

Project Data Summary Sheet¹⁵³

Project Number	SEA 1000 Phase 1B
Project Name	FUTURE SUBMARINES DESIGN ACQUISITION
First Year Reported in the MPR	2019 - 20
Capability Type	Replacement
Acquisition Type	Developmental
Capability Manager	Chief of Navy
Government 1st Pass Approval	NA
Government 2nd Pass Approval (or key Government pre-Second Pass Approval)	Feb 2019
Budget at 2 nd Pass Approval (or key Government pre-Second Pass Approval)	\$5,952.5m
Total Approved Budget (Current)	\$5,925.8m
2019-20 Budget	\$579.5m
Project Stage	Contract Signature
Complexity	ACAT 1



Section 1 – Project Summary

1.1 Project Description

SEA 1000 Phase 1B intends to deliver a fleet of 12 regionally superior conventionally powered submarines to be known as the Attack Class. The Attack Class fleet will be built in Australia by an Australian workforce, at a purpose built Submarine Construction Yard which will be owned by the Commonwealth through Australian Naval Infrastructure and operated by Naval Group. The Future Submarine Program will provide Australia with an enduring sovereign submarine capability, with the ability to build, operate, and sustain submarines in Australia into the future.

1.2 Current Status

Cost Performance

The in-year underspend of \$26.4m is predominantly attributed to delays in NG procurement activities and submission of contract change proposals to Additional Work Scope 1, a late start in subcontractors engagement for the Lockheed Martin Australia Combat System Integrator Design, Build and Integration Contract, and contract end adjustment for the Initial Services Contract. There is also lower than anticipated expenditure for Life of Type Extension activities for Collins Class Submarines, lower than anticipated posting costs for the Resident Project Office Cherbourg and travel expenditure due to COVID-19 restrictions.

Project Financial Assurance Statement

As at 30 June 2020, project SEA1000 Phase 1B has reviewed the project's approved scope and budget for those elements required to be delivered by Defence. Having reviewed the current financial contractual obligations of Defence for this 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 or in prior years.

Schedule Performance

The Future Submarine Program is continuing to work towards delivery of the first Attack class submarine in the early 2030s, subject to future Government Approvals beyond the design work currently Approved for Phase 1B of the Program.

In September 2017, the Commonwealth, Naval Group, and Lockheed Martin Australia completed a pre-sizing activity to determine the initial sizing envelope of the Attack class submarine. The pre-sizing activity was followed by a successful Preliminary System Requirements Review, which was completed in October 2017 on schedule and marked the end of Functional Analysis and the first phase of design.

The successful completion of Functional Analysis allowed entry to the phase of design known as Feasibility Studies. System Requirements Review (Feasibility Studies) was completed on schedule on 20 March 2018.

The Concept design process for the Attack class submarine involved refinement of the design and associated artefacts to maintain alignment with requirements, as requirements transition in parallel from preliminary to final status. It was vital to ensure that the concept design was concluded on a sound basis before the Project committed more resources to the next level of design, avoiding

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Forecast dates and Sections: 1.2 (Material 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 Review Report by the Auditor-General* in Part 3 of this report.

