# LHD Ships

# **Project Data Summary Sheet** 128

Project Number	JP 2048 Phase 4A/4B
Project Name	AMPHIBIOUS SHIPS (LHD)
First Year Reported in	2008-09
the MPR	
Capability Type	New
Acquisition Type	Australianised MOTS
Capability Manager	Chief of Navy
Government 1st Pass	Aug 05
Approval	
Government 2 <sup>nd</sup> Pass	Jun 07
Approval	
Budget at 2 <sup>nd</sup> Pass	\$2,958.3m
Approval	
Total Approved	\$3,091. <mark>7</mark> m
Budget (Current)	
2017-18 Budget	\$38.3m
Project Stage	Initial Materiel Release
Complexity	ACAT I



# Section 1 - Project Summary

## 1.1 Project Description

Joint Project (JP) 2048 Phase 4A/4B is providing the Australian Defence Force (ADF) with an increased amphibious deployment and sustainment capability through the acquisition of two Landing Helicopter Dock (LHD) ships and associated supplies and support.

Together, these 27,000 tonne LHDs will be able to land a force of over 2,000 personnel by helicopter and watercraft, along with all their weapons, ammunition, vehicles and stores.

## 1.2 Current Status

#### Cost Performance

## In-year

In-year expenditure of \$23.2m represents an underspend of \$15.1m. This is primarily due to the delay in Survey and Quote work for the inventory and critical spares and docking costs that were planned but not realised by the Project.

#### Project Financial Assurance Statement

As at 30 June 2018, JP 2048 Phase 4A/4B 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

Technical issues have impacted the Prime Contract Final Acceptance milestone. Resolution of those technical issues will influence a revised Final Acceptance date and impact Final Materiel Release (FMR).

There have been no major project milestones achieved in 2017-18.

The technical issues have also impacted the availability of the LHDs to progress operational test and evaluation activities. A plan to achieve FOC is being redeveloped with the completion of operational test and evaluation activities to be rescheduled across the ADF in balance with existing operational and training commitments. The project anticipates achievement of Final Operational Capability (FOC) in December 2019 (37 months behind schedule).

## **Materiel Capability Delivery Performance**

The amphibious capability sought through the provision of two LHDs is as follows:

## 128 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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- Carriage, in addition to the crew, of approximately 1,200 personnel in the force ashore with a further 800 personnel providing helicopter operations, logistics, command and intelligence as well as other supporting units;
- Space and deck strength sufficient to carry around 100 armoured vehicles, including tanks, and 200 other vehicles (approximately 2,400 lane metres);
- Hangar space for at least 12 helicopters and an equal number of landing spots to allow a company group to be simultaneously landed:
- 45 days endurance for crew and embarked force including sustainment, medical, rotary wing and operational maintenance and repair support to these forces whilst ashore for 10 days;
- . Command and control of the land, sea and air elements of a Joint Task Force; and
- . The ability to conduct simultaneous helicopter and watercraft operations in conditions up to Sea State 4.

Production set to work and test activities, although delayed due to a combination of low electrical trade productivity, timeliness of documentation and complexity involved in the integration of the platform and combat system solutions, supported the achievement of project capability outcomes with later than planned acceptance dates for both LHD 01 and LHD 02.

Rectification of defects and closure of outstanding functional requirements is being progressed and delivery of all materiel capability is expected to be achieved.

#### Note

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

#### 1.3 Project Context

#### Background

The Defence Capability Plan 2004–14 identified a requirement to replace the Heavy Landing Ship HMAS *Tobruk* (JP 2048 Phase 4A) and one Amphibious Landing Ship, either HMAS *Manoora* or *Kanimbla* (JP 2048 Phase 4B). In the Defence Capability Plan 2006–16, Phases 4A and 4B of JP 2048 were amalgamated.

A Request For Information was undertaken to gather vessel capability and industry capacity information from international and Australian ship designers and shipbuilders. A Risk Reduction and Design Study and a preliminary Request for Quotation were also undertaken to provide commercial, technical, financial and schedule information for First Pass.

First Pass approval was obtained in August 2005 with the identification of two existing LHD designs that could meet the capability requirements (Armaris' Mistral and Navantia's LHD 'Juan Carlos') and the identification of potential Australian shipbuilders.

