# **Project Data Summary Sheet** 131

Project Number	SEA 1654 Phase 3
Project Name	Maritime Operational Support Capability (Replacement Replenishment Ships)
First Year Reported in the MPR	2017-18
Capability Type	Replacement
Acquisition Type	Australianised MOTS
Capability Manager	Chief of Navy
Government 1st Pass Approval	Apr 14
Government 2nd Pass Approval	Apr 16
Budget at 2 <sup>nd</sup> Pass Approval	\$1,004.6m
Total Approved Budget (Current)	\$1,066.8m
2017-18 Budget	\$277.0m
Project Stage	Detailed Design Review
Complexity	ACAT II



## Section 1 - Project Summary

## 1.1 Project Description

The SEA 1654 Phase 3 Maritime Operational Support Capability (MOSC) Project will replace both HMA Ships Success and Sirius with a single class of two Auxiliary Oiler Replenishment (AOR) Ships to sustain deployed maritime forces.

The primary role of the AOR Ships is the provision of afloat-support capability to fleet units. Afloat support is the underway replenishment of liquid and solid cargo, including high-flashpoint marine diesel fuel and aviation fuel, potable water, explosive ordnance, fresh and frozen provisions and general stores, utilising ship's fitted systems or helicopters. The secondary role of the AOR Ships is to provide limited resupply in support of operations ashore.

#### 1.2 Current Status

## Cost Performance

## In-year

End of year underspend is \$10.0m. This variance is primarily due to the reprogramming of training development, spares provisioning and other materiel procurement activities until later financial years. This reprogramming is in part a result of Navy's direction for commercial crew delivery of the AOR Ships to Australia. This proposed reprograming has no impact on the delivery or introduction into service dates of the AOR Ships for the SEA 1654 Phase 3 Project.

## Project Financial Assurance Statement

As at 30 June 2018, the SEA 1654 Phase 3 Project has reviewed the approved scope and budget for those elements required to be delivered. 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

The SEA 1654 Phase 3 Project previously completed Critical Design Review (CDR) and cut steel of the AOR Ship 1 on schedule in June 2017.

Major SEA 1654 Phase 3 Project milestones achieved in 2017-18 include:

## 131 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.

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- Keel Laying of the first AOR Ship, Supply, in November 2017;
- Cut Steel of the second AOR Ship, Stalwart, in April 2018;
- 35% Blocks Erected of Supply, with the 15<sup>th</sup> Block erected on the slipway in June 2018; and
- The successful completion of a number of contracted Mandated System Reviews (MSRs) including the Transition Requirements Review (TXRR) and Task Analysis Requirements Review (TARR) in December 2017, and the Integrated Baseline Review (IBR) in March 2018.

Production of the AOR Ships has continued to progress throughout 2017/18 in Spain, with ship launch of *Supply* currently forecast for the end of November 2018.

The SEA 1654 Phase 3 Project remains on track to achieve the schedule requirements for the achievement of Materiel Release and Operational Capability of the AOR Ships as approved by Government at Second Pass.

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

The SEA 1654 Phase 3 Project has not delivered any materiel capability to date. *Supply* is expected to be launched in November 2018, with the launch of *Stalwart* scheduled for June 2019. The project is on track to meet the IMR and FMR milestones in 2020 and 2021 respectively.

Note

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

#### 1.3 Project Context

## Background

The Royal Australian Navy (RAN) currently has two afloat-support ships to conduct Replenishment at Sea (RAS) operations. HMAS *Success* was commissioned in 1986 and is based on the French designed Durance class AOR. HMAS *Sirius* was commissioned in 2006 and is a Korean built commercial product tanker acquired and converted to an Auxiliary Oiler (AO).

The Defence White Paper 2013 (DWP 2013) identified the requirement for the RAN to resupply its deployed ships as an essential capability given the size of the area over which its Naval forces operate and the extended periods they may be required to remain at sea. It advised the Government's intention to replace the capability currently provided by Success and Sirius at the first possible opportunity; which would include the examination of options for local, hybrid and overseas build, or the leasing of an existing vessel.

In light of the urgent need to forestall a capability gap in this crucial area and supported by value for money considerations, the Government provided First Pass approval in April 2014 for Defence to conduct a limited competitive tender process between Navantia S.A. (Navantia) of Spain and Daewoo Shipbuilding and Marine Engineering (DSME) of South Korea for two replacement replenishment ships based on existing Military-Off-the-Shelf (MOTS) designs.

