The Auditor-General Auditor-General Report No.21 2022–23 Performance Audit

## Department of Defence's Procurement of Hunter Class Frigates

Department of Defence

Australian National Audit Office

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Canberra ACT 10 May 2023

Dear President Dear Mr Speaker

In accordance with the authority contained in the Auditor-General Act 1997, I have undertaken an independent performance audit in the Department of Defence. The report is titled *Department of Defence's Procurement of Hunter Class Frigates*. I present the report of this audit to the Parliament.

Following its presentation and receipt, the report will be placed on the Australian National Audit Office's website — http://www.anao.gov.au.

Yours sincerely

A Hehi

Grant Hehir Auditor-General

The Honourable the President of the Senate The Honourable the Speaker of the House of Representatives Parliament House Canberra ACT

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# Audit snapshot

## Auditor-General Report No.21 2022–23

Department of Defence's Procurement of Hunter Class Frigates



- On 29 June 2018 the Australian Government announced the selection of BAE's Global Combat Ship – Australia as the design for the Hunter class frigate program.
- The government planned to build nine new frigates in three batches at Osborne, South Australia.
- This is the latest in a series of audits on the Department of Defence's (Defence) naval shipbuilding program. It provides independent assurance to Parliament on Defence's procurement, decision-making and advising, contracting, and delivery to date.

## Key facts

- The acquisition was planned as a foundation project in the government's continuous naval shipbuilding program.
- The estimated acquisition cost of the Hunter class project (SEA 5000 Phase 1), as publicly reported in July 2020, was \$45.6 bn (outturned).
- SEA 5000 Phase 1 is focused on design, construction and delivery of nine Hunter class frigates and associated support systems. The current approved stage of the project focuses on design and productionisation, at a head contract value of \$1.9 bn in December 2018.



Defence's management to date of its procurement of Hunter class frigates has been partly effective. Defence's procurement process and related advisory processes lacked a value for money focus, and key records, including the rationale for the procurement approach, were not retained. Contract expenditure to date has not been effective in delivering on project milestones, and the project is experiencing an 18-month delay and additional costs due in large part to design immaturity.

## What did we recommend?

- There were two recommendations to Defence. These were to improve: compliance with record keeping requirements; and advice to government on whole-of-life costs and value for money.
- Defence agreed to the recommendations.

\$2.6 bn

Value of head contract at March 2023. \$693 m Value of contract variations at

contract variations at D March 2023. constr

# 18 months

Delay to commencement of construction, approved in June 2021.

## **Summary and recommendations**

## Background

1. The Royal Australian Navy (the Navy) currently has eight ANZAC class frigates. The 2016 Defence White Paper stated that:

The Government is bringing forward the future frigate program to replace the Anzac Class frigates. A continuous build of the Navy's future frigates will commence in 2020. The future frigates will be built in South Australia following completion of a Competitive Evaluation Process.<sup>1</sup>

2. On 29 June 2018, the Australian Government announced the outcome of the competitive evaluation process, which had assessed designs by three shipbuilders:

The frigates, to be designed by BAE Systems and built by ASC Shipbuilding, are central to our plan to secure our nation, our naval shipbuilding sovereignty and create Australian jobs.

BAE's *Global Combat Ship* – *Australia* will provide our nation with one of the most advanced anti-submarine warships in the world – a maritime combat capability that will underpin our security for decades to come.

The Future Frigates, named the *Hunter* class, will be built in Australia, by Australians, using Australian steel.

This \$35 billion program will create 4,000 Australian jobs right around the country and create unprecedented local and global opportunities for businesses large and small.

The *Hunter* class will begin entering service in the late 2020s replacing the eight Anzac Frigates, which have been in service since 1996.<sup>2</sup>

3. Construction of the Hunter class frigates is part of the Australian Government's continuous naval shipbuilding program intended to develop sovereign Australian shipbuilding and sustainment. The Australian Government's *2020 Force Structure Plan* publicly reported that the cost of the Hunter class frigates was \$45.6 billion out-turned.<sup>3</sup>

## Rationale for undertaking the audit

4. The acquisition of nine Hunter class frigates is a key part of the Australian Government's substantial planned expenditure on naval shipbuilding and maritime capability<sup>4</sup> and contributes

<sup>1</sup> Department of Defence, 2016 Defence White Paper, p. 113, available from <u>https://www.defence.gov.au/about/strategic-planning/2016-defence-white-paper</u> [accessed 8 November 2022].

<sup>2</sup> Prime Minister, Minister for Defence, Minister for Defence Industry and Minister for Finance, 'The Hunter class – defending Australia and securing our shipbuilding sovereignty', joint media release, 29 June 2018, available from <a href="https://www.minister.defence.gov.au/minister/marise-payne/media-releases/joint-media-release-prime-minister-defence-minister-1">https://www.minister.defence.gov.au/minister/marise-payne/media-releases/joint-media-release-prime-minister-defence-minister-1</a> [accessed 26 October 2022]. BAE Systems is headquartered in the United Kingdom. The other participants in the competitive evaluation process, which was a limited tender approach, were Fincantieri S.p.A of Italy and Navantia S.A of Spain.

<sup>3</sup> Mid-Year Economic and Fiscal Outlook 2019–20 price and exchange.

<sup>4</sup> Defence reported to the Parliament in the most recent Major Projects Report (MPR) that the project is 'a foundation project in the Government's Continuous Naval Shipbuilding Program' and 'will provide the RAN [Royal Australian Navy] with the critical capability required to defend Australia well into the future.' See Auditor-General Report No.12 2022–23 2021–22 Major Projects Report, p. 137, available at (internet) <a href="https://www.anao.gov.au/work/major-projects-report/2021-22-major-projects-report">https://www.anao.gov.au/work/major-projects-report/2021-22</a> Major Projects Report (MPR) that the project is 'a foundation project in the Government's Continuous Naval Shipbuilding Program' and 'will provide the RAN [Royal Australian Navy] with the critical capability required to defend Australia well into the future.' See Auditor-General Report No.12 2022–23 2021–22 Major Projects Report, p. 137, available at (internet) <a href="https://www.anao.gov.au/work/major-projects-report/2021-22-major-projects-report">https://www.anao.gov.au/work/major-projects-report/2021-22</a> Major Projects Report (MPR) that the future.' See Auditor-General Report No.12 2022–23 2021–22 Major Projects Report, p. 137, available at (internet) <a href="https://www.anao.gov.au/work/major-projects-report/2021-22-major-projects-report">https://www.anao.gov.au/work/major-projects-report/2021-22-major-projects-report</a>.

to the ongoing capability of the Australian Defence Force.<sup>5</sup> This audit examined the effectiveness of the Department of Defence's (Defence) procurement of Hunter class frigates to date and the achievement of value for money through Defence's procurement activities.

5. The audit builds on previous Auditor-General work on Defence's acquisition and sustainment of Navy ships and implementation of the Australian Government's 2017 *Naval Shipbuilding Plan*, to provide independent assurance to the Parliament on Defence's planning, procurement, decision-making and advising, contracting and delivery of the Hunter class frigates to date.

## Audit objective and criteria

6. The objective of the audit was to assess the effectiveness of the Department of Defence's procurement of Hunter class frigates and the achievement of value for money to date.

7. To form a conclusion against the objective, the following high-level criteria were adopted.

- Did Defence conduct an effective tender process?
- Did Defence effectively advise government?
- Did Defence establish fit-for-purpose contracting arrangements?
- Has Defence established effective contract monitoring and reporting arrangements?
- Has Defence's expenditure to date been effective in delivering on project milestones?

8. This audit reports on Defence procurement activity and developments in project SEA 5000 Phase 1 (Hunter class frigate design and construction) to March 2023. The government and Defence have indicated that the planned Hunter class capability has been considered as part of the Defence Strategic Review and related government processes.<sup>6</sup>

<sup>5</sup> The 2020 Force Structure Plan included references to the acquisition or upgrade of up to 23 classes of Navy and Army vessels representing potential expenditure of \$168 billion to \$183 billon. The planned future investment at the time included the Attack class submarine, which was cancelled in 2021. As of March 2023, Defence had not released updated figures on planned total naval shipbuilding expenditure.

The Defence Strategic Review was commissioned by the Australian Government and announced on 3 August 2022. Its final report was provided to the Prime Minister and Minister for Defence on 14 February 2023. The review's terms of reference included a requirement that: 'The Review must consider all elements of the Integrated Investment Program and provide recommendations for the Program's reprioritisation, particularly in light of recently announced large-scale projects, to provide Australia with the force structure required by 2032-33.' A public version of the final report of the review, which included the terms of reference, was released on 24 April 2023, available from: <a href="https://www.defence.gov.au/about/reviews-inquiries/defence-strategic-review">https://www.defence.gov.au/about/reviews-inquiries/defence-strategic-review</a> [accessed 26 April 2023]. In the foreword to the public version, the reviewers noted at p. 11 that it was 'necessarily qualitatively different' from the version provided to the Prime Minister and Minister for Defence and 'less detailed, as many of the judgements and recommendations in the Review are sensitive and classified.' The review, its recommendations and the government's response to the recommendations are discussed in the following places in this audit report: footnotes 21, 52 and 169 and paragraphs 1.27, 3.120, 3.140–3.141 and 3.144–3.145.

In respect to the Hunter class frigates, the Chief of Navy advised, at the 15 February 2023 hearings of the Senate Foreign Affairs, Defence and Trade Legislation Committee, that: 'This is also one of those capabilities that have been and are being reviewed by the Australian government' in the context of the Defence Strategic Review. See Senate Foreign Affairs, Defence and Trade Legislation Committee, 2022–2023 Supplementary Budget Estimates, Proof Committee Hansard, 15 February 2023, p. 58. Available at: https://www.aph.gov.au/Parliamentary Business/Hansard/Estimates Transcript Schedule [accessed 20 April 2023].

## Conclusion

9. The Department of Defence's management to date of its procurement of Hunter class frigates has been partly effective. Defence's procurement process and related advisory processes lacked a value for money focus, and key records, including the rationale for the procurement approach, were not retained. Contract expenditure to date has not been effective in delivering on project milestones, and the project is experiencing an 18-month delay and additional costs due in large part to design immaturity.

10. Defence did not conduct an effective limited tender process for the ship design. The value for money of the three competing designs was not assessed by officials, as the Tender Evaluation Plan (TEP) proposed that government would do so. The Commonwealth Procurement Rules (CPRs) and the Defence Procurement Policy Manual required officials responsible for procurement to be satisfied, after reasonable inquiries, that the procurement achieved a value for money outcome. Defence did not otherwise document the rationale for the TEP not requiring a value for money assessment or comparative evaluation of the tenders by officials.

11. Defence's advice to the Australian Government at first and second pass was partly effective. While the advice was timely and informative, Defence's advice at second pass was not complete. Defence did not advise that a value for money assessment had not been conducted by Defence officials and that under the TEP Defence expected government to consider the value for money of the tenders.

12. Defence has established largely fit-for-purpose contracting arrangements for the design and productionisation stage, and largely effective contract monitoring and reporting arrangements to ensure adequate visibility of performance and emerging risks and issues. However, the contract management plan was established 44 months (3.6 years) after contract execution.

13. Defence's expenditure to date has not been effective in delivering on project milestones, and the cost of the head contract has increased. Lack of design maturity has resulted in an 18-month delay to the project and extension of the design and productionisation phase, at an additional cost to Defence of \$422.8 million.<sup>7</sup> At January 2023 the project was forecast to exceed the whole of project budget approved by government by a significant amount.

## **Supporting findings**

## **Tender process**

14. To select ship designs for the government-approved competitive evaluation process (CEP) — a limited tender approach — Defence conducted a shortlisting process informed by its own assessments and analysis by the RAND Corporation. Defence did not retain complete records of its assessments, and its rationale for shortlisting all selected designs for the CEP was not transparent. (See paragraphs 2.3 to 2.20)

15. Defence's Endorsement to Proceed documentation for the CEP approved the Request for Tender (RFT) going ahead and set out tender evaluation criteria and expectations for the

<sup>7</sup> Defence advised the ANAO in April 2023 that it expected the \$422.8 million would be offset from the price of the planned batch one build scope.

assessment of value for money. However, the expectations regarding the assessment of value for money were not operationalised, as the Tender Evaluation Plan (TEP) specified that value for money would not be assessed by Defence. (See paragraphs 2.21 to 2.29)

16. The TEP, which was approved by the probity advisor, did not document how the evaluation process would address the core rule of the Commonwealth Procurement Rules (CPRs), which is achieving value for money. The CPRs require officials responsible for procurement to be satisfied, after reasonable inquiries, that the procurement achieves a value for money outcome. Defence did not document the rationale for the TEP not requiring a value for money assessment or comparative evaluation of the tenders by officials. (See paragraphs 2.30 to 2.35)

17. As the tender evaluation process was underpinned by a TEP that specifically excluded a value for money assessment of tenders by officials, the Source Evaluation Report (SER) did not include a value for money assessment. (See paragraphs 2.36 to 2.39)

18. Defence conducted the tender evaluation in accordance with the TEP but did not retain a record of delegate approval of the SER Supplement document, which recorded the outcomes of the evaluation process. (See paragraphs 2.40 to 2.45)

19. Not all probity matters were recorded and addressed as required by the November 2016 Legal Process and Probity Plan for the procurement. (See paragraphs 2.46 to 2.51)

## Advice to government

20. Defence's advice to government at first pass was timely and informative. However, its recommendation to include the BAE Type 26 design in the competitive evaluation process (CEP) as the third option, instead of the alternate, was not underpinned by a documented rationale. (See paragraphs 2.53 to 2.56)

21. At second pass, Defence's advice to government on the selection of the preferred ship design was not complete. Defence did not draw the following matters to government's attention.

