Project Data Summary Sheet[162]

Project Number	**SEA 1442 Phase 4**
Project Name	**MARITIME COMMUNICATIONS MODERNISATION**
First Year Reported in the MPR	2014-15
Capability Type	Upgrade
Acquisition Type	Australianised MOTS
Capability Manager	Chief of Navy
Government 1st Pass Approval	Dec 10
Government 2nd Pass Approval	Jul 13
Budget at 2nd Pass Approval	$385.6m
Total Approved Budget (Current)	$440.0m
2018–19 Budget	$21.8m
Project Stage	Detailed Design Review
Complexity	ACAT II

Section 1 – Project Summary

1.1 Project Description

SEA 1442 Phase 4 will upgrade the communications capability in the eight Anzac Class Frigates and address communications system obsolescence in the Class, by modernising it with improved communications management, secure voice and tactical intercom, red/black switching, tactical radios and a high data rate line-of-sight capability. The project will also deliver support systems, a secondary Maritime Tactical Wide Area Network (MTWAN) Shore Gateway and upgrade the Anzac Combat System Trainer Communications Terminals.

1.2 Current Status

Cost Performance

In-year

This year the project has spent $8.7m **to 30 June 2019** of a budget of $21.8m. The $13.1m underspend is due to **delays in first ship installation which has resulted in lower than anticipated dockyard costs. Other delays have been incurred in activities relating to completion of ship installation including the training rig, delays in expenditure against the contract change proposal for spares and a change in required delivery times for spares, delay in completing work on power distribution panel and ship's books updates.**

Project Financial Assurance Statement

As at **30 June 2019**, project SEA 1442 Phase 4 has reviewed the approved scope and budget for those elements required to be delivered by the project. Having reviewed the current financial and contractual obligations of the project, current known risks and estimated future expenditure, Defence considers, as at the reporting date, there is sufficient budget remaining for the project to complete against the agreed scope.

Contingency Statement

The project has not applied contingency in the financial year.

Schedule Performance

Key milestones achieved so far include: MTWAN Secondary Shore Gateway; Prime Contract Integrated Baseline Review (IBR), System Definition Review (SDR), Preliminary Design Review (PDR), New Generation Maritime Communications System (NewGen MCS) Detailed Design Review (DDR), Support System Detailed Design Review (SSDDR), Anzac First of Class Installation Detailed Design Review (IDDR). DDR was delayed by 4 months due to delay in completion of design activities by the contractor which resulted in liquidated damages being invoked during the 2016/2017 Financial Year and accepted by the Commonwealth in the form of additional goods and services provided by the contractor.

The SEA 1442 Phase 4 delivery and installation schedule has been aligned to the Anzac Midlife Capability Assurance Program (AMCAP) scheduling and this alignment of programs has resulted in the SEA1442 Phase 4 Initial Materiel Release (IMR) moving from August to December 2019 and Final Operating Capability (FOC) moving from December 23 to **January 25** with no impact to Navy ship availability.

162 Notice to reader

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

Materiel Capability Delivery Performance

The MTWAN Secondary Shore Gateway has been delivered and is operational. The first Anzac ship capability with associated support systems is scheduled for delivery in December 2019.

Note

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

1.3 Project Context

Background

SEA 1442 (Maritime Communications Modernisation) is a multi-phased program that will modernise the Royal Australian Navy's (RAN) communications infrastructure. The preceding phase (Phase 3) delivered an initial MTWAN and Message Handling System to the RAN's Major Fleet Units.

SEA 1442 Phase 4 will address critical obsolescence problems affecting the communication systems in the RAN Anzac Class frigates. The modernised communications system (NewGen MCS) will be highly integrated and automated to deliver more agile and faster communication and reduce operator intervention. The project scope includes upgrade of various communications systems in the eight Anzac frigates, establishment of a training system at HMAS *Stirling* and a shore integration and test capability at the prime contractor's facility for in-service support, delivery of a secondary MTWAN shore gateway, and upgrade of the Anzac Combat System Trainer Communications Terminals.