<p>any costly and lengthy re-work in the future that are likely to arise if the concept design is not robust.</p> <p>The Concept Studies Review was not completed as originally planned in September 2018 due to the need to further develop the transverse balances and the Definition Plan for the subsequent design phase. The rescheduled Concept Studies Review was conducted in November 2018, corrective actions were completed by January 2019 and the Concept Studies Review was satisfactorily completed in February 2019.</p> <p>Compared to pre-contract estimates for the progression of design, an extended schedule for the design work has been implemented under the Submarine Design Contract – the first program contract executed under the Strategic Partnering Agreement. This schedule addresses the need for high-levels of design maturity required by Defence as the design phase of the Program progresses. Design work has continued to progress to the required level of maturity under the Submarine Design Contract. The extended period for the design work has not impacted the scheduled delivery date of the first or follow on submarines.</p> <p>Under the Submarine Design Contract, the Functional Ship Systems Requirements Review was scheduled for 31Oct19 and experienced a delay of five weeks to conduct of the review. This delay was assessed as recoverable by the next major milestone review, Functional Ship - System Functional Review (FS-SFR), planned for January 2021. At that time, Naval Group and Lockheed Martin Australia confirmed the path towards a successful Functional Ship System Functional Review at a Tripartite planning conference held in Adelaide at the end of January 2020.</p> <p>Naval Group advice reported to the mid-year Contract Performance Review indicated the level of risk for on-time achievement of the Core Work Scope 1 objectives (including FS-SFR) required treatment. Any potential impact to the Contract and Program Critical Path, and mitigation actions to resolve these issues, are currently being assessed.</p>
<p>Material Capability Delivery Performance</p> <p>SEA1000 Phase 1B does not currently have any material capability delivery approved. The project is currently approved for:</p> <ol style="list-style-type: none"> design including functional analysis, feasibility studies, design definition studies and basic design to enable design and construction of 12 regionally superior Future Submarines; and design and construction of the Submarine Construction Yard infrastructure and facilities to enable, build integration and testing of platform and combat system elements of the Future Submarine. <p>Capability requirements continue to be refined and assessed against the approved scope, cost and schedule.</p>
<p>Note</p> <p>Forecast dates and capability assessments are excluded from the scope of the Auditor-General's Independent Assurance Report.</p>

1.3 Project Context

<p>Background</p> <p>The SEA1000 Phase 1B Program is a large and complex program tied into the National Naval Shipbuilding Plan. The Program is in the design stage, and has multiple Government decision-making points.</p> <p>Initial options for the Future Submarine included a Military Off The Shelf (MOTS) or modified MOTS design, evolved Collins design and a new design. MOTS and modified MOTS options were removed from consideration following Government consideration in April 2013, based on an inability of available designs to meet Australia's essential capability requirements. Following extensive investigation into an evolved Collins design, Government agreed in September 2014 to cease work on progressing this option based on the effort required being equivalent to a new design.</p> <p>On 26 April 2016, Government announced that Naval Group of France has been selected as the international partner to work with Australia on the design and delivery of the Future Submarines. The Design and Mobilisation Contract was signed with Naval Group on 30 September 2016 formally commencing design of the Future Submarine. The Strategic Partnering Agreement (SPA) was signed on 11 February 2019, an overarching agreement between the Commonwealth and Naval Group under which successive Program Contracts will be executed to deliver the Future Submarine Program. On 1 March 2019, the first contract under the SPA, the Submarine Design Contract was signed superseding the Design and Mobilisation Contract.</p> <p>Following a Restricted Tender Process, Lockheed Martin Australia was selected as the Future Submarine Combat System Integrator on 30 September 2016. An initial Design Services Contract was signed with Lockheed Martin on 17 November 2016. This contract was superseded by the Design Build and Integration Contract on 12 January 2018, which represents the long-term Combat System Integration contract and includes the execution of the initial work scope.</p> <p>As announced by Government in April 2016, the Future Submarines will be constructed at a purpose built Submarine Construction Yard (SCY) at the Osborne Precinct in Adelaide. The SCY will require new infrastructure and upgrades to existing infrastructure to support the work of Naval Group and LMA. Naval Group will establish SCY Infrastructure Functional Requirements (IFR) and undertake design assurance activities to ensure the SCY is capable of building, integrating, testing and accepting into service the planned Future Submarine fleet.</p> <p>Australian Naval Infrastructure (ANI) is the owner of the land and existing facilities at the Osborne Precinct. ANI's activities are fundamental to the successful achievement of Defence's Strategic Objective which includes a rolling acquisition of submarines for the Commonwealth's continuous naval shipbuilding program. The first Attack Class Submarine is scheduled to enter service from the early 2030s as it is delivered to the Royal Australian Navy to commence initial Operational Test and Evaluation.</p> <p>The Smart Buyer Process was introduced to Defence during 2016 and became a mandatory requirement for Defence projects during 2017. As this was after the Competitive Evaluation Process, it was not feasible to commence a Smart Buyer process for SEA1000 Phase 1B.</p>
<p>Uniqueness</p> <p>SEA1000 Phase 1B will deliver 12 Attack Class submarines to the Royal Australian Navy and is the largest and most complex ship building endeavour undertaken in Australia.</p> <p>As such, the project has unique tripartite governance arrangements to address the highly sensitive nature of the information and technologies procured from the United States of America, France and Australia, in the design of a regionally superior submarine.</p> <p>Another unique element of the Program is its engagement with key suppliers in the design phase. This is required to design a submarine capable of regionally superior performance, simultaneously maximising Australian Industry involvement, and qualifying equipment to function effectively and safely in the undersea environment. This practice ensures Australia will be able to exercise sovereign control over operations and sustainment of the Future Submarine.</p>