- Contrary to the requirements of the Commonwealth Procurement Rules (CPRs), a value for money assessment had not been conducted by Defence officials. Defence's assessment was against the high-level capability requirements.
- Under the Tender Evaluation Plan (TEP) Defence expected government to consider the value for money of the tenders.
- A 10 per cent reduction to tendered build costs had been applied by Defence. The reduction had not been negotiated with tenderers.
- Sustainment cost estimates had not been prepared for government consideration as required by the Budget Process Operational Rules applying to Defence. (See paragraphs 2.57 to 2.85)

22. In its assessment, which was included in Defence's second pass advice to government, the Department of Finance (Finance) drew attention to the 10 per cent reduction to tendered build costs and other limitations in Defence's advice on costs. Finance did not comment on Defence's lack of a value for money assessment, compliance with the CPRs or quality of advice regarding value for money. (See paragraphs 2.79 to 2.80)

## Contracting arrangements

23. When it was executed in December 2018, the head contract reflected the contract negotiation outcomes reported to the delegate. However, the extent to which these outcomes were in line with Defence's original negotiation positions is not transparent because not all outcomes were clearly defined or reported against, and some negotiation issues were not finalised when the head contract was signed. (See paragraphs 3.3 to 3.12)

24. Milestones under the head contract have clear entry and exit criteria and due dates, with the first milestone payable on contract execution. (See paragraph 3.15)

25. Performance expectations are clearly set out in the contracted statement of work and are linked to performance measures, with processes to manage poor performance included in the conditions of contract. Commercial levers to incentivise the prime contractor (BAE Systems Maritime Australia) and drive value for money outcomes in project delivery are limited. Key commercial levers such as profit moderation provisions were not active at the time the head contract was executed. On 29 June 2022 Defence signed a contract change proposal activating profit moderation for the Scope Fee from 1 July 2022, enlivening a key commercial lever in the head contract. (See paragraphs 3.18 to 3.28)

26. The head contract established processes for managing contract change proposals (CCPs). As of 31 March 2023, there were 93 contract changes and the number of key milestones had increased from 25 to 37. Thirty-six of the 93 CCPs approved by Defence were price impacting and the cost of the contract has increased by \$693.2 million. This represents a 36 per cent increase to the design and productionisation cost of the Hunter class. (See paragraphs 3.13 to 3.17)

27. Amendments to the head contract mean that between December 2018 (contract execution) and March 2023, the contract has increased in price from \$1,904.1 million (GST exclusive) to \$2,597.4 million (GST exclusive). The contract price remained within the (PGPA Act) section 23 commitment approval amount as of 31 March 2023. (See paragraphs 3.13 to 3.17)

## Monitoring and reporting arrangements

28. The contract management plan was established 44 months (3.6 years) after execution of the head contract. Defence has managed the contract largely in the absence of an approved contract management plan, and BAE Systems Maritime Australia's (BAESMA's) contract master schedule remained unapproved as of March 2023. (See paragraphs 3.29 to 3.30)

29. Contracted requirements for BAESMA to report and meet with Defence have been established. Additional reporting requirements have been established in response to delays in the delivery of a contractable offer for the batch one build scope from BAESMA. (See paragraphs 3.38 to 3.43)

30. Governance and oversight arrangements — to manage and oversee project performance, risks and issues — have generally been established in a timely manner. Defence records indicate that governance bodies have met at the expected cadence and with the required Defence senior leadership attendance. (See paragraphs 3.32 to 3.37 and 3.44 to 3.45)

31. Defence has established appropriate project and program monitoring arrangements. These include performance monitoring mechanisms to inform Defence of relevant developments overseas, and Independent Assurance Review (IAR) processes. IARs have found insufficient resources, in particular skills and expertise in the project team, and that increased senior leadership attention was needed to manage realised risks and mitigate risks exceeding project risk appetite. (See paragraphs 3.46 to 3.50)

32. More generally, the Surface Ships Advisory Committee (SSAC) was asked to review cost, schedule and risk across the project and provide input to the Australian Government's Defence Strategic Review. Defence advised the Parliament in February 2023 that the SSAC's review had not resulted in any changes in scope to the project. (See paragraph 3.51)

## **Delivery on project milestones**

33. Actual project expenditure at 31 January 2022 was \$2,225.9 million, with \$1,308.4 million spent on the head contract with BAE Systems Maritime Australia (BAESMA). Defence has made milestone payments without all exit criteria being met and extended milestone due dates in response to project delays. (See paragraphs 3.53 to 3.84)

34. In June 2021 the Australian Government agreed to extend the design and productionisation period, and to an 18-month delay to the cut steel date for ship one, to enable Defence and BAESMA to improve design maturity and develop a contractable offer for the first batch of ships. The June 2022 contract change proposal to extend the design and productionisation phase increased the contract price by \$422.8 million (GST exclusive). (See paragraphs 3.106 to 3.116)

35. Design immaturity has affected Defence's planning for the construction phase, led to an extension of the design and productionisation phase at additional cost to Defence, and diverted approved government funding for long lead time items to pay for the extension and other remediation activities. Planning for the transition from the existing ANZAC class frigates to the Hunter class capability has also been affected. (See paragraphs 3.104 to 3.126)

36. In December 2021 Defence advised the Australian Government that it considered that BAESMA would recover the schedule delay over the life of the project and deliver the final ship as planned in 2044. (See paragraph 3.108)

37. The January 2023 Surface Ships Advisory Committee (SSAC) report noted that BAESMA had advised that a risk adjusted schedule would add 16 months to the delivery of the first Hunter class, moving delivery from early 2031 to mid–2032. (See paragraph 3.117)

38. As of January 2023, Defence's internal estimate of total acquisition costs, for the project as a whole, was that it was likely to be significantly higher than the \$44.3 billion advised to government at second pass in June 2018. The SSAC considered that current efforts by Defence and industry were unlikely to result in a cost model within the approved budget. As of March 2023, while Defence had advised portfolio Ministers that the program is under extreme cost pressure, it had not advised government of its revised acquisition cost estimate, on the basis that it is still refining and validating the estimate. (See paragraphs 3.86 to 3.97)

39. Defence has approved BAESMA's Continuous Naval Shipbuilding and Australian Industry Capability (AIC) strategies and plans, with an Australian contract expenditure target of 58 per cent of total contract value and 54 per cent of the design and productionisation phase. (See paragraphs 3.127 to 3.135)

40. The February 2022 Independent Assurance Review (IAR) was not assured that there was a clear path to realising the policy objective of a local surface combatant ship designing capability, due to delays in transferring relevant personnel and skills to Australia. (See paragraph 3.137)

41. In early 2023 the project remained in the design and productionisation phase, which is intended to inform Defence's planning and contracting for the ship build, including Defence's final estimate of construction costs. Defence advised the Parliament in February 2023 that the project is managing a range of complex risks and issues and is considering remediation options. Defence further advised that the Hunter class was one of the capabilities that were reviewed by government in the context of the Defence Strategic Review, which presented its final report to ministers on 14 February 2023. A public version of the final report was released on 24 April 2023. (See paragraphs 3.142 to 3.145)

## **Recommendations**

Recommendation no. 1The Department of Defence ensure compliance with the DefenceParagraph 2.13The Department of Defence ensure compliance with the DefenceRecordsManagementPolicyandstatutoryrecordkeepingrequirementsover the life of the Hunter class frigates project,including capturing the rationale for key decisions, maintainingrecords, and ensuring that records remain accessible over time.

Department of Defence response: Agreed.

Recommendation no. 2 Paragraph 2.101 The Department of Defence ensure that its procurement advice to the Australian Government on major capital acquisition projects documents the basis and rationale for proposed selection decisions, including information on the department's whole-of-life cost estimates and assessment of value for money.

Department of Defence response: Agreed.

## Summary of entity responses

42. The summary responses from the Department of Defence, with ANAO comments, and the Department of Finance are provided below. Their full responses are included at Appendix 1.

## **Department of Defence**

The Hunter class frigate program is a multi-stage procurement that will span three decades with an approval pathway that returns to Government multiple times. In June 2018 Government second pass approval was sought for the selection of the Type 26 as the reference ship design; the sale of ASC Shipbuilding; \$6.7 billion in funding for the design and productionisation phase; and agreement to return progressively for funding for the construction of the ships in three batches. Approval has not been sought for the funding to acquire nine Hunter class frigates.

Defence is committed to complying with statutory record keeping requirements. Defence notes that the Hunter class frigate project has over 730,000 documents (more if the multiple versions of documents as they are amended over time are included) within its Records Management System. Of the thousands of documents identified and requested by the ANAO, less than ten documents were unable to be located across the Department.

Defence ensures all procurement advice to Government on major acquisition projects includes the basis and rationale for proposed decisions, including value for money and whole-of-life cost estimates, and contends that this did occur in relation to the Hunter class frigate project.

#### ANAO comments on Department of Defence summary response

43. As discussed in this audit report in paragraphs 2.7 to 2.15, shortcomings in Defence recordkeeping are discussed throughout the report. In the context of the competitive evaluation process, Defence did not retain complete records of the key decisions made during the shortlisting process for the evaluation activity, including: the basis for the Ship Building Steering Group's decision to approve seven ship designs for further analysis; and the rationale for the Defence Secretary's (the decision maker's) selection of the BAE Type 26 over the French FREMM (DCNS) as the third option. In the context of Defence's development of advice for second pass government approval, the minutes of the relevant Defence Committee meeting were not retained and it is unclear what deliberations took place. The hand-written notes provided to the ANAO as evidence did not include references to the relative value for money of the tenders (discussed in paragraphs 2.64 to 2.66).

44. As discussed in this audit report in paragraphs 2.53 to 2.102, Defence's advice to the Australian Government at second pass on the selection of the preferred ship design did not include an assessment of value for money or include whole-of-life cost estimates as required by the Budget Process Operational Rules applying to Defence.

#### **Department of Finance**

In relation to the procurement process conducted by Defence, a key Finance role is to issue and support the Commonwealth Procurement Rules (CPRs) which set out the rules that officials must comply with when undertaking procurement. It is the responsibility of the Accountable Authority to provide a framework and instructions to relevant entity officials to enable them to carry out procurement processes in a manner that is compliant with the CPRs. The CPRs do not include a requirement to consult Finance on compliance with the CPRs. However, Finance maintains and promotes a CPRs advisory function that entities can consult when undertaking procurements.

In formulating its advice to Government, Finance drew on information provided by Defence throughout the procurement process and in the lead up to the Government decision. This provided Finance with visibility of Defence's assessment of a number of matters (including quality of the goods to be acquired, how well the goods would meet their intended purpose, relevant experience and performance history of potential suppliers and whole-of-life costs) that went to the consideration of value for money. Finance highlighted these Defence considerations in advice to Government.

45. At Appendix 2, there is a summary of improvements that were observed by the ANAO during the audit.

## Key messages from this audit for all Australian Government entities

46. Below is a summary of key messages, including instances of good practice, which have been identified in this audit and may be relevant for the operations of other Australian Government entities.

#### Procurement

- The core rule of the Commonwealth Procurement Rules (CPRs) is achieving value for money, irrespective of the type of procurement process undertaken. Responsibility for assessing value for money rests with officials under the CPRs, including for processes where ministers are the final decision-makers on procurement outcomes. Officials discharge this responsibility by undertaking activities that include:
  - undertaking a value for money assessment as required under the CPRs;
  - advising ministers on the outcome of the value for money assessment;
  - advising ministers of CPR requirements; and
  - maintaining records as required under the CPRs.
- Entities can demonstrate compliant, transparent and accountable procurement processes through the creation and retention of appropriate records, including for: decisions on the procurement approach; the shortlisting of options; the method for assessing value for money; assessment against selection criteria; and the rationale for the decision that was made.

#### **Contract management**

- Entities are better positioned to manage contract deliverables when relevant documentation to support contract management, including contract management plans, are developed early in the procurement process. Entities should also review the implementation of relevant contract documentation on a regular basis to ensure it remains fit-for-purpose.
- Effective contract management requires the development of appropriate commercial levers to manage performance and the utilisation of those levers when non-performance or underperformance against contractual obligations, such as key milestones, occurs.

Audit findings

## 1. Background

## Introduction

1.1 The Royal Australian Navy (the Navy) currently has eight ANZAC class frigates. The ANZAC class is a long-range frigate capable of air defence, surface and undersea warfare, surveillance, reconnaissance and interdiction. The first of class ship, *HMAS ANZAC*, was commissioned in 1996. The 2009 Defence White Paper announced that:

The Government will also acquire a fleet of eight new Future Frigates, which will be larger than the Anzac class vessels. The Future Frigate will be designed and equipped with a strong emphasis on submarine detection and response operations. They will be equipped with an integrated sonar suite that includes a long-range active towed-array sonar, and be able to embark a combination of naval combat helicopters and maritime Unmanned Aerial Vehicles (UAV).<sup>8</sup>

#### 1.2 The 2016 Defence White Paper stated that:

The Government is bringing forward the future frigate program to replace the Anzac Class frigates. A continuous build of the Navy's future frigates will commence in 2020. The future frigates will be built in South Australia following completion of a Competitive Evaluation Process.<sup>9</sup>

1.3 On 29 June 2018, the Australian Government announced the outcome of the competitive evaluation process:

The frigates, to be designed by BAE Systems and built by ASC Shipbuilding, are central to our plan to secure our nation, our naval shipbuilding sovereignty and create Australian jobs.

BAE's *Global Combat Ship* – *Australia* will provide our nation with one of the most advanced anti-submarine warships in the world – a maritime combat capability that will underpin our security for decades to come.

The Future Frigates, named the *Hunter* class, will be built in Australia, by Australians, using Australian steel.

This \$35 billion program will create 4,000 Australian jobs right around the country and create unprecedented local and global opportunities for businesses large and small.

The *Hunter* class will begin entering service in the late 2020s replacing the eight Anzac Frigates, which have been in service since 1996.<sup>10</sup>

1.4 Construction of the Hunter class frigates is part of the Australian Government's continuous naval shipbuilding program intended to develop sovereign Australian shipbuilding and sustainment.

<sup>8</sup> Department of Defence, 2009 Defence White Paper, p. 71, available from <u>https://www.defence.gov.au/sites/default/files/2021-08/defence\_white\_paper\_2009.pdf</u> [accessed 18 November 2022].

<sup>9</sup> Department of Defence, 2016 Defence White Paper, p. 113, available from <u>https://www.defence.gov.au/about/strategic-planning/2016-defence-white-paper</u> [accessed 8 November 2022]. The 2016 Defence White Paper referred to nine new Future Frigates, p. 93.