The SEA 1654 Phase 3 Project entered into contracts with DSME and Navantia on 7 and 10 October 2014 respectively, for the Risk Reduction and Design Studies (RRDS). The primary RRDS deliverable was the Mission System Specification (MSS) for the AOR Ship design solution, as well as an indicative support strategy.

The Government provided Second Pass approval in April 2016 to acquire two AOR ships and associated support systems from Navantia, including an initial period of five years in-service support. On 5 May 2016, the \$640 million acquisition contract was signed with Navantia to build the two AOR Ships in Spain, with delivery contracted to occur in 2019 and 2020 respectively.

Although the new AOR Ships will be built overseas, Australian Industry participation is estimated to be in excess of \$120 million. In addition, the initial \$250 million five-year sustainment contract also signed with Navantia, will be undertaken in Australia (note this contract is not included within Section 2.1 of this PDSS given it refers to the funding of sustainment).

On 17 November 2017, the Minister for Defence announced the AOR Ships would be named HMAS Supply and HMAS Stalwart. The keel for Supply was laid 17 November 2017 with Final Operational Capability scheduled for 2022.

# Uniqueness

The acquisition and support contracts were both signed on the same date and with the same Contractor, Navantia, with linkages between the acquisition and initial transitional five year in-service support Conditions of Contract.

While the AOR Ships are based on the existing MOTS design, based on the Spanish *Cantabria* class design, the minimal changes incorporated into the MSS have been limited to those required to meet the RAN's essential requirements, environmental obligations and statutory requirements.

The AOR Ships will be built and delivered in Spain, before transit to Australia for completion of an Australian fit out period prior to the introduction into service of each AOR Ship.

## Major Risks and Issues

The major risks the SEA 1654 Phase 3 Project currently faces are:

- The risk to achievement of Initial Operational Release (IOR) in mid-2020 as a result of the current issue of delays and deficiencies associated with the Logistics Support Analysis (LSA) program and related Integrated Logistic Support (ILS) deliverables.;
- Management of subcontractor performance; and
- Alignment with Materiel Seaworthiness Assurance.

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The project is also currently managing two key issues relating to:

- Delays to delivery and Approval of ILS deliverables are impacting the schedule leading up to the October 2019 Acceptance of the AOR Ship Support System and Operative Date (OD) of the Support Contract; and
- The responsibility for the Authorised Maintenance Organisation (AMO) and Authorised Engineering Organisation (AEO) in sustainment.

#### Other Current Sub-Projects

Project N2262 - Facilities to Support SEA1654 Phase 3 MOSC: The SEA 1654 Phase 3 Project Second Pass Approval also included the approval of scope for, and a significant percentage of the capital acquisition cost allocated to, the delivery of the facility requirements for the MOSC under the Estate and Infrastructure Group (E&IG) Project N2262. The supporting facilities and infrastructure works being delivered at Stirling, Garden Island Defence Precinct and Randwick Barracks under N2262 will be critical to the successful introduction and sustainment of the MOSC. Note the total approved budget and expenditure history included within this PDSS only includes Capability Acquisition and Sustainment Group (CASG) allocated funding and therefore Project N2262 budget and expenditure is excluded from the scope of this report.

#### 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			
Apr 14	Original Approved	13.2		1
Apr 16	Government Second Pass Approval	991.4		2
	Total at Second Pass Approval		1,004.6	3
Jun 16	Real Variation - Transfer		69.1	
Jun 18	Exchange Variation		(6.9)	
Jun 18	Total Budget		1,066.8	
	Project Expenditure			
Prior to	Contract Expenditure – Navantia S.A.	(58.6)		
Jul 17	Contract Expenditure – Raytheon Australia	(20.6)		
	Other Contract Payments/Internal Expenses	(10.0)		4
			(89.2)	
FY to	Contract Expenditure – Navantia S.A.	(264.9)		
Jun 18	Oomaat Experiance Wavarina C.A.	(204.3)		
04.1.10	Other Contract Payments/Internal Expenses	(2.1)		5
			(267.0)	
Jun 18	Total Expenditure		(356.2)	
Jun 18	Remaining Budget		710.6	
Juli 10	romaning budget	į	710.0	