After First Pass, a Design Development Activity was conducted at the designers' respective premises to clarify the necessary Australian environmental and technical requirements, resulting in Australianised designs.

During this process, two shipbuilder/designer teams were formed with Tenix Defence working with Navantia and Thales Australia

A Request for Tender was released in April 2006 to the shipbuilders for the construction of the Australianised designs. Both builders submitted compliant tenders which were evaluated, and Second Pass Approval for the Tenix-Navantia solution was obtained in June 2007.

A contract was signed in October 2007 between the Commonwealth and Tenix Defence (now BAE Systems Australia Defence), for the acquisition of the two Spanish designed *Canberra* Class LHD ships and support systems; the contract came into effect in November 2007.

Navy accepted HMAS Canberra (LHD 01) on 25 November 2014 and HMAS Adelaide (LHD 02) on 2 December 2015.

#### Uniqueness

The LHDs are based on an existing Spanish LHD design and incorporate the Australian Navy Combat System provided by SAAB. The internal and external communication systems have also been altered to align with Australian Navy standards which results in a unique vessel.

Despite the experience gained in amphibious operations with the current amphibious ships in the Royal Australian Navy (RAN), the LHDs will bring a new and unique capability to the ADF by virtue of their size, aviation, well dock, and communications capabilities.

A unique build strategy has been employed. The LHD hulls were built, including the majority of the fit-out, by Navantia at the Ferrol and Fene Shipyards in Spain. They were transported to Australia as individual lifts on a 'float on/float off' heavy lift ship, the Blue Marlin. Construction of the superstructure and its consolidation with the hull was conducted by BAE Systems Australia Defence (BAE Systems) at their Williamstown (Victoria) Shipyard in Australia. The superstructure contains the high level Combat and Communications Systems equipment that will be maintained and upgraded in Australia. BAE Systems also undertook the final outfit, set-to-work, and trials.

#### Major Risks and Issues

As the project moves towards closure, there has been a reduction in the strategic risk profile but an increase in issues such as inservice performance, ship availability, and close out of outstanding verification/assurance and warranty/latent defects. This has influenced Prime Contractor Final Acceptance leading to an impact on achievement of Final Materiel Release (FMR) and resulting in the emergence of risk surrounding the Prime Contractor retaining sufficient qualified and experienced staff. System performance of the propulsion pods had a significant impact upon the availability of both ships in 2017 requiring the docking of both HMAS Adelaide and HMAS Canberra. The project transferred to the Maritime Systems Division (MSD) effective 1 July 2017. A Transition and Remediation Program (TARP) has been established to complete the outstanding acquisition scope in conjunction with the remediation of propulsion pod system performance and a number of other systems of concern. Furthermore the TARP is addressing risk surrounding Logistics Supportability under the scope of ILS Remediation.

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Many existing risks were retired upon delivery of LHD 02 with the associated integrated logistics support products. Such risks included the identification and treatment of technical issues, major ship system or equipment failure, indices escalation, supplies, severe weather conditions during sea trials, non-acceptance of the LHD Safety Case, scope creep, Legislative/Regulatory changes and any non-supply of Government Furnished Equipment or Services. The remaining risks, issues, and certification and acceptance tasks continue to be resolved by the project office in conjunction with the prime contractor, Navy and other relevant Defence areas. The risk regarding the availability of suitably qualified project office personnel was realised after the project transferred to MSD and is now being managed as an issue.

## Other Current Sub-Projects

JP 2048 Phase 3: Watercraft system acquisition used in conjunction with the JP 2048 Phase 4A/4B Amphibious Ships (LHD) Mission System. This watercraft is the ship to shore connector for the LHDs.

