	Nov 16 – Sep 17	Nov 16 –Aug 17	Oct 16 - Jul 17	(2)	4,5
	Accept and deliver Lot 7 Aircraft (5-8)	Dec 17 – Sep 18	Dec 17 –Aug 18	Dec 17 – Oct 18	1	4,5
	Accept and deliver Lot 8 Aircraft (9-12)	Aug 19 – Feb 20	Aug 19 – Feb 20	Aug 19 – Feb 20	0	4
	MSS and two Deployable MSS	Sep 16 – Aug 18	Nov 16 – Dec 18	Feb 17 - Dec18	4	6
	Training System	Jan 18 – Mar 18	Mar 18 –Jun 18	Jan 18 – Jun 18	3	7
Notes						

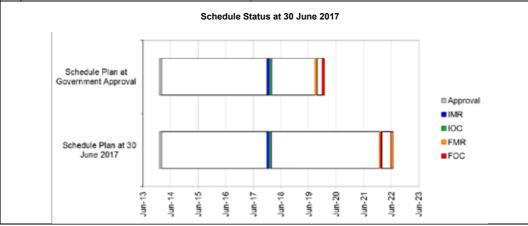
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- delivered through a number of smaller Engineering Change Proposals. Variance from original planned dates are due to changes in the Boeing / USN schedule.
- 2 Due to data disclosure issues FR 40 was updated to 40.1 and finalised in November 2016
- -3 Fleet Release 50 has been re-titled Fleet Release 46 to align with the management of the Lot 8 production contract. The capabilities planned for FR50 remain unchanged as the change was solely based on nomenclature.
- 4 Australian Lot 6 aircraft are scheduled for delivery in October 2016 (achieved), February 2017 (achieved), April 2017 (achieved), and July 2017.
  - Australian Lot 7 aircraft are scheduled for delivery in December 2017, February 2018, August 2018, and October 2018. Australian Lot 8 aircraft are scheduled for delivery in August 2019, September 2019, October 2019, and February 2020.
- 5 Australia will adopt a model of Recognition of Prior Acceptance for Aircraft certification.
- 6 Variance from original planned date is due to incorrect capture of milestone in MAA v3.0. This has been corrected in MAA v4.0. Variance is due to the aligning of delivery with facilities construction completion.
- 7 Variance from original planned date is due to the inability of the Original Equipment Manufacturer (OEM) to deliver the full Training System as per the contract. All training devices are contracted to be delivered prior to the commencement of the first conversion training courses.

3.3 Progress Toward Materiel Release and Operational Capability Milestones

Item	Original Planned	Achieved/Forecast	Variance (Months)	Notes
Materiel Release 1 (MR1)	Jan 17	May 17	4	1, 2
In Service Date (ISD)	Nov 16	May 17	6	1
Initial Materiel Release (IMR)	Jan 18	Jan 18	0	
Initial Operational Capability (IOC)	Feb 18	Jan 18	(1)	
Materiel Release 2 (MR2)	Dec 18	Dec 18	0	
Operational Capability 2 (OC2)	Jan 19	Jan 19	0	
Materiel Release 3 (MR3)	Dec 19	Oct 19	(2)	3
Operational Capability 3 (OC3)	Jan 20	Jan 20	0	3
Final Materiel Release (FMR)	Oct 19	Jun 22	32	4
Final Operational Capability (FOC)	Jan 20	Jan 22	29	4
Notes				

- 1 Variance due to the delay in accepting the first MTOC actually occurring in February 2017
- When declaring MR1, CASG acknowledged the Threshold Search and Rescue Store capability would not be delivered and would be rescheduled to be delivered at IMR, at the completion of OT&E activities late in 2017.
- 3 Milestones MR3 and OC3 are new milestones associated with the approval of the third set of 4 aircraft.
- 4 FMR & FOC dates have moved to accommodate the purchase of an additional four aircraft.