Prime Minister, Minister for Defence, Minister for Defence Industry and Minister for Finance, 'The Hunter class – defending Australia and securing our shipbuilding sovereignty', joint media release, 29 June 2018, available from <a href="https://www.minister.defence.gov.au/minister/marise-payne/media-releases/joint-media-release-prime-minister-defence-minister-1">https://www.minister.defence.gov.au/minister/marise-payne/media-releases/joint-media-releases/joint-media-release-prime-minister-defence-minister-1</a> [accessed 26 October 2022].
BAE Systems is headquartered in the United Kingdom. The other participants in the competitive evaluation process, which was a limited tender approach, were Fincantieri S.p.A of Italy and Navantia S.A of Spain.

The Australian Government's 2020 Force Structure Plan publicly reported that the cost of the Hunter class frigates was \$45.6 billion out-turned.<sup>11</sup>

## SEA 5000 Phase 1 – Hunter class frigates design and construction

1.5 Nine Hunter class frigates, based on BAE Systems' Type 26 Global Combat Ship design with Australian modifications, are to be acquired under Phase 1 of the Hunter class frigate program (SEA 5000).<sup>12</sup> Project SEA 5000 Phase 1 (the project) is focused on design, construction and delivery of the Hunter class mission and support systems. An image of the planned Hunter class frigate is at Figure 1.1.



Figure 1.1: Image of the planned Hunter class frigate

Source: Image of the planned Hunter class frigate provided by Defence.

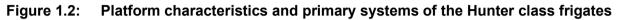
- 1.6 The project is to be delivered in the following five stages:
- competitive evaluation process to identify a designer and builder completed in 2018 (discussed in chapter two of this audit report);
- design and productionisation in progress (discussed in chapter three of this audit report);
- batch one build (ships 1–3) (planned to be considered and contracted to follow the design and productionisation stage);
- batch two build (ships 4–6) (planned to be considered and contracted to follow the construction of batch one); and

<sup>11</sup> Mid-Year Economic and Fiscal Outlook 2019–20 price and exchange.

<sup>12</sup> Department of Defence, Hunter Class Frigate [Internet], available from <u>https://www.defence.gov.au/project/hunter-class-frigate</u> [accessed 6 October 2022].

• batch three build (ships 7–9) (planned to be considered and contracted to follow the construction of batch two).<sup>13</sup>

1.7 The platform characteristics and primary systems of the approved Hunter class design are summarised in Figure 1.2. Key modifications to BAE System's Type 26 Global Combat Ship (known as the reference ship design), to meet Australian requirements, include the integration of the United States Navy's Aegis combat management system (CMS) with a Saab Australian interface and Australian CEA Technologies phased array radar.<sup>14</sup>





Source: Defence.

## **Project management arrangements**

1.8 The Chief of Navy is the capability manager, and the Navy is the capability owner.<sup>15</sup> Within the Navy, the Director-General Surface Combatants and Aviation (the Program Sponsor) is responsible for ensuring that the outcomes of all program activities are achieved and that these outcomes remain aligned with Defence strategic objectives. Within the Surface Combatants and Aviation Branch, the Director Frigates (the Capability Project Sponsor) sets direction for the project and ensures that activities and outputs are consistent with the capability needs and priorities of the capability user.

1.9 Defence's Naval Shipbuilding and Sustainment Group is responsible for managing the SEA 5000 Phase 1 acquisition on behalf of the Navy.<sup>16</sup> Within the Naval Shipbuilding and Sustainment Group, the Director-General Hunter Class Frigates (the overall Program Manager) is accountable for

<sup>13</sup> Construction planning has involved building nine frigates in three batches of three ships. In discussions with the ANAO during this audit, Defence indicated that other options had been considered internally for the construction strategy (see footnotes 168 and 169).

<sup>14</sup> In October 2017, prior to the selection of the Hunter class frigate design and builder, the Australian Government announced the selection of the United States Aegis combat management system produced by Lockheed Martin (a Foreign Military Sales arrangement with the United States government) and an Australian interface (contracted to Saab Australia) for the Hunter class frigates.

<sup>15</sup> As the capability manager, the Chief of Navy is responsible for raising, training and sustaining the capability as directed by the Chief of the Defence Force and the Secretary of Defence.

<sup>16</sup> The Naval Shipbuilding and Sustainment Group was established on 4 October 2022. Prior to the establishment of this group, the project was managed by Defence's Capability Acquisition and Sustainment Group.

delivery of the mission and support systems. The Director-General Hunter Class Frigates is supported by the Director-General Maritime Integrated Warfare Systems, who is responsible for the combat system. The Hunter class project is managed by the Hunter Class Frigates Branch which is part of the Major Surface Combatants and Combat Systems Division. The project is managed day-to-day by the project team and Project Director based in Canberra with onsite project management provided by the Naval Construction Branch based at the Osborne shipyard in South Australia.

### Head contract

1.10 On 14 December 2018, Defence entered into a head contract with ASC Shipbuilding (a subsidiary of BAE Systems Australia) valued at \$1,904.1 million, covering the design and productionisation work to support the build of the Hunter class frigates As discussed in paragraphs 1.13 to 1.15, ASC Shipbuilding commenced trading as BAE Systems Maritime Australia (BAESMA) on 11 December 2020.

1.11 As at 31 March 2023, the value of the head contract had increased to \$2,597.4 million. The key components of the head contract price as at 31 March 2023 are outlined in Table 1.1.

Table 1.1:	Components of the hea	d contract price at 31	March 2023 (\$AUD equivalent)
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Price component	Total component price (\$AUD)	
Management services <sup>a</sup>	658,794,949	
Design and productionisation <sup>a</sup>	1,323,459,685	
Long lead time items <sup>b</sup>	245,971,931	
Pass through <sup>c</sup>	369,148,790	
Total	2,597,375,355	

Note a: The management services and design and productionisation component prices include amounts for management reserve, uncertainty and other adjustments, as well as scope fee comprising BAE Systems Maritime Australia's profit margin (see paragraphs 3.21 to 3.23).

Note: Column and row totals may not add up due to rounding of individual figures.

Source: Defence documentation.

1.12 The head contract established between the Commonwealth and BAESMA sets out terms to govern the long-term relationship and contains specific provisions for management services and the design and productionisation scope of the project. Defence plans to return to the Australian Government for approval for subsequent scopes to be added under the head contract, starting with the batch one build (ships 1–3).

#### ASC Shipbuilding (later BAESMA)

1.13 As part of the procurement process and prior to execution of the head contract, the Commonwealth transferred ASC Shipbuilding to BAE Systems Australia at a nominal cost of \$1.00

Note b: Long lead time items are defined under the head contract as: 'a Mission System component or Support System Component that: a) the Contractor commits to procure as part of a Scope which will be delivered to the Commonwealth as part of another Scope; and b) is necessary to ensure timely delivery of the Supplies in accordance with the Approved CMS [Contract Master Schedule]'.

Note c: The 'pass through' component of the contract price comprises funding for expenses incurred by BAE Systems Maritime Australia in performing the work under the contract on a cost recovery basis for which no fee is to apply, in accordance with allowable cost rules. Examples include securities; warranties; intellectual property licence fees and royalties; insurances; travel and relocation costs; government fees and charges; and shipyard and Commonwealth premises costs including lease or licence fees, and utilities.

on 14 December 2018. The Commonwealth subsequently entered into the head contract for the Hunter class frigate program with ASC Shipbuilding. On 29 June 2018, the same day as the outcome of the competitive evaluation process was announced, the Australian Government announced the transfer of ASC Shipbuilding:

ASC Shipbuilding, currently wholly owned by the Commonwealth, will become a subsidiary of BAE Systems during the build. This ensures BAE Systems is fully responsible and accountable for the delivery of the frigates and ensures the work will be carried out by Australian workers and create Australian jobs.

The Commonwealth of Australia will retain a sovereign share in ASC Shipbuilding while BAE manages the program. At the end of the program the Commonwealth will resume complete ownership of ASC Shipbuilding, thereby ensuring the retention in Australia of intellectual property, a highly skilled workforce and the associated equipment.

By the conclusion of the frigate build, ASC Shipbuilding will be a strategic national asset capable of independently designing, developing and leading the construction of complex, large naval warships.<sup>17</sup>

1.14 The transaction formed part of a broader restructure of ASC Pty Ltd, a Government Business Enterprise<sup>18</sup>, under which ASC Shipbuilding, including workforce engaged on the Air Warfare Destroyer and Offshore Patrol Vessel projects, were transferred to BAE Systems Australia.

1.15 ASC Shipbuilding commenced trading as BAE Systems Maritime Australia (BAESMA) on 11 December 2020.

#### Strategic relationship

1.16 The head contract between the Commonwealth and BAESMA commits the two parties to work to develop a strategic relationship in accordance with a set of principles (the principles and corresponding performance measures are discussed at paragraphs 3.18 to 3.20 of this audit report).<sup>19</sup> The parties have agreed to 'work together in a cooperative and collaborative manner to achieve the contract objectives', including by 'developing a culture of open communication and transparency' and 'discussing all issues in an open and honest manner'. As discussed at paragraph 3.40, Defence established a Team Hunter Enterprise Plan to give effect to these principles, comprising of 24 initiatives to be implemented by the end of 2022.

19 The head contract between the Commonwealth and BAESMA states that it does not create a formal joint venture or fiduciary relationship between the two parties.

<sup>17</sup> Prime Minister, Minister for Defence, Minister for Defence Industry and Minister for Finance, 'The Hunter class – defending Australia and securing our shipbuilding sovereignty', joint media release, 29 June 2018, available from <a href="https://www.minister.defence.gov.au/minister/marise-payne/media-releases/joint-media-release-prime-minister-defence-minister-1">https://www.minister.defence.gov.au/minister/marise-payne/media-releases/joint-media-releases/joint-media-releases/joint-media-release-prime-minister-defence-minister-1</a> [accessed 26 October 2022].

<sup>18</sup> The broader restructure included the execution of the following.

<sup>•</sup> A Transitional Services Agreement between ASC Shipbuilding and ASC Pty Ltd.

<sup>•</sup> Air Warfare Destroyer and Offshore Patrol Vessel Workforce Agreements between ASC Shipbuilding and ASC AWD Shipbuilder Pty Ltd and ASC OPV Shipbuilder Pty Ltd respectively.

A Sovereign Capability and Option Deed between the Commonwealth, BAE Systems Australia and ASC Shipbuilding Pty Limited, whereby BAE Systems Australia owns 100 per cent of ordinary shares of ASC Shipbuilding Pty Limited and the Commonwealth retains a sovereign share. The deed allows the Commonwealth to reacquire the ordinary shares of ASC Shipbuilding and prohibits BAE Systems Australia from transferring or disposing of its ordinary shares without the permission of the Commonwealth. The Deed also placed requirements on ASC Shipbuilding with respect to the sovereign industrial base in Australia and the transfer of design capability to Australia.

## Project funding and expenditure

1.17 Actual project expenditure at 31 January 2023 was \$2,225.9 million, with \$1,308.4 million spent on the head contract with BAESMA. The allocated funding and actual expenditure as at 31 January 2023 on the Hunter class program and associated project costs are outlined in Table 1.2.

Funding source	Allocated funding incl. contingency (PBS 2022–23 \$AUD)	Contingency funding (PBS 2022–23 \$AUD)	Expended to 31 January 2023 (\$AUD)	Difference (\$AUD)
SEA 5000 Phase 1 project allocation	6,137,553,884	597,867,126	2,225,929,493	3,911,624,391
Other project cost allocation	1,020,353,262	66,271,341	378,981,046	641,372,216
Total	7,157,907,146	664,138,467	2,604,910,539	4,552,996,607

 Table 1.2:
 Allocated funding and actual expenditure at 31 January 2023 (\$AUD)

Note: Column and row totals may not add up due to rounding of individual figures. Source: ANAO analysis of Defence documentation.

## **Previous Auditor-General reports**

1.18 Since 2016–17, the Auditor-General has tabled seven performance audit reports relating to naval procurement, maritime sustainment and related matters.

- Auditor-General Report No.48 2016–17 *Future Submarine Competitive Evaluation Process*.
- Auditor-General Report No.39 2017–18 *Naval Construction Programs Mobilisation*.
- Auditor-General Report No.30 2018–19 Anzac Class Frigates Sustainment.
- Auditor-General Report No.22 2019–20 *Future Submarine Transition to Design*.<sup>20</sup>
- Auditor-General Report No.12 2020–21 Defence's Procurement of Offshore Patrol Vessels — SEA 1180 Phase 1.
- Auditor-General Report No.15 2021–22 Department of Defence's Procurement of Six Evolved Cape Class Patrol Boats.

<sup>20</sup> The audit report related to SEA 1000 Phase 1B (future submarines design acquisition), which was to deliver a fleet of 12 Attack class conventionally powered submarines. The Australian Government subsequently announced, on 16 September 2021, that it would not continue with the Attack class program, and contracts with Naval Group and Lockheed Martin Australia were terminated for convenience. Defence reported in the most recent Major Projects Report (MPR) that as of 30 June 2022, total project expenditure was \$3.096 billion, which included a contract termination payment of \$827.2 million to Naval Group. See Auditor-General Report No.12 2022–23, 2021–22 Major Projects Report, pp. 155–62, available at (internet) <a href="https://www.anao.gov.au/work/major-projects-report/2021-22-major-projects-report/2021-22-major-projects-report/2021-22-major-projects-report/2021-22-major-projects-report/2021-22-major-projects-report/2021-22-major-projects-report.</a>

• Auditor-General Report No.7 2022–23 Defence's Administration of the Integrated Investment Program.<sup>21</sup>

1.19 The Auditor-General has made recommendations to Defence on retaining evidence and advice regarding decision-making in procurement. Key messages from these reports included maintaining adequate records when undertaking complex negotiations and having effective oversight to realise value for money under a contract.

1.20 Project SEA 5000 Phase 1 (Hunter class frigates) has also been included in the annual Defence Major Projects Report (MPR) since 2019–20.

