Project Data Summary Sheet[142]

Project Number	**SEA5000 Phase 1**
Project Name	**HUNTER CLASS FRIGATE DESIGN AND CONSTRUCTION**
First Year Reported in the MPR	2019-20
Capability Type	Replacement
Capability Manager	Chief of Navy
Government 1st Pass Approval	Apr 16
Government 2nd Pass Approval	Jun 18
Budget at 2nd Pass Approval	$6,184.0m
Total Approved Budget (Current)	$6,055.7m
2021-22 Budget	$531.1m
Complexity	ACAT I

Section 1 – Project Summary

1.1 Project Description

As a foundation project in the Government's Continuous Naval Shipbuilding Program, SEA5000 Phase 1 – Hunter Class Frigate (HCF) Design and Construction (the Project) will deliver nine HCFs optimised for anti-submarine warfare to maintain the Royal Australian Navy's (RAN) Surface Combatant capability and replace the current *Anzac* Class Frigates.

This new generation of major surface combatants will provide the RAN with the critical capability required to defend Australia well into the future. The HCF will contribute to air and surface warfare defence, as well as serving its primary mission of anti-submarine warfare.

The Project is currently approved for the Design and Productionisation (D&P) stage, which includes:

- progressing detailed design;
- commencement of prototyping works; and
- procurement of some Long Lead Time Items (LLTI) for Batch 1 Build.

The Head Contract is with ASC Shipbuilding Pty Ltd (trading as BAE Systems Maritime Australia (BAESMA)), a subsidiary of BAE Systems Australia.

The HCF will be constructed in Osborne, South Australia.

1.2 Current Status

Cost Performance

In-year

As at 30 June 2022, financial year 2021-22 expenditure is $608.5m against the forecast budget of $531.1m. The variation is mainly driven by:

- earlier than planned payment of a portion of the UK licence fee for the reference ship design;
- higher than forecast Foreign Military Sales (FMS) disbursements for the combat management system;
- higher pass-through shipyard costs under the Head Contract; and
- services relating to CASG's Maritime Information Environment (MIE).

Project Financial Assurance Statement

As at 30 June 2022, project SEA5000 Phase 1 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 that as at the reporting date there is sufficient budget including contingency remaining for the Project to complete against the agreed scope.

Contingency Statement

The Project has not applied contingency in the financial year.

Schedule Performance

In June 2018, Government approval was granted for the D&P stage, inclusive of prototyping and procurement of LLTI for Batch 1 Build. This has enabled the design of the Mission and Support Systems to proceed, together with mobilisation of BAESMA to the Osborne South Naval Shipyard ahead of prototyping, which commenced on schedule in December 2020.

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Forecast dates and Sections: 1.2 (Materiel Capability/Scope Delivery Performance), 1.3 (Major Risks and Issues), 4.1 (Measures of Materiel Capability/Scope 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.

In the current year (2021-22), the completion date for the System Definition Review has driven delays to subsequent design reviews. The Project has also experienced schedule variance due to delays in the design maturity of the UK's Type 26 Program, which is the Reference Ship Design for the HCF. These delays in the UK were exacerbated by the COVID-19 pandemic.

In June 2021, the Government agreed to the deferral of the Ship 1 Cut Steel milestone by up to 18 months, to no later than June 2024. This will enable the Commonwealth and BAESMA to address design maturity and develop a contractible offer for the Batch 1 Build Scope. This in turn will enable the commencement of the construction of Ship 1 no later than June 2024. The extended prototyping period now includes the construction of four HCF blocks, in addition to the five Type 26 blocks that were approved by Government in 2018. The Project intends to use the four additional prototyping blocks in the construction of the Batch 1 ships. The Project is expected to return to Government for consideration of the Batch 1 Build stage Second Pass funding and approval in early 2024.

While there are significant risks and challenges, as would be expected for a project of this complexity, the Project is on track to commence Ship 1 construction in June 2024. The Commonwealth continues to work with BAESMA on mitigating risks, managing issues and any associated impacts to the Project.

Materiel Capability/Scope Delivery Performance

The current scope of the Head Contract addresses the D&P stage, inclusive of prototyping and procurement of LLTI for the Batch 1 Build stage.