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2019–20 Major Projects Report

Major Risks and Issues
The project is currently managing risk at both a Tactical and Strategic level; generally reflected at the Contract and Program levels respectively. Strategic risks identified within Section 5 broadly fall under a number of key areas being: <ul style="list-style-type: none"> Contractor performance risk; Resources, Skills and Workforce Management risk; Risk to the adaption and enhancement of methods, processes, systems and standards; Australian Industry Capability risk; and Risk to capability delivery to Navy, cost and schedule.
Other Current Related Projects/Phases
N/A
Note
Major risks and issues are excluded from the scope of the Auditor-General's Independent Assurance Report.

Section 2 – Financial Performance

2.1 Project Budget (out-turned) and Expenditure History

Date	Description	\$m	Notes
	Project Budget		
Sep 16	Original Approved (Government Interim Approval)	989.4	1
Oct 17	Real Variation - Transfer	(4.3)	2
Nov 17	Government Interim Approval	1,279.3	3
Sep 18	Real Variation - Transfer	(19.7)	4
Nov 18	Real Variation - Transfer	(7.3)	5
Feb 19	Real Variation - Transfer	(20.0)	5
	Real Variation - Transfer	(7.3)	2
	Government Interim Approval	3,742.4	6
	Total at Key Government pre-Second Pass Approval	5,952.5	
Jun 20	Exchange Variation	(24.3)	
	Real Variation - Transfer	(2.4)	2
	Total Budget	5,925.8	
	Project Expenditure		
Prior to Jul 19	Naval Group - Design and Mobilisation Contract	(365.1)	7
	Lockheed Martin Australia	(88.1)	7
	ASC Pty Ltd - Secondee Workforce	(23.2)	7
	Naval Group - Submarine Design Contract	(19.1)	7
	US Government - Submarine Combat Control System MOU	(0.0)	7
	Other Contract Payments / Internal Expenses	(227.0)	8
		(722.5)	
FY to Jun 20	Naval Group - Submarine Design Contract	(375.3)	7
	Lockheed Martin Australia	(93.3)	7
	ASC Pty Ltd - Secondee Workforce	(11.7)	7
	Naval Group - Design and Mobilisation Contract	(5.1)	7
	US Government - Submarine Combat Control System MOU	(4.0)	7
	Other Contract Payments / Internal Expenses	(63.7)	9
		(553.1)	
Jun 20	Total Expenditure	(1,275.6)	
Jun 20	Remaining Budget	(4,650.2)	
	Notes		
1	Government approval for the design and mobilisation phase for Naval Group and Lockheed Martin Australia, and work to be undertaken by Defence including establishment of the overseas government presence, mobilisation of the program office and initial development of facilities needed for the Program.		
2	Transfer to the CIOG component of SEA1000 Phase 1B for the Defence Secret Environment - International.		
3	Government approval for design of the combat system by Lockheed Martin Australia, activity to develop the concept design for the Future Submarine Construction Yard and Infrastructure business case, and program office costs.		
4	Transfer to the CIOG component of SEA1000 Phase 1B for Information Communication Technology Infrastructure Project requirements and Defence Secret Environment - International.		
5	Funding provided to Australian Naval Infrastructure for the Submarine Construction Yard.		
6	Government approval for further design work by Naval Group and program office costs, and Portfolio Additional Estimates Statements 2018-19 budget measures.		
7	The scope of this contract is explained further in Section 2.3 – Details of Project Major Contracts.		
8	Other expenditure for the period to July 2019 comprises payments for Contractor/Consultant Support (\$103m), Lockheed Martin Australia Combat System Integrator Initial Services Contract (\$30.3m), Facilities and Security arrangements in Cherbourg (\$15.2m), Legal Services (\$12.1m), US Government (\$11.2m), Lockheed Martin Australia Combat System Integrator Design Services Contract (\$10.2m), Collins Class Life of Type Extension Activities (\$9.9m), Office Fitout (\$1.6m) and other expenditure not attributable to the listed contracts (\$33.5m).		
9	Other expenditure for the period July 2019 to June 2020 comprises payments for Contractor/Consultant Support (\$39.1m), Collins Class Life of Type Extension Activities (\$10.1m), US Government (\$3.8m), Facilities and Security arrangements in		