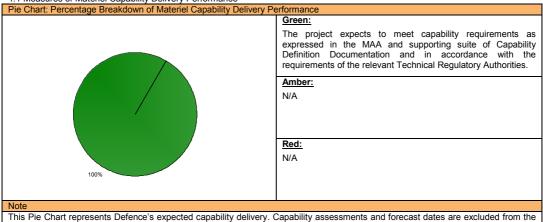


#### Note

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



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

4.2 Constitution of Initial Materiel Release and Final Materiel Release

Item	Explanation	Achievement
Initial Materiel Release (IMR)	By IMR the following will be delivered:	Not yet achieved
	4 x P-8A aircraft delivered to RAAF Edinburgh (EDN).	
	2 x MTOCs (previously delivered) in the following configurations:	
	1 x MTOC installed within Main Operating Base (MOB) temporary facility (not deployable).	
	1 x MTOC temporarily installed at Forward Operating Base (FOB) either within interim fixed facility or deployable shelters.	
	7 x trained aircrews.	
	3 x trained Mission Support System teams.	
	7 x trained maintenance teams.	
	Delivery of spares, Ground Support Equipment (GSE) and Support and Test Equipment (S&TE) to support MOB and FOB operations.	
	<ul> <li>Publications to support supply, maintenance and operations for IOC.</li> </ul>	
	Network Connectivity between all delivered P- 8A aircraft and Australian Single Information Environment.	
	IMR is expected to be achieved in January 2018.	
Final Materiel Release (FMR)	By FMR the following will be delivered:	Not yet achieved
	12 x P-8A aircraft delivered to EDN.	
	All spares, GSE and S&TE to support the additional Rate of Effort (6,600 hours) at both MOB and FOB.	
	3 x MTOC delivered and installed.	
	Three Media Fly Away Kits delivered and interfaced with SIE sufficiently to allow organic deployment to non-MTOC supported bases.	
	Delivery of HAAWC Wing Kits.	
	FMR is expected to be achieved in June 2022.	
Note		
The definitions of IMR and FMR were	updated in the latest MAA, which was approved in Octo	ber 2016.

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# Section 5 - Major Risks and Issues

Identified Risks (risk identified by standard project risk manager Description  The Project has identified capability and performance risks	nent processes) Remedial Action				
The Project has identified capability and performance risks					
associated with respective integration of the Air Vehicle and the Tactical Operations Centres (TOC) into the Defence single Information (SIE)	Integration of the Air Vehicle and the Tactical Operations Centres (TOC) into the Defence Single Information Environment (SIE) risks have been downgraded to low due to successful and effective mitigation strategies, however capabilities require testing prior to risk closure.				
The Project has identified schedule risks associated with	Expedited construction of Operational Conversion Facility.				
development and timely installation of the Aircrew Training Devices (ATD), aircrew training and potential delays importing training devices and spares due to export control restrictions and contract delays.	Continued, regular, engagement with USN and Boeing regarding Aircrew Training Device development and acceptance.				
	Continued work with US Navy International Programs Office and US Department of State to ensure clear understanding of US export controls for Australian P-8A ATDs spares and data.				
	<ul> <li>Software acceptance tasks and hardware delivery and installation tasks have been uncoupled in the schedule, to support timely installation of the ATDs</li> </ul>				
	The Australian Embassy in the US has been closely engaged with their US State Department counterparts to enable export control decisions to be expedited.				
The Project has identified supportability risks associated with:  • potential delays importing Training System to	Continued engagement with relevant USN agencies regarding the integration of USN-provided sustainment services.				
support Ready for Training, due to export control restrictions and  contract acquisition of a suitable range and depth of	Engagement of additional contractor resources to assist development of detailed plans/processes for the Sustainment System.				
retail spares to support P-8A operations.	<ul> <li>Analysis of more mature spares modelling data, and a remodelling/adjustment of future spares purchases.</li> </ul>				
	Agreement of access to USN wholesale spares pool.				
	The risk associated with the development of processes and establishing arrangements in support of the P-8A Sustainment System was realised as an issue with a medium rating.				
Emergent Risks (risk not previously identified but has emerged	during 2016-17)				
Description	Remedial Action				
The Project has identified capability and performance risks associated with the Mk 54 torpedo and the UNIPAC III (objective) Search and Rescue Kit.	resolution and understanding of Mk54 performance and capability.  • The UNIPAC III project resources have been rescoped to ensure effective resources have been applied to the program. The COA continues to work with the USN to schedule the most cost and time effective methods for approvals for this capability to be deployed from a P-8A. This risk has a low impact on capability as the interim Search and Rescue capability approved and is in place.				
The Project has identified schedule risks associated with development and timely installation of the:     High Altitude Anti-submarine Warfare Weapon Capability for the MK54 torpedo.	For the High Altitude Anti-submarine Warfare Weapon Capability for the MK54 torpedo the primary mitigation is to track development and acquisition under the extant PSFD MOU, to align RAAF capability delivery schedules with the USN. This mitigation also provides greater				
Direct Infrared Counter Measures system.	access to technical data than available under an FMS procurement, to assist in earlier AUS technical assessment and activity.				
	The DIRCM USN developmental test schedule has yet to mature, with delays being experienced due to flight testing to be conducted by both the USN and USAF. ISRPO continue to monitor the situation to ensure capability schedules are met.				