The majority of individual equipment and sub-systems is either Military Off The Shelf (MOTS) or Commercial Off The Shelf (COTS). Some development is required and involves functionality enhancements and Australianisation of the MOTS and COTS. The main complexity is in bringing the sub-systems together as a highly integrated and automated system and installation in the ships, cognisant of existing weapons, sensors, emitters, and specific platform requirements.

Government Second Pass approval was achieved in July 2013. Prime acquisition and 5-year support services contracts were awarded to Selex ES Ltd in November 2013 following an open tender process. Selex ES Ltd changed its name to Leonardo MW Ltd in September 2016.

Under the acquisition contract, Leonardo MW will: design, develop and install the NewGen MCS into the eight Anzac Class frigates; design, develop and install the support systems (including a training system and an integration and test capability); and develop and deliver integrated logistic support products. The support services contract will become operative following acceptance of the first Anzac frigate and the associated support systems.

The project is also managing the acquisition of ARC-210 Gen 5 V/UHF multi-band multi-mode software defined radios through FMS with the US Government. The radios form part of the NewGen MCS.

Uniqueness

An advanced feature of the system includes a unique radio frequency distribution system that will allow automated and efficient switching of the multitude of radios and antennae on each ship in order to establish the most effective communications path.

The high data rate line of sight system is a new capability and will be a step towards enabling the RAN to operate in a satellite denied environment and enable more efficient ship-to-ship communication.

Major Risks and Issues

The key risks for this project include: platform integration matters such as varying ship configurations, other concurrent activities on the ships during installation, and integration into the complex electromagnetic environment of the Anzac Class Frigates. Availability of sufficient resources, milestone delays due to under-estimating the time required to complete the work and the Communications Control & Management System (CCMS) not being delivered with full functionality and risks associated with training of the ships crews. Issues faced by the Project include the **preparedness for Navy training as well as delays to several acceptance milestones.**

Other Current Related Projects/Phases

N/A

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			
Dec 10	Original Approved	11.4		
Jul 13	Government Second Pass Approval	374.2		
	Total at Second Pass approval		385.6	
Dec 18	Exchange Variation		54.4	
Dec 18	**Total Budget**		440.0	
	Project Expenditure			
Prior to Jul 18	Contract Expenditure – Leonardo MW	(137.0)		1
	Contract Expenditure – US Government	(15.1)		1
	Other Contract Payments / Internal Expenses	(15.6)		2
			(167.7)	
FY to Jun 19	Contract Expenditure –Leonardo MW	(2.7)		1

	Other Contract Payments / Internal Expenses	(6.0)		1 3
			(8.7)	
Jun 19	**Total Expenditure**		(176.4)	
Jun 19	**Remaining Budget**		263.6	

Notes	
1	The scope of this contract is explained further in Section 2.3 – Details of Project Major Contracts.
2	Other expenditure comprises $5.9m for Pre-contract work with Leonardo MW, **$2.2m for technical and engineering support,** $2.1m for other pre Second Pass studies and work, $0.5m for Shore Gateway West, $0.3m for legal services, $0.2m for the Shore Integration Facility, $1.5m for Viasat modems, $0.3m for AVA-20 Antennas, $0.2m for WAMA support, $0.1m for the High Data Rate Line of Sight (HDRLOS) integration Study and $2.3m for other minor contract expenditure, project management costs and travel.
3	Other expenditure comprises **$2.5m for a Multicoupler, $1.5m for Operations Room upgrade, $1.4m for contractor support, $0.3m Power Distribution Panel replacement** and **$0.3m** for other minor contract expenditure, project management costs and travel.

2.2A In-year Budget Estimate Variance

Estimate PBS $m	Estimate PAES $m	Estimate Final Plan $m	Explanation of Material Movements
36.7	36.7	21.8	PBS to PAES **Nil variation** PAES to Final Plan – **delays in processing a Contract Change and the associated expenditure for acquisition of spares due to delays in ship 1 installation activates being completed.**
Variance $m	(0)	(14.9)	Total Variance ($m): (14.9)
Variance %	(0)	(40.6)	Total Variance (%): (40.6)