Cherbourg (\$3.3m), Legal Services (\$3.1m), Lockheed Martin Australia Combat System Integrator Initial Services Contract (-\$0.8m), other expenditure not attributable to the listed contracts (\$5.1m).

2.2A In-year Budget Estimate Variance

Estimate PBS \$m	Estimate PAES \$m	Estimate Final Plan \$m	Explanation of Material Movements
289.3	580.9	579.5	<p>PBS to PAES: Government approval of \$3.8 billion to enter into the Strategic Partnering Agreement and Submarine Design Contract with Naval Group was received in February 2019. This is reflected in the increased budget estimate for 2019-20. The variation is primarily due to this approval along with the alignment of the Submarine Design Contract with Naval Group (signed in March 2019) and the Design, Build and Integration Contract with Lockheed Martin Australia (signed in January 2018), which required reprogramming certain activities to 2020-21. The Attack Class Submarine Program remains on cost and schedule for delivery of the fleet from the early 2030s.</p> <p>PAES to Estimate Final Plan: The variation relates to an update of budget exchange rates from 2019-20 MYEFO to 2020-21 Pre-ERC.</p>
Variance \$m	291.6	(1.4)	Total Variance (\$m): 290.2
Variance %	100.8	(0.2)	Total Variance (%): 100.3

2.2B In-year Budget/Expenditure Variance

Estimate Final Plan \$m	Actual \$m	Variance \$m	Variance Factor	Explanation
		(13.4)	Australian Industry	The underspend is predominantly attributed to delays in Naval Group procurement activities and submission of contract change proposals to Additional Work Scope 1, a late start in subcontractor engagement for the Lockheed Martin Australia Combat System Integrator Design, Build and Integration Contract, and contract end adjustment for the Initial Services Contract. There is also lower than anticipated expenditure for Life of Type Extension activities for Collins Class Submarines, lower than anticipated posting costs for the Resident Project Office Cherbourg and travel expenditure due to COVID-19 restrictions.
		18.5	Foreign Industry	
			Early Processes	
		(30.8)	Defence Processes	
		(0.7)	Foreign Government Negotiations/Payments	
			Cost Saving	
			Effort in Support of Operations	
			Additional Government Approvals	
		(26.4)	Total Variance	
579.5	553.1	(4.6)	% Variance	

2.3 Details of Project Major Contracts

Contractor	Signature Date	Price at		Type (Price Basis)	Form of Contract	Notes
		Signature \$m	30 Jun 20 \$m			
Naval Group – Design & Mobilisation Contract	07 Oct 16	60.9	416.3	Cost Ceiling (capped)	ASDEFCON (Strategic)	1,5
ASC Pty Ltd – Secondee Workforce	08 Mar 17	22.1	52.7	Cost Ceiling (capped)	Standing Offer	2,5
Lockheed Martin Australia – Combat System Design Build and Integration Contract	12 Jan 18	607.2	791.9	Cost Ceiling (capped)	ASDEFCON (Strategic)	3,5
Naval Group – Submarine Design Contract	01 Mar 19	589.7	988.0	Cost Ceiling (capped)	ASDEFCON (Strategic)	4,5
US Government	05 Jul 19	224.8	224.4	Reimbursement	MOU	5
Notes						
1	Increase in contract value reflects ongoing inclusion of staged concept-design work scopes.					
2	Increase in contract value reflects ongoing requirement for technical and engineering expertise.					
3	Increase in contract value includes the costs for subsystems withheld at signature due to pricing uncertainty.					
4	Increase in contract value reflects inclusion of staged work scopes plus procurement of long lead-time equipment.					
5	Contract value as at 30 June 2020 is based on actual expenditure to 30 June 2020 and remaining commitment at current exchange rates. This includes adjustments for indexation (where applicable).					
Contractor	Contracted Quantities as at		Scope	Notes		
	Signature	30 Jun 20				
Naval Group – Design & Mobilisation Contract	Nil	Nil	Progress the concept design for the future submarine in parallel to negotiation of the Strategic Partnering Agreement.			
ASC Pty Ltd	Nil	Nil	Specialist engineering and technical services.			
Lockheed Martin Australia – Combat System Design Build and Integration Contract	Nil	Nil	Design and risk reduction work, selection of all sub-system suppliers, and delivery of a detailed design for the Combat System			
Naval Group – Submarine Design Contract	Nil	Nil	Progress submarine concept design through definition phase to basic design.			
US Government	Nil	Nil	Cooperative development, production, and support of the submarine combat control system.			
Major equipment accepted and quantities to 30 Jun 20						
N/A						
Notes						