Under the existing Head Contract D&P scope and budget, BAESMA will also fabricate a 'proof of concept test rig' as a risk reduction measure for the fabrication of the Ship 1 mast.

Note

Forecast dates and capability assessments are excluded from the scope of the Auditor-General's Independent Assurance Report.

1.3 Project Context

Background

The Project will form the foundation of the Government's Continuous Naval Shipbuilding Program, as announced in the 2017 National Naval Shipbuilding Plan. The Project is in the D&P stage, and will progress through multiple Government decision-making points for subsequent project stages.

In June 2014, an Initial Pass was approved by Government to commence capability development activities, which included conducting studies through to Interim Pass, regarding the feasibility of utilising the *Hobart* Class Guided Missile Destroyer (DDG) platform as the basis for the SEA5000 Phase 1 capability. The Project was directed to return to Government in March 2015 when further decisions on SEA5000 Phase 1 would be taken in the context of the planned 2015 Defence White Paper (DWP) and subject to successful implementation of the Air Warfare Destroyer (AWD) Reform Program.

In August 2015, the Government announced bringing forward the Future Frigate program to replace the *Anzac* Class (FFH) Frigates as part of a continuous onshore build programme to commence in 2020. The *Hunter* Class Frigates will be built in South Australia at the Osborne South Naval Shipyard.

In September 2015, an Interim Pass was approved by Government for CEA Radar Development activities to complete the development of radar technology demonstrators, and remaining supporting activities through to 2018.

In November 2015, an Interim Pass was approved by Government for SEA5000 Phase 1 to progress a Competitive Evaluation Process (CEP) and other activities through to First Pass consideration scheduled for the second quarter of 2016. Government approval was given for the High Level Capability Requirements (HLCRs) for the Future Frigate and the criteria by which frigate designs would be shortlisted for further development through the CEP.

In April 2016, Government provided First Pass approval for SEA5000 Phase 1 to complete the CEP (based on tenders received from the three ship designers that had been shortlisted), conduct combat system related activities that support integration of the CEA Technologies suite of radars, and develop capability proposals to support Gate 2 consideration in 2018.

In October 2017, the Government announced the decision to select the Aegis Combat Management System together with an Australian Interface developed by Saab Australia as the Combat Management System solution for the Future Frigate. This further interim pass included approval for SEA5000 Phase 1 to provide funds to progress combat system work ahead of Gate 2 in addition to providing for workforce and schedule protection up to April 2018.

In June 2018, the Government announced BAE's Global Combat Ship - Australia (GCS-A) as the capability best suited to Defence needs. A Smart Buyer assessment was not conducted for this project as a similar risk review process had already been conducted as part of the CEP. The platform system is based on the existing Type 26 Global Combat Ship (GCS) design, with design changes to incorporate the HLCRs as prescribed by Government. The nine frigates were classed as the *Hunter* Class FFG.

In February 2022, the Project sought Interim Pass approval from Government to contract BAESMA to construct four additional prototyping blocks in addition to the five it is contracted to build under the current D&P scope. The aim is to (a) provide the minimum necessary additional production scope to ensure no redundancies are required in the core production workforce and maintain reasonable continuity of production skill sets; and (b) reduce cost, risk, and uncertainty while improving design maturity and schedule durations to ensure the Commonwealth and BAESMA can execute an arrangement for the Batch 1 Build scope which is affordable and acceptable to the Commonwealth.

Uniqueness

The Project, delivering nine anti-submarine warfare frigates to the RAN, is one of the largest naval ship building projects ever undertaken in Australia.

SEA5000 Phase 1 will be delivered in a number of stages to achieve the objectives of Continuous Naval Shipbuilding, with each stage requiring separate approvals by Government to ensure the Project remains within cost constraints.

While the principles of the One Defence Capability System will be applied to the Project, due to the longevity, and staged nature of the Project, a unique approach will be required to manage the nine ships through the life cycle. An example of this is the requirement to return to Government for approval to commence construction and sustainment for each of the three batches of ships and their support system.