2.2B In-year Budget/Expenditure Variance

Estimate Final Plan $m	Actual $m	Variance $m	Variance Factor	Explanation
			Australian Industry	Underspend is due to **delays in first ship installation which has resulted in lower than anticipated dockyard costs. Other delays have been incurred in activities relating to completion of ship installation including the training rig, delays in expenditure against the contract change proposal for spares and a change in required delivery times for spares, delay in completing work on power distribution panel and ship's books updates.**
		(13.1)	Foreign Industry	
			Early Processes	
			Defence Processes	
			Foreign Government Negotiations/Payments	
			Cost Saving	
			Effort in Support of Operations	
			Additional Government Approvals	
21.8	8.7	(13.1)	Total Variance	
		(60.1)	% Variance	

2.3 Details of Project Major Contracts

Contractor	Signature Date	Price at		Type (Price Basis)	Form of Contract	Notes
		Signature $m	30 Jun 19 $m			
Leonardo MW	Nov 2013	187.7	245.1	Variable	ASDEFCON Strategic	1, 2, 3
US Government (AT-P-BSH)	Dec 2014	17.0	15.5	Firm	FMS	1, 3, 4

Notes	
1	Contract value is based on actual expenditure and remaining commitment based on the commitment report as well as the Australian dollar value for Contract Change Proposal **CCP-012 which was** executed as at **18 December 2018. CCP-012 incorporates the 'Not to Exceed' amount for the approved recommended spare parts list into the Acquisition Contract.**
2	In addition to Note 1 above, the **variation** in Leonardo MW contract price at 30 June 2019 is due to fluctuations in exchange rates.
3	The scope of this contract is explained further below.
4	**Change in FMS value is due to acceptance of Amendment number 1 to FMS case AT-P-BSH. Decrease in FMS value is due to lower unit prices and associated costs for technical assistance and administration fees.**

Contractor	Quantities as at		Scope	Notes
	Signature	30 Jun 19		
Leonardo MW	See scope	See scope	8 ship mission systems 1 training system 1 Shore Integration and Test facility 3 deployable High Data Rate line-of-sight systems	
US Government (AT-P-BSH)	131	140	ARC-210 Gen 5 radios, technical data, and technical support.	1

Major equipment received and quantities to 30 June 19	
1	**Additional radios ordered as spare parts.**
MTWAN Secondary Gateway has been accepted.	

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	NewGen MCS and Support System	Sep 14	N/A	Dec 14	3	1
Preliminary Design	NewGen MCS and Support System	May 15	Sep 15	Sep 15	4	2
Detailed Design	MTWAN Secondary Gateway	Sep 14	N/A	Jan 15	4	3
	NewGen MCS	Oct 16	N/A	Feb 17	4	4
	Support System	Apr 17	Jun 17	Sep 17	5	5
	First of Class Integration Detailed Design Review (IDDR)	May 17	N/A	Oct 17	5	6

Notes	
1	Delayed from originally planned due to slow ramp up/contractor performance.
2	Contract schedule re-baselined to reflect previous (SDR) milestone slippage and contractor's improved understanding of the work.
3	MTWAN System Requirements and Preliminary Design addressed prior to Second Pass Approval. In order to minimise risk to the operational network upon connection of the MTWAN Secondary Gateway, a demonstration of the design in the MTWAN shore integration facility was requested prior to design acceptance. This required additional time to complete.
4	The conduct of the Detailed Design Review (DDR) and its associated system demonstration occurred four months later than the contracted date which triggered liquidated damages.
5	The Contractor achieved the Support System DDR in September 2017 (five months later than the Contract Date due to delays resulting from the later than planned achievement of DDR).
6	The Contractor achieved the First of Class Integration Detailed Design Review (IDDR) in October 2017 (five months later than the Contract Date due to delays resulting from the later than planned achievement of DDR).