Section 3 – Schedule Performance

3.1 Design Review Progress

Review	Major System/Platform Variant	Original Planned	Current Contracted	Achieved/Forecast	Variance (Months)	Notes
System Requirements	Preliminary System Requirements Review (PSRR)	Oct 17	N/A	Oct 17	0	
	System Requirements Review (Feasibility Studies)	Mar 18	N/A	Mar 18	0	
	Combat System System Requirements Review	Nov 18	N/A	Sep 18	(2)	
	Concept Studies Review (CSR)	Sep 18	N/A	Feb 19	5	1
	Functional Ship Systems Requirements Review - Definition Phase	Oct 19	N/A	Jul 20	8	2
	Functional Ship Systems Functional Review	Jan 21	N/A	Feb 21	1	3,4
Preliminary Design	Combat System Preliminary Design Review	Dec 19	Oct 21	Oct 21	22	5
Critical Design	Combat System Critical Design Review	Mar 22	Jun 23	Jun 23	15	5
Notes						
1	Additional work was required to further develop the transverse balances and the Definition Plan for the subsequent design phase before entering the Concept Studies Review, that was held in November 2018. The Commonwealth also required that a Tripartite Planning Conference be convened to successfully exit the Concept Studies Review and support orderly commencement of the Definition design work. The Conference was held in January 2019. The Commonwealth was satisfied with this outcome and the Concept Studies Review was effectively considered complete. Minor administrative actions followed and a letter advising the Contractor of formal exit was signed in February 2019.					
2	The Functional Ship Systems Requirements Review was held in December 2019. A series of actions were identified during the review to finalise the initial Functional Baseline, as well as traceability between the Technical Requirements Specifications and the Functional Performance Specification. These actions have progressed and formal exit from the review is expected in July 2020.					

3	The schedule to achieve Functional Ship System Functional Review was validated in January 2020 by Naval Group and Lockheed Martin Australia. Valuable work on Definition design has progressed since the conduct of the Functional Ship Systems Requirements Review in December 2019, however some impact is evident from the delay to formal exit of this review.
4	Compared to pre-contract estimates for the progression of design, an extended schedule for the design work has been implemented under the Submarine Design Contract – the first program contract executed under the Strategic Partnering Agreement. This schedule addresses the need for high-levels of design maturity required by Defence as the design phase of the Program progresses.
5	Adoption by Naval Group of the standard IEEE 15288.2 Technical Reviews and Audits on Defense Programs during 2018/2019 has improved alignment in design maturity points between Naval Group and Lockheed Martin Australia. Adoption of this standard resulted in amendments to nomenclature, content and timing for some design reviews. Notably, the Functional Ship Systems Functional Review was introduced and both the Preliminary and Critical Design Reviews were re-defined in terms of content and timing.