Major Risks and Issues
The Project is currently managing risks and issues at both a strategic and tactical level. Strategic risks and issues identified within Section 5 broadly fall under a number of key areas being:

- Ship design maturity;
- System Integration;
- Operating Capability delivered to Navy;
- Industry and Navy workforce;
- Australian Industry Capability; and
- Overall budget affordability.

Other Current Related Projects/Phases

- SEA1397 Phase 5B – NULKA Upgrade. This is an upgrade to the launch sub-system associated with the active missile decoy system (Nulka) which is designed to seduce anti-ship missiles from their target. This capability will be ordered and procured under the existing SEA1397-5B Acquisition Contract (as additional order quantities).
- DEF5010 – Active Electronically Scanned Array. This is a partnership between CEA Technologies and DSTG exploring the continuous development of Active Electronic Scanned Array technologies.

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			
Jun 14	Original Approved (Initial Pass Approval)	62.8		
Sep 15	Interim Pass Approval	52.6		1
Jan 16	Pre 1st Pass Approval	22.1		2
Apr 16	Government 1st Pass Approval	208.2		
Oct 17	Interim Pass Approval (Combat System)	55.5		3
Jun 18	Government 2nd Pass Approval	5,782.7		
	Total at Second Pass Approval		**6,183.9**	
Aug 19	Real Variation - Transfer		3.3	
Feb 22	Exchange Variation		(131.6)	4
			(128.3)	
Jun 22	**Total Budget – SEA5000PH1**		**6,055.7**	
	Project Expenditure			
Prior to Jul 21	Contract Expenditure - BAE Systems Maritime Australia (previously known as ASC Shipbuilding Pty Ltd)	(591.2)		
	Contract Expenditure - US Government FMS Case (ATPGSC)	(132.9)		
	Contract Expenditure - CEA Technologies Pty Ltd	(39.7)		
	Contract Expenditure - Deloitte Touché Tohmatsu	(30.5)		
	Contract Expenditure - Odense Maritime Technology	(29.5)		
	Contract Expenditure - Saab Australia Pty Ltd	(24.0)		
	Contract Expenditure - Raytheon Australia Pty Ltd	(22.5)		
	Contract Expenditure - US Government FMS Case (ATPLFZ)	(7.5)		
	Other Contract Payments / Internal Expenses	(341.2)		5
			(1,219.1)	
FY to Jun 22	Contract Expenditure - BAE Systems Maritime Australia (previously known as ASC Shipbuilding Pty Ltd)	(415.5)		
	Contract Expenditure - US Government FMS Case (ATPGSC)	(72.4)		
	Contract Expenditure - US Government FMS Case (ATPLFZ)	(37.7)		
	Contract Expenditure - CEA Technologies Pty Ltd	(22.0)		
	Contract Expenditure – Raytheon Australia Pty Ltd	(12.0)		
	Contract Expenditure – Saab Australia Pty Ltd	(11.1)		
	Contract Expenditure – IBM Australia Ltd	(10.8)		
	Contract Expenditure - Odense Maritime Technology	(6.8)		
	Contract Expenditure - Deloitte Touché Tohmatsu	(5.1)		
	Other Contract Payments / Internal Expenses	(15.1)		6
			(608.5)	
Jun 22	**Total Expenditure**		**(1,827.6)**	
Jun 22	**Remaining Budget**		**4,228.2**	

Notes	
1	CEA Technologies Radar Development Program
2	Initiating the Competitive Evaluation Process for Future Frigates
3	Conduct further combat system development activities and to secure critical support staff.
4	Funding transfer between Capability Acquisition and Sustainment Group (CASG) and Security and Estate Group (SEG, formerly known as the Estate and Infrastructure Group (E&IG)) to address funding shortfall with the Naval Capability Infrastructure Subprogram (NCIS).
5	Competitive Evaluation Process Participants (CEP) payment totals to $122.5m, Project and Commercial Support payment totals to $146.2m and Technical Support payment totals to $72.4m.
6	Project and Commercial Support payment totals to $4.4m, and Technical Support payment totals to $10.7m.