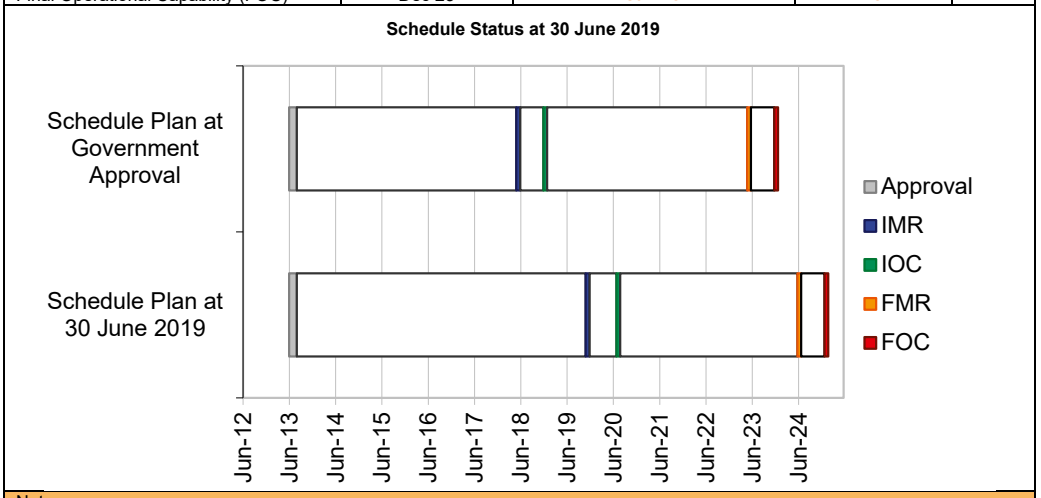
3.2 Contractor Test and Evaluation Progress

Test and Evaluation	Major System/Platform Variant	Original Planned	Current Planned	Achieved/Forecast	Variance (Months)	Notes
System Integration	NewGen MCS	Jun 18	Dec 19	**Oct 19**	**16**	1
Acceptance	MTWAN Secondary Gateway	Apr 15	N/A	Mar 15	(1)	
	Training System	Jun 17	Nov 18	**Sep 19**	**27**	2
	Shore Integration and Test Facility (SITF)	Dec 16	Mar 19	**Sep 19**	**33**	3
	Ship #1	Jun 18	Dec 19	**Oct 19**	**16**	1, 4
	Ship #2	Apr 19	Aug 20	**May 20**	**13**	4
	Ship #3	Nov 19	May 21	Feb 21	15	4
	Ship #4	Jun 20	Dec 21	Sep 21	15	4
	Ship #5	Feb 21	Oct 22	Jun 22	16	4
	Ship #6	Sep 21	Apr 23	Dec 22	15	4
	Ship #7	Apr 22	Dec 23	Oct 23	18	4
	Ship #8	Sep 22	Jun 24	Apr 24	19	4

Notes	
1	The Contract Master Schedule (CMS) dated **20 June 2019** indicated that the Ship #1 Acceptance Date would occur in **October** 2019 (**two** months earlier than the updated Contract Date). This revised forecast reflects the alignment of SEA1442 Phase 4 with the planned AMCAP dates as at **April 2019**.
2	**Contract Change Proposal (CCP-011) of 25 June 2018 included an adjustment of the schedule for this Milestone.** The CMS dated **20 June 2019** indicates **a September 2019 achievement date for this Milestone, being ten months later than the updated Contract Date**.
3	SITF acceptance date initially incorrectly positioned in the contract. The delay is due to the need to use the SITF during Ship # 1 test and acceptance period which was extended when SEA1442 Phase 4 was aligned to AMCAP. The CMS dated **20 June 2019** indicated a **September** 2019 achievement date for this Milestone, being **six** months later than the updated Contract Date.
4	Ship availability and schedule is driven by AMCAP. Whilst the availability dates for **Ships #1-#3** have been agreed, the availability dates for the remaining ships is subject to change. Forecast dates have been aligned with the AMCAP dates as at **April 2019**, which is seeking to deliver earlier than contracted. Leonardo MW to be advised 90 days prior to commencement of each ship installation period.