#### 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					
Nov 03	Original Approved	3.1	1			
Sep 04	Real Variation – Scope	4.8	2			
Aug 05	Real Variation – Scope	29.6	3			
Jun 07	Government Second Pass Approval	2,920.8				
	Total at Second Pass Approval	2,958.3	4			
Oct 08	Real Variation – Transfer	9.3				
Jul 10	Price Indexation	428.4	5			
Jun 18	Exchange Variation	(304.3)				
Jun 18	Total Budget	3,091.7				
	Project Expenditure					
Prior to Jul 17	Contract Expenditure – BAE Systems	(2,671.9)				
	Other Contract Payments / Internal Expenses	(119.0)	6			
		(2,790.9)				
FY to Jun 18	Contract Expenditure – BAE Systems	(0.2)				
	Other Contract Payments / Internal Expenses	(23.0)	7			
		(23.2)				
Jun 18	Total Expenditure	(2,814.1)				
Jun 18	Remaining Budget	277.6				
Notes						
1	This project's original budget amount is that prior to achieving Seco	ond Pass Government approval.				
2	To fund a risk reduction activity for the Project to obtain design data	and develop designs to meet Aust	ralian essential			
	requirements.					
3	First Pass Approval.					
4	Transfer of funding for technical studies from the then Defence Scie	nce and Technology Organisation	n (now Defence			
	Science and Technology Group).					
5 Up until July 2010, indexation was applied to project budgets on a periodic basis. The cumulative impact of thi						
approach was \$350.0m. In addition to this amount, the impact on the project budget as a result of out-turning was						
further \$78.4m having been applied to the remaining life of the project.						
Other expenditure comprises: Operating Expenditure, Offer Definition, Consultants, Foreign Military Sales,						
Contractor Support, Project Management costs, Integrated Logistics Support, and Other Minor Capital expenditure not attributable to the Prime contract and not included in the main contracted labour support areas.						
	'	<u>'</u>				
7	Other expenditure comprises: Integrated Logistics Support s Support Measures (\$5.4m), Shore Power design and install					
	(\$4.1m).	the first project man	3			

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2.2A In-year Budget Estimate Variance

Estimate PBS \$m	Estimate PAES \$m	Estimate Final Plan \$m	Explanation of Material Movements
48.8	43.8	38.3	PBS-PAES: The acquisition of the project is not as forecast in the Defence PBS 2017-18. Testing and acceptance of the capability has been rescheduled. As a result, expenditure has been revised from \$49m down to \$44m.  PAES-Final Plan: The variation is primarily due to delays in the survey and quote contract for the inventory and critical spares and docking costs that were planned but not realised by the project.
Variance \$m	(5.0)	(5.5)	Total Variance (\$m): (10.5)
Variance %	(10.2)	(12.6)	Total Variance (%): (21.5)

2.2B In-year Budget/Expenditure Variance

Estimate	Actual	Variance	Variance Factor	Explanation
Final Plan \$m	\$m	\$m		
		(15.1)	Australian Industry	Year to date underspend of \$15.1m
			Foreign Industry	is due to delays in the Survey and
			Early Processes	Quote work for the inventory and
			Defence Processes	critical spares and docking costs
			Foreign Government	that were planned but not realised
			Negotiations/Payments	by the Project.
			Cost Saving	
			Effort in Support of Operations	
			Additional Government Approvals	
38.3	23.2	(15.1)	Total Variance	
		(39.4)	% Variance	

2.3 Details of Project Major Contracts

	Signature		Price at			Form of Contract /			
Contra	actor	Date	Signa \$n		30 Ju \$i		Type (Price Basis)	Arrangement	Notes
BAE S	Systems	Oct 07	2,26	8.1	2,68	32.0	Variable	ASDEFCON	1, 2
Notes									
1	1 Contract Price at Revision 124. Amendments to Contract since signature include execution of contracted options for Training and Spares.					otions for			
2	2 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).						at current		
Contra	actor		Quantities	as at			Scope		Notes
		Signature 30 Jun 18							
BAE S	Systems	2		:	2	LHD ships and integrated support systems.		ystems.	
Major	equipment re	eceived and qua	antities to	30 Jun 1	8				

# Section 3 - Schedule Performance

LHD 01 and LHD 02 Delivery and Acceptance achieved.

3.1 Design Review Progress

Review	Major System / Platform Variant	Original Planned	Current Planned	Achieved /Forecast	Variance (Months)	Notes
System Requirements	Mission System (Includes Platform / Combat Systems)	Feb 08	Feb 08	Feb 08	0	
	Support System	Apr 08	Apr 08	Apr 08	0	
Preliminary	Communication	Oct 08	Oct 08	Dec 08	2	1
Design	Navigation	Oct 08	Oct 08	Dec 08	2	1
	Platform System	Nov 08	Nov 08	Nov 08	0	
	Combat System	Dec 08	Apr 09	Apr 09	4	1
	Whole of Ship	Jan 09	May 09	May 09	4	1
	Support system	Mar 09	May 09	May 09	2	1
Detailed Design	Communication	May 09	Sep 09	Sep 09	4	1
	Navigation	Jun 09	Jun 09	Jun 09	0	
	Platform system	Jun 09	Jun 09	Jun 09	0	
	Combat system	Jul 09	Oct 09	Oct 09	3	1