2.2A In-year Budget Estimate Variance

Estimate PBS $m	Estimate PAES $m	Estimate Final Plan $m	Explanation of Material Movements
655.2	532.1	531.1	PBS to PAES: The variance is a result of lower than forecast expenditure against the Head Contract with BAE Systems Maritime Australia due to delays in establishing contracts for long lead items, and a significant reduction in forecast disbursements for combat system elements being acquired via Foreign Military Sales. PAES to Final Plan: The variance is due to foreign exchange supplementation.
Variance $m	(123.1)	(1.0)	Total Variance ($m): (124.1)
Variance %	(18.8%)	(0.2%)	Total Variance (%): (18.9)

2.2B In-year Budget/Expenditure Variance

Estimate Final Plan $m	Actual $m	Variance $m	Variance Factor	Explanation
		(52.0)	Australian Industry	The variation is mainly due to: • earlier than planned payment of a portion of the UK licence fee for the reference ship design • higher than forecast FMS disbursements for the combat management system; • higher pass-through shipyard costs under the Head Contract; and • services relating to CASG's MIE.
		(25.4)	Foreign Industry	
			Early Processes	
			Defence Processes	
			Foreign Government Negotiations/Payments	
			Cost Saving	
			Effort in Support of Operations	
			Additional Government Approvals	
531.1	608.5	(77.4)	**Total Variance**	
		(14.6)	**% Variance**	

2.3 Details of Project Major Contracts

Contractor	Signature Date	Price at		Type (Price Basis)	Form of Contract	Notes
		Signature $m	30 Jun 22 $m			
CEA Technologies Pty Ltd 1	Nov 14	0.9	47.0	Variable	Standard Defence Contract	1,5
CEA Technologies Pty Ltd 2	Sep 21	27.8	27.8	Fixed	Standard Defence Contract	5
Saab Australia Pty Ltd	Nov 14	2.4	40.5	Fixed	Standard Defence Contract	7,5
United States Government (AT-P-GSC)	Jan 16	5.5	251.5	Reimbursement	Foreign Military Sales (FMS)	3,5
Deloitte Touche Tohmatsu	Apr 16	0.182	49.6	Fixed	Standard Defence Contract	6,5
BAE Systems Maritime Australia (previously known as ASC Shipbuilding Pty Ltd)	Dec 18	1,904.1	2,726.8	Variable	Standard Defence Contract	4,5
Odense Maritime Technology	Mar 19	0.3	62.5	Variable	Standard Defence Contract	4,5
Raytheon Australia Pty Ltd 1	Apr 19	6.8	13.6	Variable	Standard Defence Contract	2,5
Raytheon Australia Pty Ltd 2	Oct 19	9.0	34.6	Variable	Standard Defence Contract	2,5
IBM Australia Limited	Mar 21	3.5	14.2	Fixed	Standard Defence Contract	5,8
United States Government (AT-P-LFZ)	Sep 20	626.6	619.7	Reimbursement	Foreign Military Sales (FMS)	5,9

Notes	
1	Initial risk reduction studies relating to integration of CEA radar. Subsequent extensions include risk reduction studies, radar development activities including initial design work, initial platform integration and support for the Aegis/CEAFAR interface development.
2	Raytheon Australia Pty Ltd 1: Initial requirements verification and validation including development of a detailed design and progression towards Operation Readiness Review for the Maritime Information Environment. Subsequent extensions provide for hardware maintenance, software licences and support costs. Raytheon Australia Pty Ltd 2: Initial provision of specialist combat system technical support services for specialist services in support of combat management system activities and subsequent take up of option to extend to support continuous combat system development, which also includes uptake of additional personnel.