3.3 Progress Toward Materiel Release and Operational Capability Milestones

Item	Original Planned	Achieved/Forecast	Variance (Months)	Notes
Initial Materiel Release (IMR)	Jun 18	Dec 19	18	1
Initial Operational Capability (IOC)	Dec 18	**Jul 20**	**19**	**2**
Materiel Release 2 – Ship # 2	Apr 19	Aug 20	16	1
Materiel Release 3 – Ship # 3	Dec 19	May 21	17	1
Materiel Release 4 – Ship # 4	Aug 20	Dec 21	16	1
Materiel Release 5 – Ship # 5	Apr 21	Oct 22	18	1
Materiel Release 6 – Ship # 6	Dec 21	Apr 23	16	1
Materiel Release 7 – Ship # 7	Aug 22	Dec 23	16	1
Final Materiel Release (FMR)	May 23	Jun 24	13	1
Final Operational Capability (FOC)	Dec 23	**Jan 25**	**13**	**2**

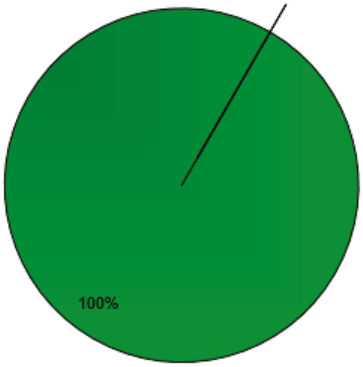


Notes	
1	See Section 3.2 Note 4 for detail.
2	**IOC and FOC have now been forecast 6 months later to allow for Navy conducted processes following completion of IMR and Final Ship Acceptance.**

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	
	**Green:** The Project expects to meet capability materiel requirements as per the Joint Project Directive, Materiel Acquisition Agreement and relevant Technical Regulatory Authority. **Amber:** N/A **Red:** N/A
Note	
This Pie Chart represents Defence's expected capability delivery. Capability assessments and forecast dates are excluded from the scope of the review.	

4.2 Constitution of Initial Material Release, Initial Operational Capability, Final Material Release and Final Operational Capability.

Item	Explanation	Achievement
Initial Materiel Release (IMR)	Ship 1 acceptance, training system, shore integration and test facility, ship 1 crew training, and support arrangements in place. IMR is expected to be achieved in December 19.	Not yet achieved.
Initial Operational Capability (IOC)	**ANZAC Class ship fitted with the new equipment and proven through testing to communicate with other platforms using voice, High Frequency Internet Protocol and High Data Rate Line of sight. IOC expected to be achieved in July 20.**	**Not yet achieved**
Final Materiel Release (FMR)	All 8 ships accepted and all support arrangements in place. FMR is expected to be achieved in June 24.	Not yet achieved.
Final Operational Capability (FOC)	**Operational Release and FMR have been met and endorsed by CN. FOC is expected to be achieved in January 25. FOC will occur when all 8 Ships have been Accepted and all Crew Training has been successfully completed, and the Support System elements are in place and running in accordance with respective Contract requirements.**	**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
Platform Integration – There is a chance that installation completion will be affected by **other AMCAP activities which are being conducted on the ship concurrently with each SEA 1442 installation.**	• Work collaboratively on the **Integrated Master Schedule (IMS) with the Contractor**, ANZAC System **Program** Office (SPO) and the AMCAP. • Continue to liaise closely with ANZAC SPO and the AMCAP through established working groups and regular meetings to monitor the progress of the installation. • **In consultation and collaboration with AMCAP, manage schedule throughout the installation to limit interruptions and avoid conflicts with other activities and re-plan if necessary.**
Platform Integration – There is a chance that installation will be affected by **unknown or late changes to ship configuration.**	• **Continue to** work collaboratively with the ANZAC SPO through established working groups and regular meetings to monitor changes to ship configuration. • In consultation and collaboration with AMCAP, ensure site surveys are conducted as late as possible prior to installation to verify ship configuration and modify installation design if necessary.
Platform Integration – There is a chance that system	• The Contractor has conducted an Electromagnetic