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Note	S
1	This project's original budget amount is that prior to achieving Second Pass Government approval.
2	The Government Second Pass Approval transfer amount only includes funding transferred to CASG, including contingency. It does not include approved capital funding transferred to Navy and other Defence Groups.
3	Transfer of funding for Training under the acquisition contract Not To Exceed (NTE) price for Training delivery and development Contract Change Proposals (CCPs) from Navy.
4	Other expenditure prior to 1 July 2017 predominately relates to pre-Second Pass RRDS activities (\$6.9m) as well as Legal and other External Service Provider (ESP) services (1.6m).
5	Other expenditure comprises operating expenditure, minor contract expenditure and other capital expenditure not attributable to the listed contracts.

2.2A in-year Budget i	estimate variance		
Estimate PBS \$m	Estimate PAES \$m	Estimate Final Plan \$m	Explanation of Material Movements
269.6	274.5	277.0	PBS-PAES: Project reprogramming other than slippage or acceleration, primarily due to updated forecast expenditure for prime contract price adjustment escalation payments and future training and spares provisioning payment milestones to be negotiated.  PAES-Final Plan: Forex fluctuations.
Variance \$m	4.9	2.5	Total Variance (\$m): 7.4
Variance %	1.8	0.9	Total Variance (%): 2.7

2P In year Budget/Expenditure Variance

2.2B In-year Budge	et/Expenditure v	ariance		
Estimate Final Plan \$m	Actual \$m	Variance \$m	Variance Factor	Explanation
			Australian Industry	Variance is primarily due to the reprogramming of training development,
			Foreign Industry	spares provisioning and other materiel
			Early Processes	procurement activities until later financial years. This reprogramming is in part a result
		(10.0)	Defence Processes	of Navy's direction for commercial crew delivery of the AOR Ships to Australia.
			Foreign Government Negotiations/Payments	
			Cost Saving	
			Effort in Support of Operations	
			Additional Government Approvals	
277.0	267.0	(10.0)	Total Variance	
		(3.6)	% Variance	

2.3 Details of Project Major Contracts

	0: 1	Prid	ce at	T (D)		
Contractor	Signature Date	Signature \$m	30 Jun 18 \$m	Type (Price Basis)		
Navantia S.A.	May 16	646.8	652.1	Fixed with indices escalation	ASDEFCON	1, 2, 3
Raytheon Australia	Nov 16	45.8	45.9	Fixed	ASDEFCON	3, 4

## Notes

- This relates to the acquisition contract with Navantia only. The responsibility for the scope and funding of support contract is under the AOR Systems Program Office (AORSPO).
- The increase in the acquisition contract price with Navantia, partly offset by foreign exchange fluctuations, predominately relates to agreed CCPs for the delivery of the Identification Friend or Foe (IFF) Capability solution for each AOR Ship, and the supply of 4,501 tonnes of Australian steel for use in the construction of the second AOR Ship, Stalwart.
- Contract value as at 30 June 2018 is based on actual expenditure to 30 June 2018 and remaining commitment at current exchange rates, and includes adjustments for indexation (where applicable).

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Contractor	Quan	tities as at	Scope	Notes	
Contractor	Signature	30 Jun 18	_ Goope	140103	
Navantia S.A.	2	2	AOR Ships Mission and Support Systems.		
Raytheon 2 2 Australia		2	Phalanx Block 1B Baseline 2 Close-In Weapon System (CIWS) and ancillary equipment.	1	
Major equipment received and quantities to 30 Jun 18					
Nil.					

## Section 3 – Schedule Performance

Review	Major System/Platform Variant	Original Planned	Current Planned	Achieved/Forecast	Variance (Months)	Notes
System Requirement	Mission System	May 16	N/A	May 16	0	1
requirement	Support System	Jul 16	N/A	Jul 16	0	
Preliminary Design	Mission System and Support System	Dec 16	N/A	Dec 16	0	
Critical Design	Mission System and Support System	Jun 17	N/A	Jun 17	0	2

#### Notes

- The key objectives of the System Requirements Review (SRR) and System Definition Review (SDR) for the Mission System, primarily establishing and validating the functional baseline contained in the contracted MSS, were achieved prior to the acquisition contract Effective Date (ED) as part of the First Pass RRDS contract and subsequent Request for Tender (RFT) Offer Definition and Improvement Activity (ODIA).
- Production on the AOR Ships commenced following CDR, with cutting steel occurring on 19 June 2017.