- Auditor-General Report No.19 2020–21 2019–20 Major Projects Report, pp. 151–58.
- Auditor-General Report No.13 2021–22 2020–21 Major Projects Report, p. 115 and pp. 135–42.
- Auditor-General Report No.12 2022–23 *2021–22 Major Projects Report*, p. 116 and pp. 137–45. This is the most recent MPR, presented to the Parliament on 9 February 2023.

## Rationale for undertaking the audit

1.21 The acquisition of nine Hunter class frigates is a key part of the Australian Government's substantial planned expenditure on naval shipbuilding and maritime capability<sup>22</sup> and contributes to the ongoing capability of the Australian Defence Force.<sup>23</sup> This audit examined the effectiveness of the Department of Defence's (Defence) procurement of Hunter class frigates to date and the achievement of value for money through Defence's procurement activities.

1.22 The audit builds on previous Auditor-General work on Defence's acquisition and sustainment of Navy ships and implementation of the Australian Government's 2017 *Naval Shipbuilding Plan*, to provide independent assurance to the Parliament on Defence's planning,

The ANAO considered the arrangements used to manage and report publicly on the Integrated Investment Program (IIP), particularly public reporting of the costs of the projects that comprise the IIP. In this context, the audit focused on two major projects, the former Future Submarine (Attack class) program and the ongoing Future Frigate (Hunter class) program, being two of the most expensive projects Defence has embarked upon. The Defence Strategic Review recommended that the IIP 'should be rebuilt in line with the force structure design priorities outlined in the Review.' Government agreed to the recommendation and stated that it would 'reprioritise Defence's IIP to fund immediate and longer term priorities' and 'rebuild the IIP as part of the inaugural National Defence Strategy.' The introduction of a biennial National Defence Strategy replacing Defence white papers, with the first iteration to be delivered by Quarter 2 2024, was another recommendation of the review. Government agreed to the recommendation and committed to release the inaugural National Defence Strategy in 2024, which the government response noted would 'encompass a comprehensive outline of Defence policy, planning, capabilities and resourcing. See pp. 55–56, p.99, p.104 and p.110 of the public version of the final report of the review, available from: https://www.defence.gov.au/about/reviews-inquiries/defence-strategic-review [accessed 26 April 2023].

<sup>22</sup> Defence reported to the Parliament in the most recent Major Projects Report (MPR) that the project is 'a foundation project in the Government's Continuous Naval Shipbuilding Program' and 'will provide the RAN with the critical capability required to defend Australia well into the future.' See Auditor-General Report No.12 2022–23 2021–22 Major Projects Report, p. 137, available at (internet) <a href="https://www.anao.gov.au/work/major-projects-report/2021-22-major-projects-report">https://www.anao.gov.au/work/major-projects-report/2021-22</a> https://www.anao.gov.au/work/major-projects-report/2021-22-major-projects-report.

<sup>23</sup> The 2020 Force Structure Plan included the acquisition or upgrade of up to 23 classes of Navy and Army vessels representing potential expenditure of \$168 billion to \$183 billon. The planned future investment at the time included the Attack class submarine, which was cancelled in 2021. As at March 2023, Defence had not released updated figures on planned total naval shipbuilding investment.

procurement, decision-making and advising, contracting and delivery of the Hunter class frigates to date.

## Audit approach

### Audit objective, criteria and scope

1.23 The objective of the audit was to assess the effectiveness of the Department of Defence's procurement of Hunter class frigates and the achievement of value for money to date.

1.24 To form a conclusion against the objective, the following high-level criteria were adopted.

- Did Defence conduct an effective tender process?
- Did Defence effectively advise government?
- Did Defence establish fit-for-purpose contracting arrangements?
- Has Defence established effective contract monitoring and reporting arrangements?
- Has Defence's expenditure to date been effective in delivering on project milestones?

1.25 The audit focused on Defence's procurement process for the design and productionisation of the Hunter class frigates (SEA 5000 Phase 1) including the rationale for shortlisting decision-making, the tender assessment process, the evidence base for advice to the Australian Government and the execution of contract-based project management and reporting mechanisms. At the time of the audit, the head contract had been signed. Contracts for the building of frigates had not been established.

1.26 The audit did not examine related procurements associated with SEA 5000 Phase 1 including the selection of the combat management system<sup>24</sup>, the acquisition of government furnished equipment<sup>25</sup>, the development of naval shipbuilding infrastructure and facilities, or the ASC restructure.

1.27 This audit reports on Defence procurement activity and developments in project SEA 5000 Phase 1 (Hunter class frigate design and construction) to March 2023. The government and Defence

As noted in paragraph 1.7, Aegis was selected as the combat management system for the Hunter class frigates. Aegis was also included in the Air Warfare Destroyer Program, see Auditor-General Report No.22 2013–14 *Air Warfare Destroyer Program*.

<sup>25</sup> Government furnished equipment for the Hunter class frigates includes the CEAFAR2 phased array radar system, weapons and various network, communications and support systems.

have indicated that the planned Hunter class capability has been considered as part of the Defence Strategic Review and related government processes.<sup>26</sup> Defence advised the ANAO in April 2023 that:

As at 20 March 2023 there have been no material changes to the Hunter Class Frigate project as a result of the Defence Strategic Review, or other Defence or Government decisions.

#### Audit methodology

1.28 The audit procedures included:

- reviewing Defence records, including procurement planning, tender assessments, advice, and contract management documentation;
- discussions with Defence officials and Defence contractors;
- walkthroughs of Defence systems; and
- discussions with Department of Finance officials.

1.29 The audit was open to contributions from the public. The ANAO received and considered two submissions.

1.30 The ANAO conducted fieldwork at Defence offices in Canberra, the Osborne shipyard in South Australia, the Henderson shipyard in Western Australia and Fleet Base West in Western Australia.

1.31 The audit was conducted in accordance with ANAO Auditing Standards at a cost to the ANAO of approximately \$854,701.

1.32 The team members for this audit were Mark Rodrigues, James Woodward, David Willis, Helen Sellers, Emily Hill, Jude Lynch, Corne Labuschagne, Danielle Page, Sally Ramsey and Amy Willmott.

The Defence Strategic Review was commissioned by the Australian Government and announced on 3 August 2022. Its final report was provided to the Prime Minister and Minister for Defence on 14 February 2023. The review's terms of reference included a requirement that: 'The Review must consider all elements of the Integrated Investment Program and provide recommendations for the Program's reprioritisation, particularly in light of recently announced large-scale projects, to provide Australia with the force structure required by 2032-33.' A public version of the final report of the review, which included the terms of reference, was released on 24 April 2023, available from: <a href="https://www.defence.gov.au/about/reviews-inquiries/defence-strategic-review">https://www.defence.gov.au/about/reviews-inquiries/defence-strategic-review</a> [accessed 26 April 2023]. In the foreword to the public version, the reviewers noted at p.11 that it was 'necessarily qualitatively different' from the version provided to the Prime Minister and Minister for Defence and 'less detailed, as many of the judgements and recommendations in the Review are sensitive and classified.' The review, its recommendations and the government's response to the recommendations are discussed in the following places in this audit report: footnotes 21, 52 and 169 and paragraphs 3.120, 3.140–3.141 and 3.144–3.145.

In respect to the Hunter class frigates, the Chief of Navy advised, at the 15 February 2023 hearings of the Senate Foreign Affairs, Defence and Trade Legislation Committee, that: 'This is also one of those capabilities that have been and are being reviewed by the Australian government' in the context of the Defence Strategic Review. See Senate Foreign Affairs, Defence and Trade Legislation Committee, 2022–2023 Supplementary Budget Estimates, Proof Committee Hansard, 15 February 2023, p. 58. Available at: https://www.aph.gov.au/Parliamentary Business/Hansard/Estimates Transcript Schedule [accessed 20 April 2023].

## 2. Procurement and decision-making

#### Areas examined

This chapter examines whether the Department of Defence's (Defence) procurement and decision-making processes for the selection of the Hunter class frigate design were supported by an effective tender process and effective advice to the Australian Government.

#### Conclusion

Defence did not conduct an effective limited tender process for the ship design. The value for money of the three competing designs was not assessed by officials, as the Tender Evaluation Plan (TEP) proposed that government would do so. The Commonwealth Procurement Rules (CPRs) and the Defence Procurement Policy Manual required officials responsible for procurement to be satisfied, after reasonable inquiries, that the procurement achieved a value for money outcome. Defence did not otherwise document the rationale for the TEP not requiring a value for money assessment or comparative evaluation of the tenders by officials.

Defence's advice to the Australian Government at first and second pass was partly effective. While the advice was timely and informative, Defence's advice at second pass was not complete. Defence did not advise that a value for money assessment had not been conducted by Defence officials and that under the TEP Defence expected government to consider the value for money of the tenders.

#### Areas for improvement

The ANAO made two recommendations aimed at improving Defence's future record keeping and advice in the procurement context. The ANAO also identified two opportunities for improvement relating to probity management in procurement.

2.1 When undertaking procurement activities, an entity's accountable authority has a duty to promote the proper (efficient, effective, economical and ethical) use and management of public resources in accordance with the *Public Governance, Performance and Accountability Act 2013* (PGPA Act) and to comply with the Commonwealth Procurement Rules (CPRs).<sup>27</sup> An effective procurement and decision-making process is demonstrated by:

- a value for money focus;
- following approved processes, including those in the approved procurement plan;
- maintaining appropriate records, which underpin the accountability and transparency of procurement and decision-making processes; and
- providing decision-makers with advice that is clear, accurate, complete and timely.

## Did Defence conduct an effective tender process?

To select ship designs for the government-approved competitive evaluation process (CEP) — a limited tender approach — Defence conducted a shortlisting process informed by its own assessments and analysis by the RAND Corporation. Defence did not retain complete records

<sup>27</sup> The CPRs are a legislative instrument issued by the Minister for Finance under subsection 105N(1) of the PGPA Act. Officials from non-corporate Commonwealth entities (including Defence) must comply with the CPRs when performing duties related to procurement.

of its assessments, and its rationale for shortlisting all selected designs for the CEP was not transparent.

Defence's Endorsement to Proceed documentation for the CEP approved the Request for Tender (RFT) going ahead and set out tender evaluation criteria and expectations for the assessment of value for money. However, the expectations regarding the assessment of value for money were not operationalised, as the Tender Evaluation Plan (TEP) specified that value for money would not be assessed by Defence.

The TEP, which was approved by the probity advisor, did not document how the evaluation process would address the core rule of the Commonwealth Procurement Rules (CPRs), which is achieving value for money. The CPRs require officials responsible for procurement to be satisfied, after reasonable inquiries, that the procurement achieves a value for money outcome. Defence did not document the rationale for the TEP not requiring a value for money assessment or comparative evaluation of the tenders by officials.

As the tender evaluation process was underpinned by a TEP that specifically excluded a value for money assessment of tenders by officials, the Source Evaluation Report (SER) did not include a value for money assessment.

Defence conducted the tender evaluation in accordance with the TEP but did not retain a record of delegate approval of the SER Supplement document, which recorded the outcomes of the evaluation process.

Not all probity matters were recorded and addressed as required by the November 2016 Legal Process and Probity Plan for the procurement.

2.2 On 4 August 2015, the Prime Minister and the Minister for Defence announced that the Australian Government was:

Bringing forward the Future Frigate programme (SEA 5000) to replace the ANZAC class frigates. As part of this decision, we will confirm a continuous onshore build programme to commence in 2020 – three years earlier than scheduled under Labor's Defence Capability Plan. This decision will save over 500 hundred jobs and help reduce the risks associated with a 'cold start'. The Future Frigates will be built in South Australia based on a Competitive Evaluation Process, which will begin in October 2015.<sup>28</sup>

## Assessment and shortlisting process

2.3 The Department of Defence (Defence) conducted an iterative process to assess and shortlist ship designs whose designers would be invited to participate in the competitive evaluation process.<sup>29</sup> The shortlisting process that followed the government's August 2015 announcement involved the following steps.

Footnote continued on the next page...

Auditor-General Report No.21 2022–23 Department of Defence's Procurement of Hunter Class Frigates

<sup>28</sup> Prime Minister and Minister for Defence, 'Joint Media Release – The Government's plan for a strong and sustainable naval shipbuilding industry ', 4 August 2015, available from <u>https://www.minister.defence.gov.au/media-releases/2015-08-04/joint-media-release-prime-minister-andminister-defence-governments-plan-strong-and-sustainable-naval-shipbuilding-industry</u> [accessed 8 November 2022].

<sup>29</sup> Defence had considered other potential options for the future frigate prior to the Australian Government's August 2015 announcement.

- An initial market survey and analysis by the RAND Corporation (RAND)<sup>30</sup> to identify potentially relevant ship designs. RAND was tasked with examining only military-off-the-shelf design options, with the contracted statement of work excluding new, or clean sheet, designs.
- Consideration of the identified designs by the Defence Ship Building Steering Group<sup>31</sup> (chaired by the Chief of Navy) in September 2015.
- Agreement by the government in November 2015 ('interim pass') to progress analysis of the initial group of designs that had been identified.<sup>32</sup>

2.4 In November 2015, the government agreed to the 'essential criteria' to be used to further shortlist down to the final three preferred designs. The essential criteria were that the ships<sup>33</sup>:

- be buildable in Australia within program budget and starting in 2020;
- meet Navy's capability requirements;
- be able to accommodate communications and combat management systems compatible with Navy's surface fleet, and comply with applicable Australian legislative and regulatory requirements;
- be based on a steel hull; and
- be supportable in Australia for operation and sustainment.

2.5 Following further shortlisting assessments by RAND<sup>34</sup> and Defence, the project sponsor (the Chief of Navy) presented a paper on the future frigate design options to the February 2016 meeting

32 Defence identified seven ship designers: BAE (United Kingdom); DCNS (France); Fincantieri (Italy); Huntington Ingalls Industries (United States); Navantia (Spain); Odense Maritime Technology (Denmark); and ThyssenKrupp Marine Systems (Germany).

RAND's final report did not make any recommendations and assessed that 'each of the alternatives has advantages and disadvantages across the various mission and platform capability areas, the suitability for building in Australia, and total life-cycle costs.'