**Project Data Summary Sheets** ANAO Report No. 26 2017-18 2016-17 Major Projects Report 5.2 Major Project Issues

Description	Remedial Action			
Cooperative Program process development . The Cooperative Program approach is less regulated than the more conventional FMS or DCS acquisition strategies. As a result, some additional effort is required to develop acquisition and sustainment processes in order to optimise the full benefits of the partnership.	Work closely with the USN to adapt existing FMS/DCS arrangements, where beneficial for the project.  Identify those areas where existing arrangements are not adaptable or beneficial to the project, and prepare/approve new arrangements as early as possible.			
Unexpected fatigue testing results During a contracted Wing-Fuselage Full Scale Fatigue Test, Boeing discovered unexpected signs of structural fatigue. USN expect this to be a localized issue affecting a finite number of components that will likely require some additional maintenance or replacement during scheduled depot overhauls, but that would not be expected to have widespread consequences for P-8A fleet operations or fleet longevity.	Ongoing engagement between Australian and USN subject matter experts to understand the causes of the unexpected signs of fatigue and the required remediation actions.     Incorporation of an Operational Loads Monitoring System on at least one P-8A aircraft has now been contracted with Boeing by the USN.			
S&TE Support Solution for P-8A deficient. The deficiencies may cause an issue for both operational maintenance and serviceability.	S&TE Support Solutions for P-8A issues were resolved and the have been or closed.			
Note				
Major risks and issues in Section 5 are excluded from the scope of the review.				

# Section 6 - Project Maturity

<ol><li>6.1 Project Maturity</li></ol>	/ Score and Bo	enchma	ark	6.1 Project Maturity Score and Benchmark							
						Attribu	utes				
Maturity Score			Schedule	Cost		Requirement	Technical Understanding	Technical Difficulty	Commercial	Operations and Support	Total
Project Stage	Benchmark		8	7		8	8	8	8	8	55
Integration and	Project Stat	us	8	8		8	7	8	8	7	54
Test	Explanation		Proje suffice  Tech but free provies  Open	nical Under urther work indes insight a	rstandir s require and acce Suppor	ect Office  ng: Sustai ed to docu ess to the t: Australi	nment arr ment exe P-8A capa a continue	rangement cutable prability. es to deve	at the remains to have be cocedures	een agreed The CP vector	dget is  If in concept, with the USN is required to
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60 —					1 1	<b>67</b>	_60(6	65		9	
50						55					
40				42 45	<u> </u>						
30		(30	35								
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	Decide Via	Industry Proposals 1st Pass Approval	2nd Pass Approva	Preliminary Design Contract Signature	etai .	9 9	<u>a</u>	na na	MAA Closure	Project Completion	
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	pab	Industry Proposals / Offers 1st Pass Approval	<u> </u>	o' 'S	Detailed Design Review(s)	Complete Acceptance Testin	eas	Final Contract Acceptance Final Materiel Release (FN	MAA Closure	n s	
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	Decide Viable Capability Options	ğ		Preliminary Design Review(s) Contract Signature	ت	Complete Acceptance Testing  Complete Sys. Integ. & Test	Initial Materiel Release (IMR)	Final Contract Acceptance Final Materiel Release (FMR)			
	ons			-		9		-			
0045 40 MDD 04-1											
2015-16 MPR Status 2016-17 MPR Status											