3	US Government Initial MOU was for SEA5000 Feasibility and Technical Integration Study. Contract value was increased for additional Feasibility and Technical Risk Reduction Studies including CEAFAR/Cooperative Engagement Capability (CEC) and integration of CEAFAR into the Aegis Combat System. Contract value also includes acquisition of Long Lead Time Items for Development Sites.
4	Design and Productionisation for Hunter Class Frigates. Contract changes include inclusion of shipyard licence fees, facilities management services, Functional Baseline review, the Maritime Integration Environment, and the Interim Arrangement, as well as the removal of some Australian Interface scope.
5	Contract values as at 30 June 2022 is based on actual expenditure to 30 June 2022 and remaining commitment at current exchange rates, and includes adjustments for indexation (where applicable).
6	Initial Contract for Delivery of Shipbuilding Strategy Report, subsequent contracts for Project Management support.
7	Initial Contracts for combat system studies and subsequent contracts for technical support and de-risking activities for the combat management systems and radar platform integration.
8	Initial contract for services relating to the in-service support of the Maritime Information Environment, subsequent changes incorporated an upgrade to address shipbuilding and sustainment partner requirements, a scalable solution and implementation approach to reduce cost of ownership.
9	The variance at “Price at signature” and the “as at 30 June 2022” is a result of fluctuations in current exchange rates.

Contractor	Contracted Quantities as at		Scope	Notes
	Signature	30 Jun 22		
CEA Technologies Pty Ltd 1	N/A	N/A	Risk reduction radar development activities including design work, platform integration and support for the Aegis/CEAFAR interface development.	
CEA Technologies Pty Ltd 2	N/A	N/A	Development and testing of new interface between US Aegis and CEAFAR2 Phased Array Radar Systems.	
Saab Australia Pty Ltd	N/A	N/A	Combat system studies, technical support and de-risking activities for the combat management systems and radar platform integration.	
United States Government (AT-P-GSC and AT-P-LFZ)	N/A	N/A	Feasibility and Integration studies and acquisition of LLTIs.	
Deloitte Touche Tohmatsu	N/A	N/A	Project Management Support.	
BAE Systems Maritime Australia (previously knowns as ASC Shipbuilding Pty Ltd)	N/A	N/A	Design and Productionisation for the Hunter Class Frigates (HCF).	
Raytheon Australia Pty Ltd 1	N/A	N/A	Development of design operational readiness review of the Maritime Information Environment including licences, hardware and in-service support costs.	
Raytheon Australia Pty Ltd 2	N/A	N/A	Provision of specialist combat system technical support services and support continuous combat system development.	
Odense Maritime Technology	N/A	N/A	Identification of Support Requirements during the D&P stage.	
IBM Australia Limited	N/A	N/A	Services relating to the Maritime Information Environment (CASG’s protected maritime ICT network across Naval shipyards and Defence establishments).	

Major equipment accepted and quantities to 30 Jun 22
N/A
Notes
N/A

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 Review (SRR)	Mission System and Support System	Sep 19	N/A	Sep 19	0	1
System Definition Review (SDR)	Mission System (Mission System System Definition Review (MSSDR))	Nov 20	Apr 22	May 22	18	1,2
	Support System (Support System System Definition Review (SSSDR))	Nov 20	Dec 22	Mar 23	28	1,2,3,8
Preliminary Design Review (PDR)	Mission System	N/A	N/A	Oct 23	N/A	1,2,4,8, 9
Critical Design Review (CDR)	Mission System (System Critical Design Review (SCDR))	Nov 22	N/A	Dec 24	25	2,5,6,8, 10
	Mission System (Final Critical Design Review (FCDR))	Jun 24	N/A	Dec 25	18	2,5,6,8, 10
	Support System (Support System Critical Design Review (SSCDR))	Apr 25	N/A	Feb 27	22	2,5,6,7, 8,10