Following the January 2013 Australia–UK Ministerial Consultations (AUKMIN), the Australian and UK Defence Ministers had requested a joint report on 'mutually beneficial collaboration' on frigates. Defence briefed the Minister that the joint report 'found no major impediments to the Type 26 GCS [global combat ship] being considered as a candidate platform for the Future Frigate', noting that 'there are a number of other potential candidates that should be explored'.

In May 2014 the Australian Government had also approved \$78.2 million for capability development activities based on the Navantia F105 air warfare destroyer hull, foreshadowing a sole sourced limited tender for the frigates.

<sup>30</sup> The August 2015 announcement followed government consideration of another RAND report, *Australia's* Naval Shipbuilding Enterprise: Preparing for the 21st Century, commissioned by Defence in 2014. The report is discussed at p. 20 and pp. 29–30 of Auditor-General Report No.39 2017–18 Naval Construction Programs— Mobilisation.

<sup>31</sup> Defence was unable to locate the terms of reference for the Ship Building Steering Group in response to a request from the ANAO.

<sup>33</sup> The government also agreed to common criteria for selecting the designer and builder of the future frigates and offshore patrol vessels, which included supporting implementation of shipbuilding principles informed by the RAND analysis discussed in footnote 30. One of the principles was 'selecting a mature design that is buildable in Australian shipyards'. See Auditor-General Report No.12 2020–21 *Defence's Procurement of Offshore Patrol Vessels — SEA 1180 Phase 1*, paragraph 1.7.

<sup>34</sup> RAND had identified the following eight designs: Patrol Frigate 4923, Huntington Ingalls Industries (United States); Type 26, BAE (United Kingdom); D650 FREMM, DCNS (France); F590 FREMM, Fincantieri (Italy); Iver Huitfeldt, Odense Maritime Technology (Denmark); JDS Akizuki (Japan); HMAS Hobart, Navantia (Spain); and Type 45 Daring, BAE (United Kingdom).

of the Defence Capability and Investment Committee.<sup>35</sup> The paper advised that Defence's assessment was that four of the seven assessed designs were viable — the Italian FREMM, the Modified F-100, BAE's Type 26 and the French FREMM — as the designs were:

most likely to:

- Be compliant with the RAND shipbuilding Principles;
- Meet a 2020 construction start date inclusive of modifications; and
- Sufficiently meeting [sic] the capability requirements.

2.6 The Defence Capability and Investment Committee meeting records state that 'after discussion, the Secretary [of Defence] agreed that the Italian FREMM (Fincantieri), Modified F-100 (Navantia) and Type 26 (BAE) be recommended to the government for progression through the SEA 5000 Phase 1 Competitive Evaluation Process.' The meeting records indicated that the Italian FREMM (Fincantieri) and Modified F-100 (Navantia) were considered the two most viable designs and that either the Type 26 or the French FREMM should be progressed as a third option.

## Record keeping

2.7 Defence did not retain complete records of the key decisions made during the shortlisting process for the competitive evaluation activity. Records not retained by Defence included the following.

- The basis for the Ship Building Steering Group's decision to approve seven ship designs for further analysis. It was not clear whether Defence had accepted RAND's initial shortlist or made the decision to progress analysis on seven ship designs on another basis.<sup>36</sup>
- The rationale for the Defence Secretary's (the decision-maker's) selection of the BAE Type 26 over the French FREMM (DCNS) as the third option.<sup>37</sup>

2.8 The approach adopted by Defence to its record keeping is not consistent with the July 2014 Commonwealth Procurement Rules (CPR) requirements, which applied at that time. Successive iterations of the CPRs have highlighted that maintaining records is one of the 'fundamental

<sup>35</sup> The Defence Capability and Investment Committee was chaired by the Defence Secretary. The committee's role was to review the overall Defence Capability Plan and major capability and investment risks and issues to ensure that resourcing, including capital investment and operating costs, was consistent with Defence's strategic priorities and resourcing strategies.

<sup>36</sup> Six of the seven ship designs selected by Defence were from RAND's recommended shortlist of eight ship designs. On 3 September 2015 the Ship Building Steering Group 'agreed the RAND analysis would be used to filter the initial 24 alternatives to 8 options' and that '[p]rofessional judgement of one of the RAND 8 was used to further reduce the number to 7'. The meeting minutes did not identify the particular options.

<sup>37</sup> The sponsor's paper noted that:

Of the remaining viable designs French FREMM (DCNS) could be selected based upon the RAND assessment of lower risk to a 2020 construction start. Alternatively, the type 26 (BAE Systems) could be selected based upon the more optimistic CASG assessment of the schedule and BAE's greater existing industrial footprint and shipbuilding experience in Australia.

An agendum paper prepared by Defence's Contestability Division questioned the evidence available to support the CASG assessment of the schedule.

elements of accountability and transparency' in procurement.<sup>38</sup> The requirements for recordkeeping are long-standing and appear in section 7 of the CPRs. They state that:

- Officials must maintain for each procurement a level of documentation commensurate with the scale, scope and risk of the procurement.
- Documentation should provide accurate and concise information on: the requirement for the procurement; the process that was followed; how value for money was considered and achieved; relevant approvals; and relevant decisions and the basis of those decisions.
- Documentation must be retained in accordance with the Archives Act 1983.<sup>39</sup>
- 2.9 Further, the Defence Records Management Policy notes that:

Defence must manage its records in a way that:

- a. complies with legislation, standards and government policy;
- b. provides for public accountability;
- c. supports decision-making; and
- d. preserves corporate memory and historical information.
- To meet this requirement, all Defence records are:
  - a. created to support business and meet obligations;
  - b. captured in digital format and described;
  - c. made accessible and disclosed where required; and
  - d. appraised, retained and disposed of in accordance with the principles in this policy.

2.10 In addition to the risk of non-compliance with the CPRs, incomplete record keeping makes it difficult for Defence to: demonstrate that the procurement was conducted with due regard to fairness, probity and value for money; and facilitate scrutiny and review of its procurement processes and decisions, including by the Parliament.<sup>40</sup>

2.11 Further shortcomings in Defence record-keeping are discussed in paragraphs 2.34 to 2.35, 2.44, 2.63, 2.66 to 2.67, 2.73 and 2.78 of this audit report. These deficiencies raise issues of transparency, accountability and non-compliance with the CPRs and Defence Records Management

<sup>38</sup> See paragraph 7.1 of the July 2014 CPRs, March 2017 CPRs, January 2018 CPRs, December 2020 CPRs and July 2022 CPRs. Paragraph 7.1 further states that accountability means that officials are responsible for the actions and decisions that they take in relation to procurement and for the resulting outcomes. Transparency involves relevant entities taking steps to enable appropriate scrutiny of their procurement activity.

<sup>39</sup> The most recent iteration is Department of Finance, *Commonwealth Procurement Rules*, July 2022, paragraphs 7.2–7.5.

<sup>40</sup> Further, as noted by the Commissioner for Law Enforcement Integrity, 'lack of record keeping can create corruption vulnerabilities within an Agency'. See: Australian Commission for Law Enforcement Integrity, *Investigation Report: Operation Tardis An investigation into payments made under the Cape Class Patrol Boat contract by the Department of Home Affairs*, 5 December 2022, p. 37, paragraph 233, available at: <a href="https://www.aclei.gov.au/sites/default/files/documents/2022-12/investigation report - operation tardis.pdf">https://www.aclei.gov.au/sites/default/files/documents/2022, p. 37, paragraph 233, available at: <a href="https://www.aclei.gov.au/sites/default/files/documents/2022-12/investigation report - operation\_tardis.pdf">https://www.aclei.gov.au/sites/default/files/documents/2022, p. 37, paragraph 233, available at: <a href="https://www.aclei.gov.au/sites/default/files/documents/2022-12/investigation\_report - operation\_tardis.pdf">https://www.aclei.gov.au/sites/default/files/documents/2022-12/investigation\_report - operation\_tardis.pdf</a> [accessed 14 December 2022].

Policy. Defence's record keeping has also been identified as an issue in prior ANAO performance audits.<sup>41</sup>

2.12 The Hunter class procurement is a long-term activity. Given the weaknesses in record keeping identified in this audit, Defence should implement measures to ensure compliance with its Records Management Policy over the life of the program.<sup>42</sup>

## Recommendation no. 1

2.13 The Department of Defence ensure compliance with the Defence Records Management Policy and statutory record keeping requirements over the life of the Hunter class frigates project, including capturing the rationale for key decisions, maintaining records, and ensuring that records remain accessible over time.

#### Department of Defence response: Agreed.

2.14 Defence notes the Hunter class frigate project has over 730,000 documents within its record management system (Objective). Of the thousands of documents identified and requested by the ANAO, less than ten documents were unable to be located across the Department.

#### ANAO comment

2.15 As outlined in paragraphs 2.7 to 2.12 of this audit report, shortcomings in Defence recordkeeping are discussed throughout the report. In the context of the competitive evaluation process, Defence did not retain complete records of the key decisions made during the shortlisting process for the evaluation activity, including: the basis for the Ship Building Steering Group's decision to approve seven ship designs for further analysis; and the rationale for the Defence Secretary's (the decision maker's) selection of the BAE Type 26 over the French FREMM (DCNS) as the third option.

2.16 In April 2016, the government agreed ('first pass' approval) to: the commencement of the competitive evaluation process for the selection of the head contractor; Defence's three shortlisted ship designs; and 23 high-level capability requirements.<sup>43</sup> The competitive evaluation process was to comprise:

Footnote continued on the next page...

<sup>41</sup> For example, see: Auditor-General Report No.12 2020–21 Defence's Procurement of Offshore Patrol Vessels — SEA 1180 Phase 1; Auditor-General Report No.4 2021–22 Defence's Contract Administration — Defence Industry Security Program; and Auditor-General Report No.44 2017–18, Defence's Management of Sustainment Products—Health Materiel and Combat Rations.

<sup>42</sup> During this audit the ANAO also observed that Defence officials had made use of publicly available social media applications such as 'WhatsApp' and 'Signal'. This was in addition to official communications channels such as email, which are managed on the Defence protected network. Defence guidance on such use is not consistent.

<sup>•</sup> The Defence Security Principles Framework (DSPF) guidance on 'Working Offsite' issued in November 2020 (first issued in July 2018) states that 'the use of applications such as Signal, Zoom and WhatsApp cannot be used for transmission or storage of Official information'.

<sup>•</sup> The 'Defence Guide to enable Remote Working' issued in August 2021 (first issued in July 2018) supports the use of 'Signal' for official communication, but does not support the use of 'WhatsApp'.

<sup>43</sup> The Defence Capability Life Cycle Manual (version 1.0, January 2020) states that:

- a risk reduction design study; and
- a Request for Tender (RFT) process.

2.17 Defence advised the government that a suitable design and an affordable and viable build strategy would be presented at the 'second pass' government approval stage. In its recommendation to progress the competitive evaluation process, Defence noted that following this process the government would be in a position to choose a preferred option based on the ability to start construction in 2020, the capability requirements, minimal design change and value for money. Government agreed to funding of \$289.3 million for the competitive evaluation process.<sup>44</sup>

2.18 Following the government's agreement to the procurement approach, Defence did not update the existing October 2014 Acquisition and Support Implementation Strategy (procurement plan)<sup>45</sup> or develop a new procurement plan to reflect the change from the approach envisaged in October 2014 and associated risks.<sup>46</sup> The development of a formal acquisition strategy or procurement plan was a mandatory requirement of the Defence Procurement Policy Manual in effect at that time. Further, in 2016 first pass advice to government the adoption of a suitable Acquisition and Support Implementation Strategy had been identified by Defence as a mitigation for the risks to implementation (which were assessed as 'extreme').

#### **Risk reduction design study**

2.19 In August 2016 Defence commenced risk reduction design studies with each of the three tenderers. The studies were conducted to inform Defence's understanding of the consequences of applying the 'Australianised' changes on the reference ship designs and to try to reduce the cost and schedule risk associated with the changes.

2.20 Defence intended to use the information to form the basis of the technical requirements for the RFT. Defence received the risk reduction design study deliverables from the tenderers in May 2017 following release of the RFT. The deliverables were assessed as part of the tender evaluation in November 2017.

At first pass, the government also agreed to the commencement of construction (cutting steel) in 2020. In January 2017, the government agreed that cutting steel would be achieved in 2020 on prototype ship blocks.

First Pass is the process that gives Government the opportunity to narrow the alternatives being examined by Defence to meet an agreed capability gap. First Pass approval allocates funds from the Integrated Investment Program to enable options endorsed by Government to be investigated in further detail, with an emphasis on detailed cost and risk analysis.

Second Pass is the final milestone in the Requirements Phase, at which point Government endorses a specific capability solution and approves funding for the Acquisition Phase. The project cannot proceed to the Acquisition Phase until this approval is obtained from Government.

<sup>44</sup> To implement the competitive tender process, participant services contracts were signed with each tenderer on 12 August 2016. Each tenderer initially received \$12 million to undertake activities that were aimed at reducing technical, schedule, commercial and cost risks and at informing the later procurement and acquisition stages. In March 2017, the contracts were amended to incorporate an additional \$17.7 million to cover design activities that were intended to reduce schedule risk.

<sup>45</sup> The 2014 version of the Defence Procurement Policy Manual stated that an Acquisition and Support Implementation Strategy (also known as a procurement plan) was to be used to define the strategy and approach Defence would use to acquire the relevant capability.

<sup>46</sup> The 2014 strategy centred on a series of risk reduction design studies to establish the feasibility of using the Air Warfare Destroyer hull (that is, the hull used for Navy's three Hobart class destroyers) as the basis for the SEA 5000 Phase 1 project. The procurement approach agreed at first pass included the Analysis of Alternatives, risk reduction design study and the RFT.

## Request for Tender for the head contract

2.21 On 28 March 2017 an Endorsement to Proceed (the EtP) with the RFT was approved by the Director-General Future Frigates (civilian Senior Executive Service Band 1 official). According to the EtP, the RFT was:

to establish a long term relationship with a Tenderer so as to assist the Commonwealth to achieve the Project Objectives in the most efficient, effective and innovative manner.