3.2 Contractor Test and Evaluation Progress

Test and Evaluation	Major System / Platform Variant	Original Planned	Current Contracted	Achieved / Forecast	Variance (Months)	Notes
System Integration	TBA	TBA	TBA	TBA	N/A	1
Acceptance	TBA	TBA	TBA	TBA	N/A	1
Notes						
1	SEA1000 Phase 1B has approval to conduct basic design of 12 regionally superior Future Submarines and design and construction of the Submarine Construction Yard infrastructure and facilities to enable, build integration and testing of platform and combat system elements of the Future Submarine. The above milestones are expected to be defined by Government in subsequent approvals.					

3.3 Progress Toward Materiel Release and Operational Capability Milestones

Item	Original Planned	Achieved / Forecast	Variance (Months)	Notes
Initial Materiel Release (IMR)	TBA	TBA	N/A	1
Initial Operational Capability (IOC)	TBA	TBA	N/A	1
Final Materiel Release (FMR)	TBA	TBA	N/A	1
Final Operational Capability (FOC)	TBA	TBA	N/A	1
Notes				
1	SEA1000 Phase 1B has approval to conduct basic design of 12 regionally superior Future Submarines and design and construction of the Submarine Construction Yard infrastructure and facilities to enable, build integration and testing of platform and combat system elements of the Future Submarine. The above milestones are expected to be defined by Government in subsequent approvals.			
Schedule Status at 30 June 2020				
Not Applicable				
Note				
Forecast dates in Section 3 are excluded from the scope of the Auditor-General's Independent Assurance Report.				

Section 4 – Materiel Capability Delivery Performance

4.1 Measures of Materiel Capability Delivery Performance

Pie Chart: Percentage Breakdown of Materiel Capability Delivery Performance	
Not Applicable	<p>Green: SEA1000 Phase 1B does not currently have any materiel capability delivery approved. The project is currently approved for: design including functional analysis, feasibility studies, design definition studies and basic design to enable design and construction of 12 regionally superior Future Submarines; and design and construction of the Submarine Construction Yard infrastructure and facilities to enable, build integration and testing of platform and combat system elements of the Future Submarine. Capability requirements continue to be refined and assessed against the approved scope, cost and schedule. SEA1000 Phase 1B is expected to return to Government in 2020/2021 to seek progressive approval of scope and funding as the Program moves through the design and build phase.</p> <p>The first Attack Class Submarine (HMAS <i>Attack</i>) is scheduled to enter service from the early 2030s as it is delivered to the Royal Australian Navy to commence Operational Test and Evaluation. This is the point after which all contractor sea trials have been completed and the submarine has been formally accepted from Naval Group and Lockheed Martin Australia. During Operational Test and Evaluation, the Commonwealth personnel and persons providing services on behalf of the Commonwealth submarine will be progressively released for operations during the Operational Test and Evaluation, after which time the submarines will continue in service.</p>
	<p>Amber: N/A</p>
	<p>Red: N/A</p>
Note	
This Pie Chart represents Defence's expected capability delivery. Capability assessments and forecast dates are excluded from the scope of the Auditor-General's Independent Assurance Report.	

4.2 Constitution of Materiel Release and Operational Capability Milestones

Item	Explanation	Achievement
Initial Materiel Release (IMR)	Note 1	Not yet achieved
Initial Operational Capability (IOC)	Note 1	Not yet achieved
Final Materiel Release (FMR)	Note 1	Not yet achieved
Final Operational Capability (FOC)	Note 1	Not yet achieved
Note		
1	SEA1000 Phase 1B has approval to conduct basic design of 12 regionally superior Future Submarines and design and construction of the Submarine Construction Yard infrastructure and facilities to enable, build integration and testing of platform and combat system elements of the Future Submarine. The above milestones are expected to be defined by Government in subsequent approvals.	