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	Whole of ship	Jul 09	Dec 09	Dec 09	5	1
	Support system	Aug 09	Dec 09	Dec 09	4	1
Notes	•					

1 Due to the complexity of the design and integration of the combat, communications and platform systems, more time was allocated to the design review activities.

The Heavy Lift Ship Company, Dockwise, delivered the LHD 01 hull to BAE Systems in Australia on 28 October 2012 (66 days later than planned). LHD 02 departed Spain on the Heavy Lift Ship, Blue Marlin, in December 2013 and arrived in Australia in February 2014 on schedule.

#### 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	LHD Ships 1 and 2	Mar 15	Mar 15	Oct 15	7	1
Acceptance	LHD Ship 1 Project Acceptance	Jan 14	Feb 14	Oct 14	9	2
	LHD Ship 2 Project Acceptance	Aug 15	Aug 15	Oct 15	2	3
	LHD Final Acceptance	Sep 15	Nov 16	Mar 19	42	4

#### Notes

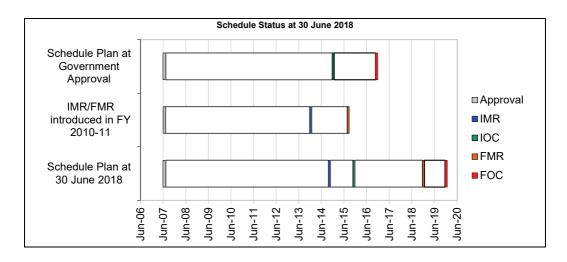
- 1 System Integration relates to the whole capability, commencing with LHD 01 and completion at LHD 02. LHD 01 production and test activities delays impacted System Integration and set to work activities.
- Project Acceptance for LHD 01 occurred later than planned. The delay was a direct result of a combination of low productivity in the set to work of electrical systems, timeliness of documentation and complexity involved in the integration of the platform and combat system solutions.
- A combination of lower than anticipated production and testing performance, timeliness of documentation and complexity involved in the integration of the platform and combat system solutions, delayed the planned Sea Acceptance Trials for LHD 02, with an associated follow-on impact of delayed delivery and acceptance of LHD 02.
- 4 Whilst the delay in LHD Ship 2 Project Acceptance initially affected Final Acceptance, technical issues and a rising number of defects have impacted closure of Contract requirements and obligations. The Final Acceptance milestone is dependent upon rectification of defect issues and completion of Acceptance testing.

3.3 Progress toward Materiel Release and Operational Capability Milestones

Item	Original Planned	Achieved /Forecast	Variance (Months)	Notes
Initial Materiel Release (IMR) (LHD 01)	Jan 14	Oct 14	9	1
Initial Operational Capability (IOC) (LHD 01)	Dec 14	Nov 15	11	2, 3
Materiel Release 2 (MR2) (LHD 02)	Aug 15	Oct 15	2	4
Final Materiel Release (FMR)	Aug 15	Dec 18	40	5
Final Operational Capability (FOC) (LHD 02)	Nov 16	Dec 19	37	6

#### Notes

- 1 LHD 01 production delays impacted System Integration and set to work activities resulting in the delay to achievement of IMR
- The change is a direct result of a combination of low productivity in the set to work of electrical systems, timeliness of documentation and complexity involved in the integration of the platform and combat system solutions. IOC is a Capability Manager responsible milestone which is constituted by an operational capability level delivered through a range of Defence assets. LHD 01 and the associated Integrated Logistic Support products contribute to the achievement of IOC.
- This variance is as a result of late delivery of LHD 01 and the programmed workup of operational capability level during the year by the Defence Forces. This delay is not related directly to LHD 02 delivery or dependent on FMR.
- The variance is related directly to a combination of lower than anticipated production and testing performance, timeliness of documentation and complexity involved in the integration of the platform and combat system solutions, and delayed LHD 02 delivery to the project.
- Technical issues and a rising number of defects have impacted testing and closure of Contract requirements and obligations. The Final Acceptance milestone is dependent upon rectification of defect issues and may continue to impact Final Materiel Release (FMR). The FMR date is under review to incorporate remediation activity and expected to be clarified with the approval of a revised Materiel Acquisition Agreement in late 2018.
- The technical issues which arose throughout 2017 hindered the availability of both LHD ships and prevented the planned FOC operational scenarios from being exercised and assessed. The Operational Test and Evaluation activities planned in 2018 and 2019 are being rescheduled across Defence in balance with a range of operational and training commitments already planned. This planning is significant and ongoing.