Test and	Major System/Platform Variant	Original	Current	Achieved/	Variance	Notes
Evaluation	major Systems and market	Planned	Planned	Forecast	(Months)	
System Integration	AOR Ship 1	Aug 19	N/A	Sep 19	1	1, 2
integration	AOR Ship 2	May 20	N/A	Jun 20	1	1, 2
Acceptance	AOR Ship 1	Sep 19	N/A	Oct 19	1	
	AOR Ship 2	Jun 20	N/A	Jun 20	0	

- System integration planned and forecast dates, including the installation, set-to-work, and testing of all systems on-board the AOR Ships by Navantia, are based on the completion of the Sea Acceptance Trials (SATs) for each AOR Ship.
- The integration of some systems such as the torpedo-self-defence (NIXIE), CIWS, Integrated Broadcast System (IBS), and remaining Information Communications Technology (ICT) Networks are required to take place in Australia after delivery of each AOR Ship from Spain.

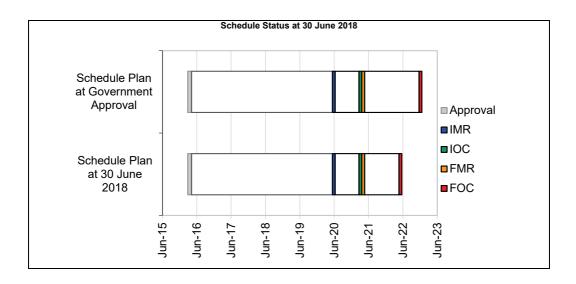
3.3 Progress Toward Materiel Release and Operational Capability Milestones

Item	Original Planned	Achieved/Forecast	Variance (Months)	Notes
Initial Materiel Release (IMR)	Q2 2020	Jun 20	0	
Initial Operational Capability (IOC)	Q1 2021	Mar 21	0	
Final Materiel Release (FMR)	Q1 2021	Mar 21	Ó	
Final Operational Capability (FOC)	2022	May 22	(7)	1

## Notes

Current early forecast achievement of FOC aligns with the latest SEA1654 Phase 3 Integrated Project Management Planning documentation

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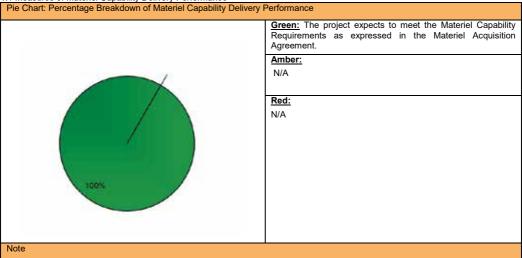


## Note

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



4.2 Constitution of Initial Materiel Release and Final Materiel Release

Item	Explanation	Achievement
Initial Materiel Release (IMR)	AOR Ship 1 delivered ready for training, work-up and Operational Test and Evaluation (OT&E).	Not yet achieved.
	Those CASG Fundamental Inputs to Capability (FIC) elements including transition into sustainment as defined by the AOR Support System sufficient to support OT&E.	
	IMR is currently scheduled to be achieved in June 2020.	

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

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the scope of the review.

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Final Materiel Release (FMR)	AOR Ship 1 and AOR Ship 2 complete in accordance with the Government Approved scope.	Not yet achieved.
	FMR is currently scheduled to be achieved in March 2021.	