Section 5 – Major Risks and Issues

5.1 Major Project Risks

Identified Risks (risk identified by standard project risk management processes)	
Description	Remedial Action
There is a risk that our Program Partners will not adequately address issues and challenges (including technical risks) that arise during the course of the Program.	Contracted requirements exist on Program performance, behaviours and expectations and are supported by: ongoing engagement with CEO's; bilateral and tripartite governance arrangements; and ongoing independent critical peer review by the Naval Shipbuilding Advisory Board and Submarine Advisory Committee.
There is a risk that Program Participants are unable to staff the Program with the right number of suitably qualified and experienced personnel, build skills to prepare for construction and execute the Program effectively and with increasing productivity over time.	Program Partners have established Resourcing Profiles for current and future work; and must pass Mandated Systems Reviews before progressing to subsequent stages of design and delivery. Contracted requirements exist for delivery of a Capability Realisation Plan for Naval Group Australia and the Commonwealth-monitoring of ramp-up and training plans. Other actions include: Defence and Naval Group Australia working in close collaboration with the Naval Shipbuilding College and the Naval Shipbuilding Industry Reference Committee. A Workforce Plan has been developed to ensure ongoing ramp up of skills in Defence's Future Submarine Program (FSP) Office to provide sufficient capacity to monitor and manage Partner performance. Other actions include: Mentoring and training programs to develop the skills and experience of junior Australian Public Service personnel; Succession Planning; ongoing recruitment of personnel to authorised levels and rebalancing of skills and experience to meet changing needs as the Program transitions from design through to construction and sustainment.
There is a risk to the implementation of best-practice industry methods, processes systems and standards (including those related to program planning and control) to promote effectiveness and efficiencies.	Contracted requirements exist for the adaption and enhancement of methods, processes, systems and standards to meet all FSP Objectives; to demonstrate how these meet the Commonwealth's needs; and are implemented in Australian (including through modern manufacturing in a newly established Submarine Construction Yard in Adelaide). Requirements also exist for well-defined plans, an effective resource-based schedule, sound planning and Program management; and for the establishment of program management conforming to Australian standards. Integrated Baseline Reviews (IBRs) are being undertaken which will set a performance measurement baselines which enables the Commonwealth to accurately measure cost and schedule performance. IBRs are planned to be conducted periodically through each Contract phase.
There is a risk that our Program Partners fail to maximise Australian Industry involvement through all phases of the Program without unduly compromising capability, cost or schedule.	Contracted requirements exist for Australian Industry Capability Plans for each Phase of the FSP, for Defence to approve engagement of key subcontractors; and for Naval Group to transfer procurement functions in France to Naval Group Australia. Contract requirements and processes have been developed to exercise better make-by decisions on best-for-program basis.
There is a risk to the FSP Strategic Objectives for the achievement of a regionally superior Attack Class submarine capability that provides the Commonwealth with enduring sovereign control over the operation and sustainment of Australia's Future Submarine capability; on cost and on schedule.	Sound requirements are being developed for the Attack class. Compliance is being monitored through the traceability of requirements to design artefacts and ongoing Design Reviews. Contracted requirements exist for the development and annual reporting of Program Cost Estimates, particularly within the design phase, to track and control costs as design decisions are made to balance capability and affordability. Other actions include cost transparency; routine assessment of pricing and expenditure; and cost and schedule management. Requirements also exist for well-defined plans, an effective resource-based schedule, sound planning and Program management; and for the establishment of program management conforming to Australian standards. The Commonwealth are monitoring performance against the Contract Master Schedules and Integrated Master Schedule (IMS). IBRs are being undertaken which will set performance measurement baselines which enables the Commonwealth to accurately measure cost and schedule performance. IBRs are planned to be conducted periodically through each Contract phase.
Emergent Risks (risk not previously identified but has emerged during 2019–20)	
Description	Remedial Action
N/A	N/A

5.2 Major Project Issues

Description	Remedial Action
N/A	N/A
Note	
Major risks and issues in Section 5 are excluded from the scope of the Auditor-General's Independent Assurance Report.	