performance may be affected by integration into the complex electromagnetic environment of the Anzac Class Frigates.	Environmental Effects (E3) program which involves co-site performance analysis, measurements and modelling. • If issues arise, the Project Team will implement the recommended engineering and procedural processes to address the issues.
System Integration – There is a chance that system design will be affected by unavailability, complexity, or changing external and legacy interfaces.	• Continue to liaise closely with ANZAC SPO and the AMCAP through established working groups and regular meetings to monitor any changes to the external or legacy interfaces. • Respond to any incompatibility with integrated components in a collaborative fashion with AMCAP to determine remedial action that best suits the project and the Navy.
Resourcing – There is a chance that the project will be affected by a lack of staff.	• Continue to monitor human resource requirement through the life of the SEA 1442 Phase 4 project to ensure that it meets its obligations under the contract with the Contractor, its partnership with the AMCAP and its commitment to the Navy. • Where required, continue to recruit to replace as quickly as possible and utilise contracted support as necessary.
Milestone Delay – There is a chance that a milestone is delayed due to under-estimating the time required to complete the work.	• Continue to review the project's schedule and its critical path to monitor risk and areas of slippage. • Work collaboratively with the Contractor, the AMCAP or other stakeholders as necessary to address root causes and identify relevant remediation strategies. • **This risk has been downgraded to Medium as the potential impact from milestone delays is reducing.**
Training Facility – There is a chance that delays in the preparation of the Training Room may result in Contractor claims for excusable delay and lost schedule.	• Continue to work with the WAMA to expedite the allocation of this task.
Training System – There is a chance that an adequate training system is not delivered in time to train the Ship 1 crew.	• **Remedial action being progressed to ensure delivery of Ship 1 is not impacted.** • **Contract an additional resource within the Project Team to manage the Training function.**
CCMS – There is a chance that the CCMS may not be delivered with full functionality, which may result in a loss of schedule and or system performance.	• **Continue to work with the Contractor to ensure sufficient resources are allocated to delivering the CCMS with the prescribed level of functionality as scheduled.**
Availability of Crew for Training – There is a chance that insufficient ship's crew will be trained to meet Ship 1, leading to an impact on schedule or performance.	• **Continue to liaise with Navy to agree training dates as early as possible.** • **Contract an additional resource within the Project Team to manage the Training function.**
Emergent Risks (risk not previously identified but has emerged during 2018–19)	
Description	Remedial Action
N/A	**N/A**

5.2 Major Project Issues

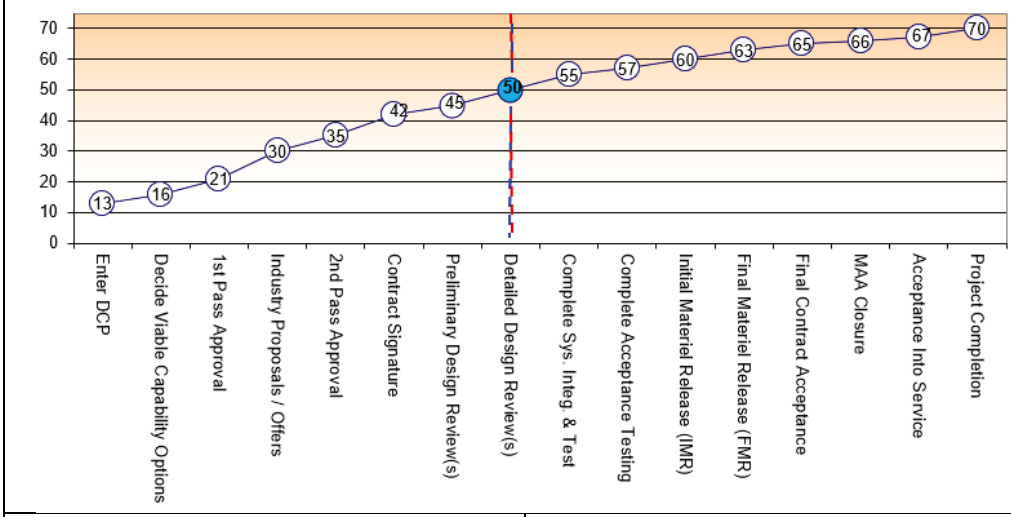
Description	Remedial Action
Non-recurring Sustainment Costs not yet defined - Analysis of non-recurring sustainment costs is incomplete.	• **Through the bi-annual IIP Update process, Government agreed to the combining of the SEA 1442 Phase 4.S2 unapproved sustainment budget and SEA 1442 Phase 5 unapproved budgets. The Capability Manager has indicated that sustainment of the delivered SEA 1442 Phase 4 capability will be managed from within the existing sustainment allocation. The alignment of this project to the AMCAP program significantly reduced the risk to sustaining the capability through to the current Planned Withdrawal Dates (PWD) of the Anzac Class ships. Any changes to PWD will include funding for the continued sustainment of the SEA 1442 Phase 4 delivered capability. This issue is now closed.**
The installation baseline will change as a result of the SEA 1448 Phase 4B mast change being incorporated into the ship program.	• The Project Team worked with the ANZAC SPO and AMCAP to manage this change. • The Contractor prepared revised installation plans **at additional** cost (minor) to the project. **This issue is now closed.**
Preparedness for Training – The Training Program was	• **The Project Team worked with the contractor and Navy**