2.22 The RFT document was released on 31 March 2017 to the three tenderers. The conditions of tender provided to the tenderers stated that 'Tenders will be evaluated utilising the tender evaluation criteria at clause 3.9 to determine the tender that will best support the achievement of the Project Objectives on a value for money basis'. The Minister for Defence Industry announced the release of the RFT, stating that:

The release of the RFT is an important part of the Competitive Evaluation Process which will lead to the Government announcing the successful designer for the Future Frigates in 2018.

...

Three designers—BAE Systems with the Type 26 Frigate, Fincantieri with the FREMM Frigate, and Navantia with a redesigned F100, have been working with Defence since August 2015 to refine their designs.

The three shortlisted designers must demonstrate and develop an Australian supply chain to support Australia's future shipbuilding industry, and also how they will leverage their local suppliers into global supply chains.

The Government is committed to maximising Australian industry opportunities and participation and this project will contribute to building a sustainable Australian shipbuilding workforce.<sup>47</sup>

2.23 Responses to the RFT were due on 24 July 2017. On 29 June 2017, Defence wrote to tenderers advising that the closing time for tender response had been extended to 7 August 2017. Tenderers were not informed of the reason for the extension. In December 2022 Defence informed the ANAO that it was unable to locate any documented reason or approval to extend the RFT. All three participants submitted their tenders by 7 August 2017.

2.24 During the RFT process, Defence issued 16 addenda to the tenderers between 7 April 2017 and 28 July 2017. All tenderers were informed of amendments to the RFT documentation at the same time.

## Evaluation criteria

2.25 The EtP set out 10 agreed tender evaluation criteria and 'considerations including value for money'. These considerations included five project objectives that 'have been developed [to] identify what is required to deliver the outcomes sought by the Government.' The objectives were:

- deliver nine Anti-Submarine Warfare Frigates (Ships) based on a Military-Off-The-Shelf design with a minimum level of change;
- contribute to a Continuous Naval Shipbuilding industry in Australia;

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<sup>47</sup> Minister for Defence Industry, '\$35 billion Future Frigate Tender', media release, 31 March 2017, available from <u>https://www.minister.defence.gov.au/media-releases/2017-03-31/35-billion-future-frigate-tender</u> [accessed 18 November 2022].

- maximise Australian Industry Capability;
- commence construction in Adelaide in 2020; and
- remain within the provision<sup>48</sup> of the Integrated Investment Program (IIP).<sup>49</sup>

2.26 The objectives aligned with the evaluation criteria, as shown in Figure 2.1 below. The 23 high-level capability requirements (discussed in paragraph 2.16) were included under the 'tendered mission system will meet the Commonwealth's capability requirements' evaluation criterion.

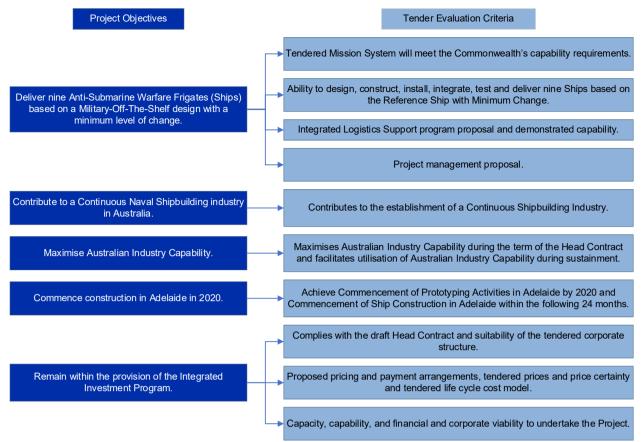
The ANAO recently reviewed the reported Future Frigate costs in Auditor-General Report No.7 2022–23 *Defence's Administration of the Integrated Investment Program*. The ANAO reported at paragraph 3.61 that:

- The total capital funding provision over the future years of the project recorded in Defence's confidential (internal) IIP spreadsheet dated March 2016, was \$36 billion (out-turned).
- The figure appearing in the confidential IIP spreadsheet (\$36 billion) was 20 per cent higher than the minimum cost of \$30 billion reported in the published 2016 IIP document.
- While the presentation of the indicative acquisition cost of the Future Frigate Program–Evaluation, Design and Construction in the 2016 public IIP document was not incorrect, the minimum publicly reported cost was 18 per cent lower than the provision in the confidential broadsheet.

<sup>48</sup> The EtP noted that:

The objective to remain within the provision of the Integrated Investment Program has been communicated to the tenderers in the RFT for clarity as to "establish commercial arrangements that are affordable to the Commonwealth taking into account the price and payment arrangements, price certainty and the allocation of risk".

<sup>49</sup> The published 2016 Integrated Investment Program document included a figure of greater than \$30 billion (out-turned price basis) for the Future Frigate Program–Evaluation, Design and Construction. See Department of Defence, Integrated Investment Program, 2016, chart at p. 77 and Table 6 at pp. 89–90, available from https://www.defence.gov.au/sites/default/files/2021-08/2016-Defence-Integrated-Investment-Program 0.pdf [accessed 4 May 2023].



## Figure 2.1: Alignment of project objectives and tender criteria

Source: ANAO analysis of Department of Defence documents.

2.27 In the EtP, Defence documented an assessment of the risks to each of the five project objectives and the risk treatments.

- Three project objectives were assessed as high risk. These were: 'to deliver nine Anti-Submarine Warfare Frigates (Ships) based on a Military-Off-The-Shelf design with a minimum level of change'; 'contribute to a Continuous Naval Shipbuilding industry in Australia'; and 'remain within the provision of the Integrated Investment Program'.
- Two project objectives were assessed as medium risk. These were: 'maximise Australian Industry Capability'; and 'commence construction in Adelaide in 2020'.

2.28 Enclosures to the EtP included signoffs from the probity advisor for the project (the Australian Government Solicitor, AGS)<sup>50</sup> and the legal advisor for the procurement (Ashurst). In summary, the legal advisor did the following.

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<sup>50</sup> Defence's Legal Process and Probity Plan was dated 9 November 2016 and outlined AGS' role as developing and reviewing Defence documentation 'to ensure that the applicable legal process and probity requirements in the Plan are followed'.

- Noted risks with regards to the RFT approach, including the lack of a statement of work<sup>51</sup>, operational and performance specification documents, and limitations to the achievement of tender quality pricing.
- Indicated that given this approach, the tenders would not represent binding offers from the participants to enter into a contract, that were capable of acceptance by the Commonwealth. The tenders would instead include a range of information and proposals that could, with further negotiation and development, form the basis of a binding offer in due course.
- Noted uncertainties regarding the shipyards, workforce arrangements, combat management system, some aspects of continuous naval ship building and Australian Industry Capability, and pricing risks.

2.29 The RFT also outlined key assumptions for the tenderers to rely on for the purpose of developing their tenders, as outlined in Table 2.1. These assumptions aligned with areas of uncertainty identified by the legal advisor in reviewing the EtP.

Area	Assumption <sup>a</sup>	
Drumbeat	24 months between the start of construction of each ship.	
Shipyard	The tenderers will be provided with a facilities assumptions document. The shipyard and associated infrastructure will be Government Furnished Facilities and the contractor will operate the shipyard including for other Commonwealth projects in the shipyard.	
Ship batches	The ships will be built in three batches, with three ships in each batch.	
Responsibility for workforce	The contractor will not be required to engage any particular shipbuilding workforce.	
Combat Management System	The Commonwealth will specify a combat management system after tender lodgement, which will be provided to the contractor as mandated Government Furnished Material. For the purposes of the tender the tenderers are to assume an Aegis combat management system, representing the more difficult option for physical integration into the platforms.	

#### Table 2.1: Key Assumptions in the Request for Tender

Note a: Following the release of the RFT, two of the five key assumptions changed. The Osborne shipyard was specified as the location of construction. Defence introduced the purchase of ASC Shipbuilding as a contractual requirement, as noted at paragraph 1.13.

Source: Department of Defence.

## **Tender Evaluation Plan**

2.30 Defence's 2016 Defence Procurement Policy Manual — which was in effect at the time the Tender Evaluation Plan (TEP) was developed — provided that tender evaluation plans must be prepared for all complex procurements and all military significant procurements as part of a major

<sup>51</sup> The RFT provided a statement of requirements which informed tenderers that 'The Commonwealth will not be providing a Statement of Work of the type that would normally form Attachment A to the Conditions of Contract. If the Tenderer is selected as a preferred Tenderer following tender evaluation, the Commonwealth and the Tenderer will develop the Statement(s) of Work to be included in the Head Contract at contract execution'. A statement of work was provided in the head contract signed with ASC Shipbuilding Pty Ltd on 14 December 2018.

or minor project. The TEP was expected to be 'the planning and control document for the management and conduct of the tender evaluation'.

2.31 The Future Frigate TEP was signed on 7 August 2017, the day the tender closed, by the Acting Director-General Future Frigates (acting SES Band 1/one-star equivalent). The plan established the Tender Evaluation Organisation (see Figure 2.2 below) and an Expert Advisory Panel.<sup>52</sup>

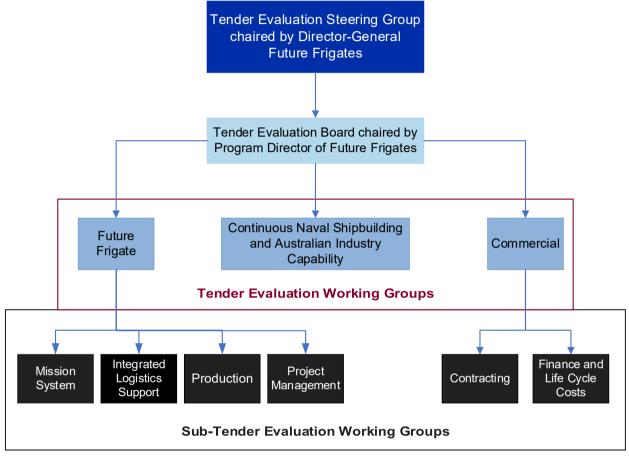


Figure 2.2: Elements of the Tender Evaluation Organisation

Source: ANAO analysis of Department of Defence documents.

<sup>52</sup> The TEP described the advisory panel as 'a panel of experts with global experience of leading warship procurement and sustainment programs in the UK, USA, Canada and Australia, who have been selected by the Commonwealth to review the conduct of the CEP.' The panel comprised: three retired Rear Admirals from Canada, the United States and the United Kingdom; and a former Director, Maritime for BAE Systems Australia. The latter was subsequently engaged as a lead negotiator for the Hunter procurement head contract (refer to paragraph 3.4) and was later appointed as a member of the Surface Ships Advisory Committee (SSAC). Members of the committee are appointed by the Secretary of Defence on the recommendation of the Chief of Navy and Deputy Secretary Capability Acquisition and Sustainment Group. The committee's Terms of Reference state that its role is to provide Defence with independent critical peer review of surface ship programs to validate existing plans and actions and enable early identification of areas of weakness. In addition to its ongoing review work, through quarterly reports to the Defence Secretary and Chief of the Defence Force (CDF), the committee was tasked to review the cost, schedule and performance of the Hunter class program and report to the Secretary and CDF by December 2022, to enable its outcomes to be considered as part of the Defence Strategic Review (DSR) commissioned by the Australian Government. The final DSR report was provided to the government on 14 February 2023. A public version of the final report was released on 24 April 2023.

2.32 The Future Frigate TEP set out roles, responsibilities, and the process to be followed for the evaluation of tenders (including tender registration, managing late tenders, conducting an initial screening process, and rules regarding access to tenders). Regarding the assessment of value for money of the tenders received, the TEP stated that:

The TEP does not require the Tender Evaluation Organisation (TEO) to conduct a comparative evaluation of tenders and to determine a ranking of tenders based on a value for money assessment of the tenders. Rather the TEO is to provide Government with its assessment of the acceptability to the Commonwealth of the tenders against each of the evaluation criterion. Using the acceptability assessment it is proposed that Government will consider the value for money of the tenders.

2.33 AGS provided a formal sign-off for the TEP, stating that it had identified 'no probity or legal process issues with the contents of the Evaluation Plan'. Previously, AGS had provided input on the lack of a process for assessing value for money in the draft TEP (dated 2 March 2017).

We understand that the TEP [Tender Evaluation Plan] does not require the TEO to make a value for money assessment. As this is a procurement process, a VFM [value for money] decision will need to be made at some level of government – in our view this process should be outlined in the TEP. We suggest that the intended process to be undertaken be explained in the TEP. If there is a more detailed process to be conducted within government for the selection of the preferred tenderer then we suggest that it be detailed in the TEP.

2.34 The TEP did not document how the evaluation process would address the core rule of the Commonwealth Procurement Rules (CPRs) — achieving value for money — other than to say that 'it is proposed that Government will consider the value for money of the tenders'. Paragraph 4.4 of the March 2017 CPRs, which applied at the time, provided that: 'Achieving value for money is the core rule of the CPRs. *Officials* responsible for a *procurement* **must** be satisfied, after reasonable enquires, that the *procurement* achieves a value for money outcome [emphasis in original].' Further, the 'Defence Procurement Policy Manual 2016', which applied at the time, reiterated the CPR requirements and highlighted the requirement for comparative analysis of costs and benefits in assessing value for money:

The CPRs provide that Value for Money is the core principle underpinning Australian Government Procurement and the application of this principle requires a comparative analysis of all relevant costs and benefits of each proposal throughout the whole procurement cycle (whole-of-life costing).

Value for Money <u>is not</u> limited to a consideration of capability versus price, or 'cheapest price wins.' Value for money requires consideration of Australian Government policy, specifically values such as open competition, efficiency, ethics and accountability. The CPRs outline these policies in further detail. Officials conducting procurement should be aware that the overall goal of the procurement process is to provide a value for money recommendation to the delegate. [emphasis in original]

2.35 Defence did not document the rationale for the Future Frigate TEP not requiring a value for money assessment, comparative evaluation of the tenders, or ranking of tenders.<sup>53</sup> This was a

<sup>53</sup> An earlier draft TEP (dated 10 February 2017) did include the conduct of a value for money assessment as a responsibility of the Tender Evaluation Board. The draft stated that:

The TEB [Tender Evaluation Board] Chair, with the assistance of the TEB members will produce a Value for Money assessment and provide an overall ranking of tenders.

further shortcoming in record-keeping for the procurement. There is no Defence record of the department seeking advice from the Department of Finance on its selected procurement approach and compliance with the CPRs.