Notes	
1	The Achieved/Forecast dates for the SRR, SDR and PDR design reviews are based on the date that the associated Head Contract Key Milestone was achieved or is forecast to be achieved. For SRR and MSSDR these dates were Sep 19 and May 22 respectively. For SSSDR and PDR, these dates are forecast to be Mar 23 and Oct 23 respectively. It is noted that Head Contract Key Milestones are generally achieved a number of months after the conduct of the design review exit event to enable the Key Milestone Criteria (e.g. closure or downgrading of action items) to be completed.
2	The delayed achievement of the MSSDR, primarily as a result of design delays experienced in the UK Type 26 Program, has driven delays to subsequent design reviews. It is noted that the MSSDR included an element that was focused on the Land Based Test Site (Development and Sustainment) (LBTS(D&S)).
3	In Q3 21, the conduct of the SSSDR exit event was deferred to Oct 22, by mutual agreement between the Commonwealth and BAESMA, in order to enable the Integrated Logistics Support artefacts to be further matured thus significantly increasing the likelihood of achieving an optimal outcome from the design review process. The Head Contract Key Milestone associated with SSSDR is forecast to be achieved in Mar 23.
4	The Commonwealth and BAESMA are developing the scope of the PDR. The PDR exit event will be conducted in Jul 23 and will be focused on setting the Allocated Baseline (for the design of the Batch 1 ships and the LBTS(D&S)) and examining options to control the accumulation of risk into the detailed design leading into the Batch 1 Build stage. The forecast date been adjusted from Jul 23 (as reported in the 2020-21 report) to Oct 23 to align with the Head Contract Key Milestone date for PDR which is based on the Commonwealth's acceptance of the Key Milestone Progress Certificate. It is noted that the acceptance of a Progress Certificate for a Design Review is a number of months after the Design Review exit event to enable the closure or downgrading of action items that arise during the activity.
5	Forecast dates for events occurring more than 18 months from the current date are not robust and should be considered indicative dates only as the Commonwealth and BAESMA are in the process of re-baselining the schedule for the D&P scope beyond the PDR event. The D&P scope schedule re-baseline activity will be complete in Aug 22 in advance of the second Integrated Baseline Review (IBR2) to be conducted in late 2022.
6	Previous PDSS's have referred to a 'Critical Design Review – Combat System' event. The project will not conduct an event by this name. The concept of a 'Critical Design Review – Combat System' was contemplated prior to contract signature, however, it was not included in the System Review Plan that was agreed between the Commonwealth and BAESMA at contract signature as its scope was incorporated within the scope of the other Critical Design Reviews.
7	Previous PDSS's have not referred to the Critical Design Review – Support System (SSCDR) event. The date for this design review (Apr 25) was brought into the Head Contract via the Integrated Logistics Support (ILS) program contract change executed in Feb 21.
8	Forecast design review dates, derived from the Contract Master Schedule, include hard constraints. This means the dates are considered achievable and will not move if schedule slippage occurs. The D&P scope schedule re-baselining, in preparation for IBR2 in late 2022, may result in adjustments to design reviews that are currently subject to a hard constraint.
9	The Original Planned and Current Contracted dates for PDR are set as N/A due to this Design Review not being included into the Head Contract as a Key Milestone. This was addressed through a change to the Head Contract that was executed during the 2021-22 review period, however, the Effective Date of the change was 01 Jul 22 (which falls outside the review period).
10	The SCDR, FCDR and SSCDR are included in the Head Contract as Key Milestones, however, the date is set as TBC. As such, the Current Contracted dates for these Design Reviews are set as N/A. A change to the Head Contract will be executed in the 2022-23 review period to update these Key Milestone dates. The dates will be based on the outcome of the D&P re-baseline and IBR2 activities in late 2022 – see notes 5 and 8.

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	Prototyping commencement	Dec 20	N/A	Dec 20	0	
	Ship 1 Build commencement	Dec 22	N/A	Jun 24	18	1,2
Acceptance	Ship 1	TBA	N/A	TBA	N/A	3

Notes

1	In Jun 21 the Government approved the deferral of the Ship 1 Build Commencement (Ship 1 Cut Steel) milestone date from Dec 22 to no later than Jun 24. The forecast date identified above refers to the milestone currently being worked to by the Commonwealth and BAESMA. It is noted, however, that the Batch 1 Build scope will be subject to Government Second Pass Approval in early 2024 to enable Commonwealth and BAESMA to include this scope within the Head Contract prior to Jun 24.
2	The risk to the achievement of the Ship 1 Cut Steel milestone remains, but the milestone is currently considered achievable. The production by Design Zone methodology allows construction of low risk blocks to commence in Jun 24 as forecast, which enables the design for higher risk and more complex blocks to mature.
3	This milestone is expected to be defined by Government Second Pass Approval in early 2024.