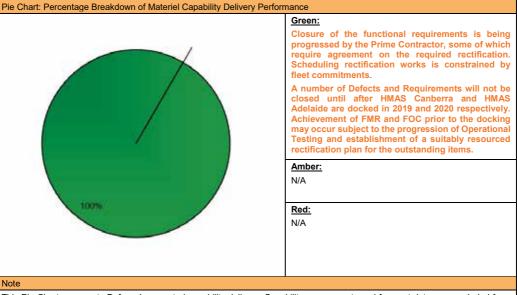


Note

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)	<ul> <li>LHD 01 delivered ready for Operational Test and Evaluation.</li> </ul>	Achieved
	<ul> <li>Capability Acquisition and Sustainment Group (CASG) Elements of Fundamental Input to Capability Support System, including Technical Documentation, Spares Support and Training Support (CASG portion).</li> </ul>	
Final Materiel Release (FMR)	Completed delivery of LHD 02 and all remaining Acquisition Project Support Deliverables.	Not yet achieved

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FMR is expected to be achieved in December 2018.	
	1

# Section 5 – Major Risks and Issues

#### 5.1 Major Project Risks

5.1 Major Project Risks	
Identified Risks (risk identified by standard project risk manager	ment processes)
Description	Remedial Action
There is a chance that the delivery and support of two LHDs will be affected by spares and equipment that are not appropriate for RAN usage profiles leading to an impact upon sustainability and cost.	This risk was realised and is now disclosed as an issue in Section 5.2
There is a chance that in-service use of the Ships during the NOTE period will identify system performance shortfalls in key systems leading to an impact on schedule and cost.	This risk is realised and is now disclosed as an issue in Section 5.2.
There is a chance that defect rectification and testing won't be completed by Final Acceptance due to insufficient access to LHD's leading to an impact on schedule and cost.	This risk is realised and is now disclosed as an issue in Section 5.2.
There is a chance that the corporate knowledge of the CoA project team will be affected by the transfer from Specialist Ships Acquisition Branch to Major Surface Ships Branch leading to an impact upon schedule and cost.	This risk was realised and is now disclosed as an issue in Section 5.2
Emergent Risks (risk not previously identified but has emerged	during 2017-18)
Description	Remedial Action
There is a chance that the Prime Contractor will not be able to retain sufficient qualified and experienced staff leading to an impact on schedule.	Collaborative contract management and regular engagement to ensure Prime Contractor and Commonwealth adherence to contractual obligations     Dedicated resource to support the coordination and
	prioritisation of defects/testing with repair and maintenance activities during each availability

# 5.2 Major Project Issues

Description	Remedial Action
Initial acceptance of the LHDs occurred prior to the achievement of all applicable contractual and FPS requirements this has affected the ability to complete the outstanding requirements leading to an impact on schedule and cost.	<ul> <li>Prompt sign off of contract requirements.</li> <li>Monitor burn down rate of remaining contract requirements.</li> <li>Provision of expert review at earlier acceptance testing.</li> <li>Progressive acceptance review of stage category test results.</li> </ul>
The review of contract deliverables, witnessing of tests and defect rectification which has been affected by the limited number of sufficiently skilled CoA project personnel leading to an impact on schedule and cost.	Engaging External Service Providers (Contractors).     Utilise personnel from CASG maritime matrix organisation and available personnel from the SPO.     An enduring Project Management and Transition capability has been established within Major Surface Ships Branch.
The forecast FMR date has been affected by the volume of outstanding technical issues.	The project is working with the Prime Contractor to accept and close out Warranty, Latent Defect claims, Defects and outstanding technical requirements.  Key personnel identified to ensure internal/external stakeholders are made available to develop, review and provide internal signatures for outstanding waivers/deviations.  Key personnel identified with authority to agree to actions that will enable the resolution of outstanding requirements.
Final Acceptance (FA) of the acquisition contract has been affected by the volume of outstanding technical issues.	This Issue has been closed. The FWT CCP was rejected by the CoA and current Contract requirements still remain. TARP was stood up and FA delayed.