not completely ready in time for the commencement of Navy Training.	Training to modify the initial course/s to allow training to commence as planned with subsequent 'Delta' courses being provided by the contractor to cover topics not able to be taught initially. • The TNGRR was progressed with known deficiencies to allow training to commence in support of Ship 1 readiness. To enter the next Milestone Review, the Contractor is required to ensure risks associated with the Training Program are mitigated to the level acceptable to the Commonwealth.
Milestone Delays –Three Contract Milestones are in delay by the Contractor; SITF and Training System Acceptance & the Ship 1 Installation Complete Milestone.	• This delay is being actively managed by the Project Team and Contractor to ensure the impact does not affect First of Class activities and to maintain Ship 1 Acceptance Milestones.
Note	
Major risks and issues in Section 5 are excluded from the scope of the review.	

Section 6 – Project Maturity

6.1 Project Maturity Score and Benchmark

Maturity Score		Attributes							Total
		Schedule	Cost	Requirement	Technical Understanding	Technical Difficulty	Commercial	Operations and Support	
Project Stage	Benchmark	7	7	7	8	7	7	7	50
Detailed Design Review	Project Status	7	7	8	7	7	7	7	50
	Explanation	**Requirement**: An Equipment Demonstration has been completed and detailed design indicates all operationally critical requirements as per the Operational Concept Document and Function and Performance Specification can be met. **Technical Understanding**: The necessary logistics data and arrangements for its employment in support of the capability are not yet in place. **Leonardo MW had previously prioritised its work effort on the equipment installation and integration activities for the first Ship, but now they are now focusing on completing the training system requirements with Training System Acceptance anticipated during Quarter 3 2019. Once Training System Acceptance has been achieved, this will allow the Technical Understanding Score to increase from 7 to 8.**							



Section 7 – Lessons Learned

7.1 Key Lessons Learned

Project Lesson	Categories of Systemic Lessons
Ensure requirements are clear, unambiguous, and that a common understanding is established between all parties as early as possible, including the Capability Acquisition and Sustainment Group, Capability Manager, end-user community and the contractor.	Requirements Management
Interfaces, and in particular legacy interfaces, need to be well defined, consistent, documented, and well understood by all parties. The risk profile and associated contingency needs to include interface management.	Requirements Management
More attention needs to be given to the possible impacts when tailoring the ASDEFCON suite of contracting templates to suit individual project context and strategy in order to avoid unnecessary detail, resource burden, cost and schedule.	Contract Management
Additional effort is required by the project team during contract negotiations to assess and better understand scope, schedule, risk, cost and resource commitments made under the contract, including an assessment that the schedule is realistic.	Contract Management
The use or re-use of extant system components or Government Furnished Material requires additional clarity and understanding on the serviceable status of equipment, responsibility for repair and/or replacement as well as the management responsibilities of these assets.	Contract Management

Pay close attention to schedule and ensure all work is captured, logical and can form a basis for sound management post contract award. Alignment of multiple schedules in a complex multi contractor environment, such as between SEA 1442 Phase 4 and AMCAP, can be a source of additional and unnecessary effort if not closely monitored and aligned.	Schedule Management
Access to appropriately skilled and experienced resources is critical to achieving project planning and management objectives.	Resourcing Schedule Management
Project Team coordination of the training program and data codification involves significant effort and preferably dedicated experienced Integrated Logistics Support (ILS) resources should be allocated early in the Project.	**Resourcing**

Section 8 – Project Line Management

8.1 Project Line Management as at 30 June 2019

Position	Name
Division Head	Mr Ivan Zlabur
Branch Head	Ms Myra Sefton
Project Director	Mr Peter Henrick
Project Manager	Mr Simon Russell