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	1,2
Initial Operational Capability (IOC)	TBA	TBA	N/A	1,2
Final Materiel Release (FMR)	TBA	TBA	N/A	1,3
Final Operational Capability (FOC)	TBA	TBA	N/A	1,3

Notes

1	SEA5000 Phase 1 has approval to procure LLTIs, perform prototyping and detail Design and Productionisation of the HCF.
2	These milestones are expected to be defined by Government in early 2024 when approval for Batch 1 Build is sought.
3	These milestones are expected to be defined by Government in subsequent Second Pass Approvals.

Schedule Status at 30 June 2022

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/Scope Delivery Performance

4.1 Measures of Materiel Capability/Scope Delivery Performance

Traffic Light Diagram: Percentage Breakdown of Materiel Capability/Scope Delivery Performance

Not Applicable

Green:
The Project does not currently have any materiel capability delivery approved. The Project is currently approved for the D&P stage, inclusive of prototyping and procurement of LLTI for the HCF. Capability requirements continue to be refined and assessed against the Second Pass approved scope, cost and schedule. The Project is expected to return to Government in early 2024 to seek approval of the scope and funding required for the Batch 1 Build stage.

Blue:
In Feb 22, the Project obtained Interim Pass approval from Government to increase the Head Contract D&P scope to include four additional prototyping blocks in addition the five BAESMA is already contracted to build.
In May 22, the Commonwealth approved BAESMA, under the current D&P scope and budget, to fabricate a 'proof of concept test rig' as a risk reduction measure for the fabrication of the Ship 1 mast.

Amber:
As described in Section 5, the Project is currently managing a variety of technical risks related to the achievement of Navy materiel capability requirements. These risks are primarily related to the integration of the combat system into the UK Type 26 reference ship design, and constraints arising from design margin and fundamental naval architecture limits being reached.

Red:
N/A

Note

This Traffic Light Diagram 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	The Project has approval to procure LLTIs, perform prototyping and detailed Design and Productionisation of the HCF. These milestones are expected to be defined by Government in subsequent Second Pass 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
The HCF design is approaching fundamental naval architecture limits on weight and stability, and is in danger of either exceeding one or more platform limitations or providing in-service growth margins that substantially limit future capabilities.	The Project is tracking naval architecture limits and design margins closely through Head Contract deliverables such as the Margin Monitoring Program, the Quarterly Weight Report, and the Mandated System Review process. The next mandated review is the Preliminary Design Review planned for July 2023.
Change decisions are made without understanding technical, cost and schedule implications, leading to schedule slippage, cost growth, and an inability to achieve holistic technical performance objectives for Ship 1.	The Project has established and placed on contract the Mission System Functional Baseline and is now progressing towards the Allocated Baseline. BAESMA is undertaking a program re-baseline to update the Contract Master Schedule in preparation for the next Integrated Baseline Review.
The HCF design is not sufficiently mature to commence and maintain continuous, efficient production in Q2 2024.	Design Separation is being achieved via a staged release approach. The separation of Design Zones is sequenced to ensure spatial design, planning, and procurement activities are completed to support the shipyard production schedule.
The workforce requirements for the SEA5000 Phase1 capability and support system are not fully resourced within Navy's approved uniformed workforce guidance.	The Project, with Navy and BAESMA, is analysing the ship's Scheme of Complement to ensure it is fit for purpose. Positions will be prioritised to ensure a requisite workforce capability is available to support the HCF introduction into service.
The shipbuilding industry is not acquiring, developing, promoting or sustaining sufficient industrial shipbuilding workforce to support, operate and maintain Continuous Naval Shipbuilding.	BAESMA's plans, such as the Continuous Naval Shipbuilding (CNS) Strategy and CNS Plan, Workforce Management Plan and Supply Chain Management Plan, describe industry obligations and initiatives to develop the workforce and supply chains. The rating of this risk has been reduced to Medium since the 2020-21 report due to the progress that has been made through the approval of the Head Contract management plans, prototyping activities at the Osborne Naval Shipyard, and other enterprise-wide initiatives being implemented by the National Naval Shipbuilding Office.
BAESMA and the Type 26 Original Equipment Manufacturers do not maximise opportunities for Australian industry participation in each batch and achieve sovereign shipbuilding capability for Australia.	The Project is constantly striving to better understand the Australian industrial base and identify more opportunities to invest in, and develop, local industry capability and capacity. Australian Industry Capability (AIC) obligations are described in the Head Contract AIC Strategy and AIC Plan. The rating of this risk has been reduced to Medium since the 2020-21 report due to the progress that has been made through the approval of Head Contract management plans and a contract change that identified and locked-in Local Industry Investment funding for the Batch 1 Build stage.
Combat System integration into the ship is not sufficiently mature to support achievement of expected capability requirements for Ship 1/Batch 1.	The Project, BAESMA, and other key combat system suppliers will refine their combat system integration and assurance roles through an update to the Head Contract Statement of Work and deliverables such as the Engineering Management Plan, System Integration Plan and Combat System Assurance Plan.
The current Design and Productionisation scope realises a Batch 1 design that does not form a suitable basis for future batches, given the expectation of further capability insertion into future batches.	The Project is studying margin remediation options for future batch designs. The Project is continually reviewing requirements and developing plans to address obsolescence and capability development opportunities for future batches.
Emergent Risks (risk not previously identified but has emerged during 2021–22)	
Description	Remedial Action
Unable to raise, train and sustain future Navy workforce in order to support future Navy capabilities and provide Seaworthiness assurance.	The Project, with Navy and BAESMA, will identify training opportunities such as high fidelity simulators, and conduct workforce modelling/analysis to identify key skillsets required.
The delivered HCF (and future batches) has insufficient capability to counter current and emerging threats.	Ships Division, through the Maritime Integrated Warfare Systems Branch, to establish a Surface Combatant System Integration Service to support a spiral development strategy for the HCF.