## Section 7 - Lessons Learned

### 7.1 Key Lessons Learned

7.1 Key Lessons Learned	
Project Lesson	Categories of Systemic Lessons
The signed PSFD MoU does not provide explicit detail on those activities which will be	Contract Management
undertaken in the interests of both nations by the CP (paid for by shared funding) and	
those which are Australian unique (paid for in addition to the shared financial	
contribution). Clearer definition of this division in the MoU would have avoided the post-	
signature negotiation required to resolve this ambiguity.	
The CP model has allowed Australia to work closely with the USN in the future	Requirements Management
requirements definition and planning for the P-8A. This has been to the significant	
mutual benefit of both the USN and Australia.	
Precision of description about what is included under the PSFD MoU.	Contract Management
Greater focus in regards to Australian Industry involvement within MoU.	Requirements Management
Scope of the MoU, does not contemplate other USN organisations (NAVSUP,	Contract Management
	Contract Management
SPAWAR).	Contract Management
Use of a US Cooperative Program contract support model should be used with caution, if	Contract Management
the activity will be subcontracted primarily back to Australian Industry to support.	
Consider direction contract arrangements within Australia, with reachback to US CONUS	
OEM as required if IP, export and data support can be assured.	
Airworthiness Certification of USN product may not meet Australian WHS requirements.	Requirements Management
Consider what SFARP approach needs to be taken when introducing into service.	
Export controls need to be closely monitored to ensure the articles receive appropriate	Contract Management
Congressional approval in time for shipment, particularly for classified items.	
When interfacing with US ICT organisations, it is very difficult to arrange access with the	Requirements Management
correct subject matter experts. Consider strong relationships under a cooperative	
program to ensure the right people are making decisions.	
Procurements through different parts of the USN organisation have different schedules	Contract Management
and may take significantly longer than others. Ensure the contracting processes and	3
timelines for the organisation conducting the contract management are well understood,	
before beginning the Procurement Process.	
Purchase of OEM engines are more expensive through the CP than via DCS with the	Contract Management
OEM - however ensure the articles can be supported by the USN.	Contract Management
INMARSAT connectivity and who pays for each segment is rarely clear. Ensure	Requirements Management
	requirements ividinagement
ownership of SIM cards as well as assigning the aircraft tail number to the correct SIM	
card is well understood.	Deminerate M
NAVAIR structures engineers supporting PMAs are generally conservative until they	Requirements Management
know more detail. Ensure they are aligned with the PMA priorities in terms of timeliness	
of product delivery	
SPAWAR manages a large number of components in the TOC across the USN, of which	Requirements Management
only a small number are needed for an aircraft platform. As a consequence, large	
numbers of "common" TOC components may be changed as part of a suite of TOC	
upgrades across the USN fleet, and rolled into what was a relatively minor air vehicle	
change. This may well hold up delivery of a new mission system software drop while	
awaiting the software regression testing to be complete on the overall configuration build	
change for the TOC.	
Consider co-location or moving of Acq staff to the sustainment organisation as part of	Resources
the SPO creation. This will ensure a better flow of knowledge transfer and ownership of	
the history of a particular requirement.	
Ensure the transition plan is approved well in advance of the first aircraft delivery	Requirements Management
(12 months or more).	
(12 mondio of more).	1

# Section 8 - Project Line Management

## 8 1 Project Line Management in 2015–16

6.1 Project Line Management in 2015–10		
Position	Name	
Division Head	AVM Catherine Roberts	
Branch Head	AIRCDRE Adam Brown (to Dec 16)	
	AIRCDRE Leon Phillips (Dec 16-current)	
Program Director	GPCAPT Debbie Richardson	
Project Manager	WGCDR Peter Hay (to Jan 17)	
	WGCDR James Badgery (Jan 17–current)	