# Section 5 – Major Risks and Issues

5.1 Major Project Risks	5.1
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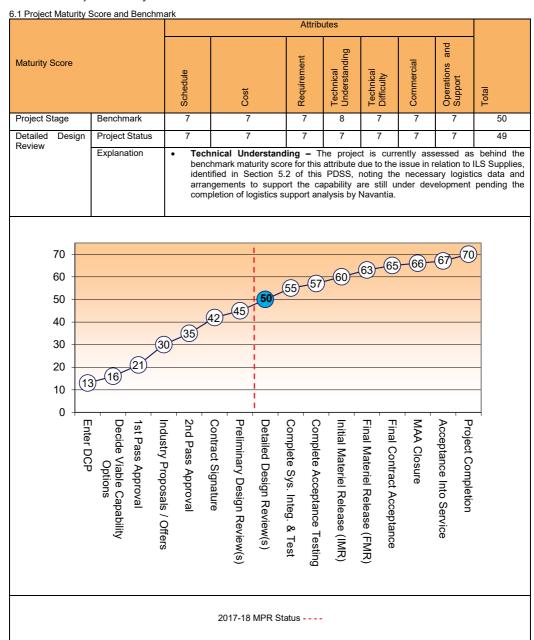
5.1 Major Project Risks				
Identified Risks (risk identified by standard project risk management processes)				
Description	Remedial Action			
There is a chance that the SEA1654 Phase 3 Project may not meet Navy's forecast date for introduction into service for the first AOR Ship, Supply, as a result of the current delays and deficiencies associated with the LSA program and related ILS deliverables.	The SEA1654 Phase 3 Project has agreed LSA corrective actions with Navantia for current omissions and defects of ILS deliverables to ensure fitness for purpose in time for IOR of Ship 1, <i>Supply</i> .			
	Navy direction for the commercial crew delivery of the AOR Ships from Spain to Australia will likely reduce the risk to schedule for introduction into service due to the resultant shift in scheduled training and in service support activities.			
There is a chance that ineffective management of subcontractor performance may result in poor quality product, delays or requirements that do not meet fitness for purpose.	Active management by the SEA 1654 Phase 3 Project, through close collaboration and interface working groups with Navantia, its subcontractors, CASG and Navy representatives, to ensure the system requirements are understood. Regular Interface working Group.			
	CASG senior management engagement as required to ensure the performance of subcontractors to meet the fitness for purpose of the AOR Ships.			
There is a chance that Materiel Seaworthiness Assurance planning does not align with the SEA1654 Phase 3 Project contracted acquisition scope.	Continuing close liaison with RAN stakeholders in development of Materiel Seaworthiness Assurance Plan (MSAP) seeks to provide early identification of any misalignment to the SEA 1654 Phase 3 Project's acquisition strategy and contracted scope of Supplies to enable the development and implementation of appropriate mitigation activities.			
Emergent Risks (risk not previously identified but has emerged during 2017-18)				
Description	Remedial Action			
N/A	N/A			

# 5.2 Major Project Issues

5.2 Major Project Issues				
Description	Remedial Action			
Delays and deficiencies associated with a range of Integrated Logistic Support (ILS) Supplies, incorporating the necessary Technical Data (TD) furnished from subcontracted vendors, is impacting the delivery of the acquisition Support System, contractor Transition/Phase-In activities, and achievement of the OD of the Support Contract.	The SEA1654 Phase 3 Project has agreed LSA corrective actions with Navantia prior to submission of future ILS deliverables for Commonwealth review. This mitigation includes the implementation of a number of steps including improved quality processes and engagement of experienced local Australian industry by Navantia.			
	This issue currently has no realised impact on the forecast schedule for the Materiel Release and Operational Capability Milestones of the AOR Ships.			
The RAN has directed that the Authorised Maintenance Organisation (AMO) and Authorised Engineering Organisation (AEO) responsibilities must be retained within the Commonwealth. Therefore Navantia are unable to undertake the full AMO/AEO scope contracted under the support contract.	The SEA1654 Phase 3 Project is working with the RAN to understand the requirement for the AORSPO AMO/AEO accreditation. This will identify the implications to the allocated resources for the AORSPO as well as inform the development and negotiation of a CCP to the support contract to remove AMO/AEO responsibilities from the scope and contract price.			
Note				
Major risks and issues in Section 5 are excluded from the scope of the review.				

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# Section 6 - Project Maturity



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# Section 7 - Lessons Learned

7.1 Key Lessons Learned

Project Lesson	Categories of Systemic Lessons
N/A	N/A

# Section 8 - Project Line Management

8.1 Project Line Management in 2017–18

6.1 Project Line Management in 2017–16		
Position	Name	
Division Head	Mr Patrick Fitzpatrick (Acting to Aug 17)	
	RADM Anthony Dalton (Aug 17 - current)	
Branch Head	Mr Peter Croser	
Project Director/Manager	Mr Gary McFarlane (to Sep 2017)	
	Mr Graham Dean (Acting Sep 17 – May 18)	
	Mr Chris Horner (May 2018 – current)	