5.2 Major Project Issues

Description	Remedial Action
Information exchange is constrained by security, cyber considerations, export, intellectual property, Defence policies and tools.	This is now being managed as a risk as there is a Frigate MoU in place between the Australian and UK governments. The Project actively participates in the Global Combat Ship User Group's information exchange working group. The Project works with the US and UK security authorities to clarify bilateral agreements, and with BAESMA to develop the Data Management System. The rating of this risk has been reduced to Medium since the 2020-21 report due to the governance associated with the Frigate MoU and the GCS UG now being business-as-usual combined with the progress that has been made in the roll-out of the DMS and other Information Management and Technology (IM&T) initiatives.
The acquisition and sustainment of Hunter Class Frigate is not achievable with the allocated funding.	The Project uses a process of progressive Government approval. Cost models are refined through the execution of discrete Head Contract scopes to meet budgeting and programming expectations along with proactive management of cost risk.
The Build Scope Statement contains a level of uncertainty unacceptable to SEA5000-1, Defence and Government.	This is now being managed as a risk as the Project is working collaboratively with BAESMA to meet an early 2024 approach to Government for the Batch 1 Build scope. The Head Contract has been changed to include a program for cost, risk and uncertainty management leading up to the delivery of BAESMA's Batch 1 Build scope response.

Note
Major risks and issues in Section 5 are excluded from the scope of the Auditor-General's Independent Assurance Report.

Section 6 – Lessons Learned

6.1 Key Lessons Learned

Description	Categories of Systemic Lessons
Government Furnished Material (GFM), data and information requirements need to be clearly defined, articulated and agreed between the platform designer, the various CoA Branches, Divisions and SPO's responsible for delivery, and materiel suppliers. This is required in terms of both the level of data maturity required, and schedule required by dates to enable the platform designer to meet key project milestones.	Schedule Management
A Lessons and Opportunities Framework finalised and agreed to ensure lessons learnt are more robustly captured, assessed and where relevant encapsulated within processes, plans and procedures.	Lessons Learnt Processes
A Quality Management Plan compliant with CASG Quality Management System and in accordance with the guidance included in ISO Standard 9004:2018 is required to ensure continuous and sustained success particularly within a Project that is highly complex.	Quality Management

Section 7 – Project Structure

7.1 Project Structure as at 30 June 2022

Unit	Name
Division	Ships Division
Branch	Hunter Class Frigate Branch