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Description	Remedial Action		
In-service use of the Ships during the NOTE period has identified system performance shortfalls in key systems leading to an impact on schedule and cost.			
	Project was transferred to the Maritime Systems Division and integrated with TARP effective 1 July 2017, to ensure all acquisition and sustainment activities are effectively coordinated.		
Project Closure was not achieved in December 2016 as forecast due to a delay in Final Operating Capability (FOC)	Ensure resources continue to be assigned to tracking and closure of functional requirements.		
which has led to an impact on schedule.	Ensure resources continue to be assigned to tracking and closure of defects and deficiencies.		
	Review remediation activity, Operational Testing and Evaluation schedule and update MAA by end of 2018.		
The delivery and support of two LHDs will be affected by spares and equipment that are not appropriate for RAN usage profiles leading to an impact upon sustainability and cost.	Project has engaged External Service Providers to review & make recommendations on the Logistics Supportability Analysis Record and this work is ongoing as part of the TARP ILS Remediation.		
	ILS Remediation is reviewing maintenance baseline and associated spares recommendations using current RAN Operating Profiles.		
	Project to continue to review all engineering changes to ensure spares have been correctly identified.		

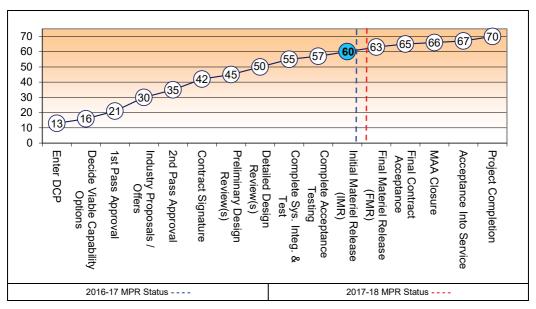
# Note

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

0.11 Toject Maturity 30	Attributes								
Maturity	/ Score	Schedule	Cost	Requirement	Technical Understanding	Technical Difficulty	Commercial	Operations and Support	Total
Project Stage	Benchmark	10	8	8	8	9	8	9	60
Initial Materiel	Project Status	8	9	9	9	9	8	10	62
Release	Explanation	Schedule: BAE Systems delivered LHD 01 and LHD 02 late.     Cost: The Project is on track to achieve outcomes within the allocated budget.     Requirement: Integration and testing processes have verified achievement of endorsed requirements.     Technical Understanding: Knowledge necessary to operate and support the capability has been transferred to Sustainment.     Operations and Support: The Mission and Support Systems are now fully operational.				of e			



## Section 7 - Lessons Learned

## 7.1 Key Lessons Learned

Project Lesson	Categories of Systemic Lessons
Independent Assurance Reviews and Project Stakeholder Group meetings enable adjustment of project strategies and stakeholder input to balance schedule decisions against impacts to cost, schedule, performance, quality and stakeholder expectations. For example, cost, performance and supportability may be impacted by early acceptance of the supplies to meet schedule demands.	Contract Management
Prior to committing to the acquisition contract, use best endeavours to obtain high fidelity sustainment data and assess it against suitability (fitness for purpose). Senior engineering and logistic reviews are required prior to the delivery of the sustainment products to minimise sustainment risks.	Contract Management
When introducing new major capabilities into service, both operational tasks and maintenance tasks should be modelled and analysed in detail, before the training obligations under the acquisition contract are agreed.	First of Type Equipment

# Section 8 - Project Line Management

## 8.1 Project Line Management in 2017-18

Position	Name
Division Head	RADM Adam Grunsell
Branch Head	CDRE Steven Tiffen (Jul 17 – Jun 18) CDRE Robert Elliott (Jun 18 – current)
Project Director	Mr Terrence Stamp
Project Manager	Ms Donna Tobias (Jul – Nov 2017) Vacant (Nov 17 – Mar 18) Mr Thomas Egan (Mar 18 – current)

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