### Assessment against the Tender Evaluation Plan

2.36 Tenders were assessed in accordance with the Tender Evaluation Plan (TEP) following the close of the request for tender (RFT) on 7 August 2017.

2.37 The Source Evaluation Report<sup>54</sup> was approved by the delegate (Deputy Secretary, Capability Acquisition and Sustainment Group) on 13 December 2017. The report set out the Tender Evaluation Board's overall assessment of tender compliance<sup>55</sup> and risk<sup>56</sup> for each of the 10 criteria outlined in the RFT and TEP. All tenderers were found to be 'acceptable with changes', with tenders largely meeting compliance requirements and resulting in a combination of medium–high risks across most criteria, with two extreme risks identified in the assessment of the BAE Systems' Type 26 design. A summary of the results is set out in Table 2.2.

Criterion	BAE Systems	Tenderer A	Tenderer B
Contribution to a Continuous Naval Shipbuilding Industry	Meets Requirements High Risk	Meets Requirements High Risk	Meets Requirements High Risk
Maximising Australian Industry Capability	Meets Requirements High Risk	Meets Requirements High Risk	Meets Requirements High Risk
Tendered Mission System	Meets Requirements Medium Risk	Meets Requirements Medium Risk	Marginal (closer to Meets Requirements) Medium Risk
Commencement of Prototyping and Construction in Adelaide	Meets Requirements (closer to Marginal) Extreme Risk	Meets Requirements High Risk	Meets Requirements High Risk
Deliver nine ships based on the RSD with Minimum Change	Meets Requirements Extreme Risk	Meets Requirements (closer to Marginal) Medium Risk	Meets Requirements Medium Risk
Integrated Logistics Support program proposal	Meets Requirements (closer to Marginal) Medium Risk	Meets Requirements Medium Risk	Meets Requirements (closer to Marginal) Medium Risk
Project management proposal	Meets Requirements Low Risk	Meets Requirements (closer to Marginal) Low Risk	Meets Requirements (closer to Marginal) Low Risk

 Table 2.2:
 Summary of the overall assessment of tender compliance and risk

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<sup>54</sup> The purpose of the Source Evaluation Report was 'to present a consolidated analysis of the information in each TEWG [Tender Evaluation Working Group] Report.'

<sup>55</sup> Compliance was defined as 'the assessment of whether or not the tendered solution meets the Commonwealth's requirements.'

<sup>56</sup> Risk was defined as being 'related to the successful implementation of the tendered solution.'

Criterion	BAE Systems	Tenderer A	Tenderer B
Head Contract Compliance	Does not meet requirements – Moderate Medium Risk	Does not meet requirements – Significant High Risk	Marginal Low Risk
Pricing and Payment arrangements	Compliance with pricing models: Does not meet requirements (significant) High Risk	Compliance with pricing models: Does not meet requirements (moderate) Medium Risk	Compliance with pricing models: Marginal High Risk
Financial and Corporate Viability, Capability and Capacity	Meets Requirements Medium Risk	Marginal Medium Risk	Meets Requirements Medium Risk

Source: Defence.

2.38 In accordance with the TEP, the Source Evaluation Report did not include a value for money assessment and did not recommend a preferred tenderer.

2.39 Following the 13 December 2017 delegate approval of the Source Evaluation Report, the probity advisor (AGS) issued a probity sign-off on 21 December 2017, confirming that from a probity perspective the assessment of tenderers in the Source Evaluation Report was 'fair and defensible'. Defence should have ensured that the probity sign-off was available to the delegate (the Deputy Secretary CASG) at the time of the delegate's consideration of the tender evaluation report.

#### **Offer Definition and Improvement Activities**

2.40 Prior to finalisation of the Source Evaluation Report (SER), Defence commenced Offer Definition and Improvement Activities with all three tenderers. The SER contained advice to the SER delegate (the Deputy Secretary, Capability Acquisition and Sustainment Group) that:

With the approval of the SER delegate, the Project has entered into Offer Definition with all three tenderers prior to Second Pass. Offer Definition will be used to further explore key issues and risks identified in tender evaluation, and seek to mitigate short term Project risks.

2.41 The SER delegate's approval to proceed with offer definition activities was provided by email on 30 November 2017, with Defence commencing offer definition activities with all three tenderers on the same day.

2.42 An Offer Definition Plan was approved on 1 December 2017 by the offer definition delegate, the Director-General Future Frigates (SES Band 1/one-star equivalent). The plan stated that the objectives of the Offer Definition and Improvement Activities were to:

- improve and maximise value for money, which is achieved through competitive tension and providing feedback on selected aspects of the tendered offers;
- enable the tenderers to better understand Defence's requirements and Defence to better understand the tenders, with the aim of refining the products to be contracted;
- minimise risk, by giving the Commonwealth the opportunity to identify and agree potential risk treatments with each tenderer; and

• progress contract documents so the Commonwealth and any subsequent preferred tenderer will have fewer issues to resolve during contract negotiations in the lead up to contract signature.

2.43 Tenderers provided offer definition responses between 12 December 2017 and 28 February 2018. Defence reported the outcomes of the offer definition process in a 'Source Evaluation Report Supplement'. That report provided a further assessment of each tenderer against eight of the 10 tender evaluation criteria and highlighted six areas of change between the Source Evaluation Report and the offer definition outcomes.<sup>57</sup> The report concluded that the overall assessment of tenderers remained unchanged and all tenders had 'the potential to achieve the project objectives, but with different strengths and weaknesses, and areas of discrimination.'<sup>58</sup>

2.44 On 9 April 2018, the Source Evaluation Report Supplement was finalised by the Project Director. Defence has not retained a record of the approval of this report by the offer definition delegate or the Source Evaluation Report delegate.<sup>59</sup> Further, the Source Evaluation Report Supplement did not include a value for money assessment (which had been identified as an objective of the Offer Definition and Improvement Activities) or recommend a preferred tenderer. As discussed in paragraphs 2.32 to 2.35, the approach to tender evaluation adopted by Defence was not consistent with the CPRs or the Defence Procurement Policy Manual 2016, which applied at the time. Further, and as discussed in paragraphs 2.7 to 2.9, these and other shortcomings in record-keeping raise issues of transparency, accountability and non-compliance with the CPRs and Defence Records Management Policy.

2.45 The probity advisor (AGS) signed off the Source Evaluation Report Supplement, confirming that: the evaluation of Offer Definition deliverables had been conducted in accordance with the Offer Definition Plan, RFT and the Tender Evaluation Organisation; and that the assessment in the Source Evaluation Report Supplement was 'fair and defensible' from a probity perspective. The AGS sign off did not include commentary in relation to value for money.

#### Management of probity

2.46 The November 2016 Legal Process and Probity Plan reflected the procurement approach agreed by the government in April 2016 and set out ethical and probity standards to be followed by Defence officials. The Director-General Future Frigates was responsible for ensuring compliance with the plan. The plan set out the following.

• Applicable legislative and regulatory requirements (such as the Defence Accountable Authority Instructions made under the PGPA Act).

<sup>57</sup> The Source Evaluation Report Supplement noted that two tenderers, including BAE, improved their assessments against head contract compliance and pricing and payment arrangements. Further, two tenderers improved their assessment in relation to financial and corporate viability, capability and capacity. The net result was a marginal improvement to BAE's assessment outcomes relative to the other tenderers.

<sup>58</sup> The Offer Definition and Improvement Activities resulted in changes to the tenderers' compliance and risk assessments under three criteria: head contract compliance; pricing and payment arrangements; and financial and corporate viability, capability and capacity. All changes in assessment resulted in more compliance with the criteria than in the initial Source Evaluation Report.

<sup>59</sup> In December 2022 Defence informed the ANAO that:

The record was signed by the four tender evaluation board directors, the project director and the branch head. To date Defence has not been able to find the DESPEC CASG signed record. Defence believes that this demonstrated the validity of relevant processes.

- Instructions on how to work with tenderers.<sup>60</sup>
- Responsibilities for the identification and management of conflicts of interest.
- Records management responsibilities, including the maintenance of a register of conflicts of interest, a register of gifts and hospitality<sup>61</sup>, and an audit trail.

2.47 Defence's probity register recorded that 1571 officials received a probity briefing or returned a conflict of interest declaration between February 2016 and January 2019. The register did not contain sufficient information to determine whether all members of on-site liaison teams received probity training or briefings prior to commencing their roles. For the 1571 entries, ANAO analysis indicates the following.

- There were 72 instances of a conflict of interest or confidentiality declaration not being completed. For these 72 cases, there were 52 instances where document management system access was reported as being removed and 20 instances where there is no report of action taken.
- There were 32 instances where a probity briefing was not recorded. For these 32 cases, there were 28 occurrences reported of the person's access being removed.<sup>62</sup> There were four instances of personnel not completing a required probity briefing and not being recorded as having their access removed.

2.48 Defence recorded interactions between Defence officials and tenderers or other relevant parties between August 2016 and November 2018 on a register of communications. The project register included a gift register (which was a subset of the communications register) with six entries. Five of the six entries were for gifts received by the on-site liaison teams and one entry was for a gift received by the Project Director.<sup>63</sup> ANAO review of Defence records identified that BAE Systems notified Defence that it provided hospitality valued at AUD \$340 to the General-Manager Ships and Director-General Future Frigates. Receipt of this hospitality was not recorded by Defence in the project register or the departmental gifts and benefits register.<sup>64</sup> There is no record of Defence's management of probity in relation to this event.

Management of probity issues

2.49 During the competitive evaluation process, the probity advisor (AGS) provided advice on a range of topics including conflicts of interest, protocols for the on-site liaison teams, communication with tenderers, the tender evaluation process, media, and requests for information.

<sup>60</sup> For example, on-site liaison teams were established in each tenderer's home country (Italy, Spain and the United Kingdom) to assist the tenderers. These teams consisted of four personnel: a team leader, a senior engineer, a support engineer, and a Navy representative.

<sup>61</sup> The Probity Plan allowed incidental hospitality while on-site, which it defined as hospitality which is 'incidental to an activity relating to achieving Defence Portfolio outcomes'.

<sup>62</sup> The register recorded instances where access had been removed due to not receiving a probity briefing, not making a conflict-of-interest declaration and for no longer working on the project.

<sup>63</sup> The on-site liaison teams were authorised under the on-site liaison team protocols to receive gifts valued at less than \$200 provided they were reported to the Project Director. All three teams reported the receipt of gifts on departure from their posts.

<sup>64</sup> A Defence internal audit in August 2022 titled 'Defence's Management of Gifts, Benefits and Sponsorship' found that 'Defence does not have effective controls in place to manage gifts, benefits and sponsorship activity. Controls in place for educating, monitoring and reporting gifts, benefits and sponsorship have not been effective in preventing or detecting policy non-compliance, exposing Defence to impartiality, integrity and reputational risks.'

2.50 Defence records show that five of the eight recorded probity issues had been reported to the Project Director by project staff.<sup>65</sup> Of the remaining three incidents<sup>66</sup>, AGS was aware of two incidents. The remaining incident was reported through the SEA 5000 probity mailbox.<sup>67</sup> These probity incidents and their treatments were not recorded in any register.

2.51 In signing off the competitive evaluation process, the probity advisor reported to Defence that:

Key legal process and probity issues, such as identifying and managing conflicts of interest, ensuring the fair and equitable treatment of tenderers, and ensuring the protection of confidential information have, in our view, been managed appropriately throughout the CEP.

#### Opportunity for improvement

2.52 Prior to obtaining sign-off by the probity advisor in a procurement context, Defence should confirm that all probity matters have been drawn to the attention of the probity advisor.

## Did Defence effectively advise government?

Defence's advice to government at first pass was timely and informative. However, its recommendation to include the BAE Type 26 design in the competitive evaluation process (CEP) as the third option, instead of the alternate, was not underpinned by a documented rationale.

At second pass, Defence's advice to government on the selection of the preferred ship design was not complete. Defence did not draw the following matters to government's attention.

- Contrary to the requirements of the Commonwealth Procurement Rules (CPRs), a value for money assessment had not been conducted by Defence officials. Defence's assessment was against the high-level capability requirements.
- Under the Tender Evaluation Plan (TEP) Defence expected government to consider the value for money of the tenders.
- A 10 per cent reduction to tendered build costs had been applied by Defence. The reduction had not been negotiated with tenderers.
- Sustainment cost estimates had not been prepared for government consideration as required by the Budget Process Operational Rules applying to Defence.

In its assessment, which was included in Defence's second pass advice to government, the Department of Finance (Finance) drew attention to the 10 per cent reduction to tendered build costs and other limitations in Defence's advice on costs. Finance did not comment on Defence's

<sup>65</sup> Under the Plan, any breaches of confidentiality and security arrangements were required to be reported to the Project Director, who was responsible for determining the action required, following advice from the Probity Advisor as necessary.

<sup>66</sup> The three incidents were: tender information being stored on the drive of a staff member on a project unrelated to SEA 5000; opening SEA 5000 documentation in an insecure location; and a cleaner accessing an unauthorised area.

<sup>67</sup> In December 2022, Defence informed the ANAO that:

The Project Director (at the time) did not have access to the probity mailbox. When contacted on 8 December 2022, the AGS probity advisor recalled the incident of the cleaner, however, the project office has been unable to identify documented evidence of what occurred.

lack of a value for money assessment, compliance with the CPRs or quality of advice regarding value for money.

#### Advice provided to government at 'first pass'

2.53 In April 2016, Defence provided sufficient advice on risk, cost and schedule to inform the Government's decision to proceed to the competitive evaluation (also see paragraphs 2.16 to 2.17). The advice addressed the following.