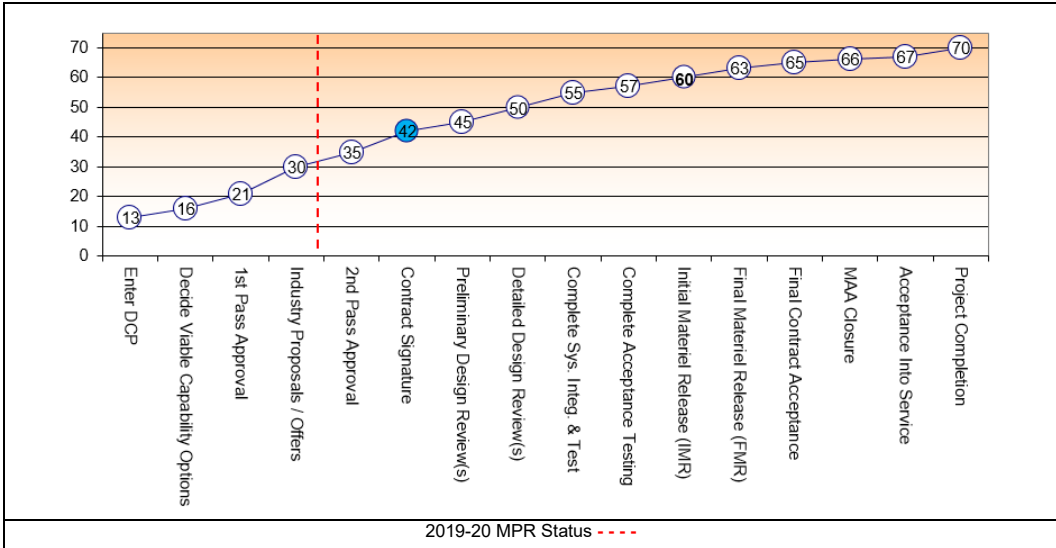
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Section 6 – Project Maturity

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	6	6	6	6	6	6	6	42
Enter Contract	Project Status	4	7	6	4	4	3	4	32
	Explanation	<p>SEA 1000 Phase 1B is currently approved for: design including functional analysis, feasibility studies, design definition studies and basic design to enable design and construction of 12 regionally superior Future Submarines; and design and construction of the Submarine Construction Yard infrastructure and facilities to enable, build integration and testing of platform and combat system elements of the Future Submarine.</p> <p>Capability requirements continue to be refined and assessed against the approved scope, cost and schedule. SEA1000 Phase 1B is expected to return to Government in 2020/2021 to seek progressive approval of scope and funding as the Program moves through the design and build phase.</p> <p>Schedule: The currently approved project schedule is understood and remains within schedule tolerance; notwithstanding there is significant schedule pressure on submarine design and SCY activities. The project is working to identify and mitigate any potential delays caused by COVID-19.</p> <p>Cost: Costs are being managed with some variation (underspend) in the approved budget.</p> <p>Requirement: While requirements are agreed by Navy and Contractors and captured on the appropriate contracts, key studies are underway to determine if requirements can be met. Key performance requirements will remain open until later in design, carrying forward risk.</p> <p>Technical Understanding: Considering the project is in a Design phase, the Technical Understanding will be matured and provided for as the project progresses through the multiple forecast design reviews. Studies are planned to better understand performance issues.</p> <p>Technical Difficulty: Modelling, early demonstration of Critical Equipment and balances indicate a feasible platform design. Risk mitigation studies are underway to confirm the achievement of requirements.</p> <p>Commercial: While the project has established Strategic-level Agreements and design contracts with Naval Group and LMA, as the design matures, more detailed requirements including the involvement of Australian Industry will be brought into project contracts.</p> <p>Operations and Support: The Issue of Operations and Support is understood at a high level, and is being further developed by the various Fundamental Inputs to Capability (FIC) leads. There is a broader activity to conduct; namely to define lower-level requirements including the involvement of Australian Industry, exercising sovereign control over operations and sustainment and qualifying equipment to function effectively and safely in the undersea environment.</p>							



Section 7 – Lessons Learned

7.1 Key Lessons Learned

Description	Categories of Systemic Lessons
Careful selection of Acquisition Contractors with relevant experience and knowledge, underpinned by strong commercial arrangements, is essential to protect the Commonwealth's interests	Contract Management
The Program must be an informed customer, closely monitoring Contractor progress with strong and pro-active management.	Contract Management
Research into program failures and lessons learned from submarine design by allied nations ensured SEA1000 Ph 1B was aware of the necessity of having a set of good requirements to achieve success in design and development.	Requirements Management

Section 8 – Project Line Management

8.1 Project Line Management as at 30 June 2020

Position	Name
Division Head	Mr Gregory Sammut
Branch Head	CDRE Craig Bourke
Project Director	CDRE Craig Bourke