- Project risk Defence acknowledged that the project was high risk, and that schedule and design change risks were rated as extreme (given the commitment to cut steel in 2020).
- Budget costs would be managed within the Integrated Investment Program, without increasing schedule risk.<sup>68</sup> Defence advised that it would return to the Government if trade-offs between costs and capability were required.
- Design risks stemming from the three ship designs having different design maturity risk and that all would require redesign work.<sup>69</sup>
- Industry engagement Defence advised that due to the accelerated schedule of the competitive evaluation process, there had not been direct industry engagement to support cost quality.<sup>70</sup>

2.54 In outlining the competitive evaluation process, Defence noted that the government would decide the design that best met requirements in terms of construction start date, capability requirements, design changes and value for money. This approach to determining value for money had been included in the Tender Evaluation Plan (TEP) discussed in paragraph 2.31.

2.55 As noted in paragraph 2.7, Defence has not retained full records outlining the rationale for the selection of the designs that were put forward for the government's agreement as part of first pass approval.

2.56 In relation to the cost estimates advised to government, the advice noted that acquisition costs were based on estimates developed for the Force Structure Review. A paper on the draft Defence advice, prepared by Defence's Contestability Division, noted that:

the estimate does not meet the cost quality normally required for First Pass approval by the Estimates Memorandum agreed with Finance ...

Only around 18% of the estimate, rather than around 80% that would usually be expected, is of the appropriate quality. In light of the time constraints it is unlikely that this can be substantially improved. Senior engagement with the Department of Finance will likely be necessary.

<sup>68</sup> Defence noted that the BAE Type 26 was not yet in production and the first of class had been delayed to 2017.

<sup>69</sup> There was scope to provide additional information in the advice regarding risk treatments for managing necessary design changes and departures from the RAND shipbuilding principles.

<sup>70</sup> Accordingly, the cost estimates provided in the brief were based on the 2016 Integrated Investment Program and the 2016 Defence White Paper.

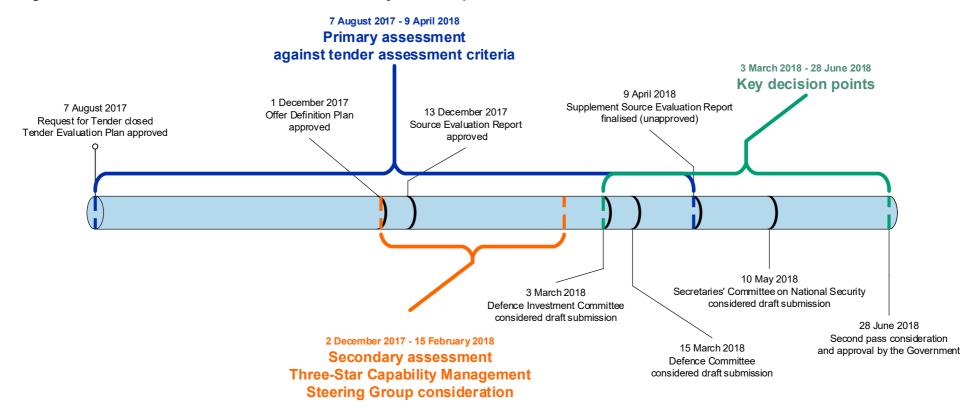
#### Development of advice for 'second pass' government approval

2.57 The purpose of second pass is to achieve endorsement by government of a specific capability solution and funding for its acquisition. To develop its advice to government, Defence drew on its assessment of tendered designs against key elements of the government-approved capability requirements. The advice was developed by the Navy and was reviewed internally by Defence senior committees and externally by the Secretaries' Committee on National Security<sup>71</sup> prior to submission to government. The timeline of tender assessments and decision points is set out in Figure 2.3 and discussed further below.

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<sup>71</sup> The Secretaries' Committee on National Security is chaired by the Secretary of the Department of the Prime Minister and Cabinet and is the peak officials-level forum for supporting the work of the National Security Committee of Cabinet and its sub-committees.

#### Figure 2.3: Timeline of tender assessments and key decision points



Source: ANAO analysis of Defence documentation.

## Capability Management Steering Group (CMSG)

2.58 To develop advice and a recommendation, the Chief of Navy convened four meetings of a Future Frigate Three-Star Capability Management Steering Group (CMSG) between 5 December 2017 and 14 February 2018.<sup>72</sup>

2.59 At its first meeting (5 December 2017), the CMSG agreed that its advice and recommendation would be based on an assessment against the government's 23 high-level capability requirements.<sup>73</sup> The CMSG also agreed to seek additional information from tenderers and partner navies.

2.60 The project probity advisor (AGS) advised Defence that 'accepting and considering additional information as part of the RFT evaluation process would ... constitute bid repair' and that Defence 'could be seen to have acted inconsistently with the RFT Conditions of Tender released to the Tenderers'.<sup>74</sup> Defence nonetheless approached two tenderers for further information, and considered the additional information as part of the CMSG's deliberations. Defence advised the ANAO in April 2023 that it was not able to locate a response to the AGS advice.

2.61 The CMSG's minutes show that it had intended to incorporate the outcomes from the Offer Definition and Improvement Activities. On 20 February 2018, prior to the receipt of all Offer Definition and Improvement responses by Defence (see paragraph 2.43), the Chief of Navy approved recommendations to be made to the Defence Investment Committee.

#### Defence Investment Committee (DIC)

2.62 On 2 March 2018 the Chief of Navy presented to Defence's Investment Committee (DIC) on the tender process, project timeline and the key differences between the tendered options, but did not address value for money nor make a recommendation on the preferred tenderer. Further, the papers presented to the DIC, which included draft advice to government, did not identify a preferred tender or address value for money. An attachment to the Chief of Navy's paper stated that the Chief Financial Officer was 'aware of the project's financial position but as the offer definition updates have not yet been received, a full costing review has not occurred.'

2.63 At its 2 March 2018 meeting the DIC noted the assessed cost and schedule risks and levels of compliance against requirements for the tendered design and agreed to present BAE's 'Global Combat Ship – Australia' as the preferred option to the Defence minister and the government. The outcomes (minutes) of the DIC meeting did not refer to the tender evaluation outlined in paragraphs 2.36 to 2.45, the assessments made in the Source Evaluation Report, or the Source

<sup>72</sup> Participants included the Vice Chief of the Defence Force (VCDF), Deputy Secretary CASG (DEPSEC CASG), Chief Defence Scientist and Head of Navy Capability. The Terms of Reference for the CMSG included decisionmaking on key program issues, noting that it would generally meet prior to Defence seeking government approval at first or second pass.

<sup>73</sup> At the inaugural CMSG, the Chair stated that: 'the CMSG needed to consider what information is required to inform any SEA 5000 recommendation, taking heed of lessons learnt from SEA 1180 [Offshore Patrol Vessels]. A key outcome is for both DEPSEC CASG and himself, to be confident in the advice that they will provide to IC [the Defence Investment Committee], DC [the Defence Committee] and Government.'

AGS also observed that if Defence considered further information provided by a tenderer on an aspect outside its tendered offer, 'there is high risk that the integrity of the CEP could be questioned, or that the RFT process conducted by Defence could be challenged'. AGS considered that 'the next best approach from a probity perspective (in order to protect the integrity of the CEP), would be to provide all three tenderers with the opportunity to address any major weaknesses that they could not address due to the requirements of the RFT in relation to the submission of a Reference Ship Design (RSD) with Minimum Change'.

Evaluation Report Supplement. Further, the DIC outcomes (minutes) did not document consideration of whether the 'Global Combat Ship – Australia' represented value for money for the Commonwealth.

#### Defence Committee (DC)

2.64 DIC records indicate that draft advice to government was to be considered by the Defence Committee (DC) on 15 March 2018. The DC is the most senior enterprise-level committee within Defence.

2.65 On 15 March 2018 the DC considered a presentation with summary information on the tendered offers and draft advice to government, as endorsed by the DIC, which included the identification of BAE as the preferred tender.

2.66 The minutes of the DC's 15 March 2018 meeting were not retained.<sup>75</sup> In the absence of these minutes, it is unclear what deliberations took place. A senior Defence official's hand-written notes of the relevant 2018 DIC and DC meetings indicate that the discussions focused on capability and Australian shipbuilding industry considerations. The hand-written notes did not include references to the relative value for money of the tenders.<sup>76</sup>

#### Meetings with ministers and secretaries

2.67 On 4 May 2018, Defence officials met with the Prime Minister, the Minister for Defence, the Minister for Defence Industry and the Secretary of the Department of the Prime Minister and Cabinet. At the meeting, Defence undertook to review options for 'commercial and company structures associated with the successful tenderer and resultant enduring Australian sovereign naval ship building base'.<sup>77</sup>

2.68 On 10 May 2018 Defence presented its draft second pass advice to the Secretaries' Committee on National Security. The committee noted the key issues discussed at the meeting with Ministers on 4 May 2018 and agreed that Defence's advice proceed, with amendments, to the government for consideration.

<sup>75</sup> In December 2022, Defence advised the ANAO that:

Defence staff identified Objective files that were hidden to all users except a very limited number of staff who had been given specific access by Objective administrators. This control was put in place during the Competitive Evaluation Process due to the sensitive and commercial nature of the content and was instigated on both the Defence Protected Network and Defence Secret Network (DSN). The extent to which the files had been 'hidden' was not identified during the ANAO field work.

Objective is Defence's electronic record-keeping system. The additional documentation provided to the ANAO included a presentation and summary assessment of the tenders.

<sup>76</sup> The hand-written notes from the relevant 2018 DIC and DC meetings were made by a senior Defence official. Copies of those notes were stored in the Defence records management system on 23 January 2023. The original notes were provided to the ANAO on 24 January 2023.

<sup>77</sup> On 9 May 2018 Defence sought advice from AGS on approaching the selected tenderer with a proposal that the tenderer acquire and operate a corporate entity of ASC as a condition of contract, which had not been outlined in the RFT. AGS noted several risks, including the risk of inequitable treatment if non-preferred tenderers were not approached and the risks associated with changing aspects of the procurement so late in the process. AGS also noted that Defence had reaffirmed the workforce assumptions in the RFT both while the tender was live and during the Offer Definition phase. On 25 May 2018, senior Defence officials met with the three tenderers in Singapore to seek in-principle agreement to a share purchase agreement to acquire ASC shipbuilding following the selection of the preferred tenderer.

## Advice provided to government at 'second pass'

2.69 To support the government's decision-making, Defence provided advice on the preferred capability, cost, schedule and risk. Defence did not provide advice on value for money.

#### Advice on preferred capability

2.70 Defence recommended that the government select BAE Systems' 'Global Combat Ship – Australia' as the preferred capability.

2.71 The rationale for the recommended selection was clearly documented in the advice to government and was based primarily on anti-submarine warfare capability as the key discriminator. The focus on anti-submarine warfare capability aligned with the project objective, approved by government, to deliver nine anti-submarine frigates (see paragraph 2.25). Anti-submarine warfare capability was also one of the 23 high level capability requirements assessed in one of the ten tender evaluation criteria, under 'Tendered Mission System (see Table 2.2).

2.72 Defence advised the government that it had selected mature designs for consideration. The advice noted that Defence had assessed the three tenders against the 23 high-level capability requirements and project objectives and that the key differentiator between the tenders related to anti-submarine warfare capability. An attachment to the advice included Defence's comparison of the tenderers against the high-level capability requirements. This comparison differed from the assessments made by the Future Frigate Three-Star Capability Management Steering Group (the CMSG, discussed in paragraph 2.58). The source document for this attachment has not been retained by Defence. Defence advised the ANAO in September 2022 that it was unable to locate records of its assessment (prepared during the tender evaluation) against the 23 high level capability requirements.

2.73 Defence's assessment against the high-level capability requirements, as provided to government, did not include an assessment against the capability requirement relating to the maturity of the ship designs. However, the second pass advice noted that 'BAE Systems has only recently commenced construction on the UK [BAE Type 26<sup>78</sup>] program' and that the Type 26 'does not yet represent a ship in water...the design is not yet complete.' Defence's advice also noted that the 'UK expects a (Type 26) ship acceptance date (post contractor sea trails) in 2023 and they advise that the project is on track to meet this milestone'.

2.74 Defence has previously responded to ANAO observations that the shortlisting of the BAE offering did not appear to be consistent with the principles regarding design maturity in the RAND report on *Australia's Naval Shipbuilding Enterprise: Preparing for 21<sup>st</sup> Century.* In November 2017, during the performance audit resulting in Auditor-General Report No.39 2017–18 *Naval Construction Programs—Mobilisation,* Defence advised the ANAO that:

The three designs are considered military-off-the-shelf with the T26 [BAE Type 26] having just started construction in the UK. The RAND analysis completed in 2015 noted "numerous data

ANAO comment: this is a reference to the variant of the BAE offering procured by the UK Ministry of Defence.

unknowns" for this platform however UK MoD [Ministry of Defence] has now shared the relevant protected data to the SEA5000 project.<sup>79</sup>

2.75 The maturity of the BAE Type 26 reference ship design is discussed further in paragraphs 3.98 to 3.117 of this audit report.

2.76 Defence's advice to government also noted that the tenderers had agreed in principle to the ASC transaction at a nominal cost of \$1.00.

#### Advice on cost

2.77 In its advice to government at second pass, Defence noted that all three tendered options were unaffordable within the Integrated Investment Program (IIP) provision (\$36.4 billion), with a four per cent difference in cost between the three options. Defence advised the government that project costs (estimated at \$44.3 billion) would be managed within the provisions of the future naval construction program.<sup>80</sup> Defence provided the government with a rough order of magnitude whole-of-life cost estimate for BAE Systems' tender.<sup>81</sup>

2.78 The acquisition cost estimate provided in the advice included a 10 per cent cost reduction to the tendered production costs, valued at \$2.1 billion. Defence did not document the basis for this advice and did not disclose, in the advice, that a cost reduction had not been negotiated with the tenderers. An assessment of project cost estimates undertaken by Defence's Contestability Division in April 2018 had considered the 10 per cent reduction and noted that:

it could be argued that there is an opportunity for these costs to reduce. However there is no clear evidence either from the Department of Defence experience in shipbuilding projects, nor the broader cost analysis literature to support this. There is significant discussion in the cost literature to support the opposite — initial cost estimates tend to be overly optimistic resulting in future cost increase.

The reduction in the total acquisition estimate by this amount is a cost risk to the project and increases the likelihood that during future submissions to government the build cost will increase from this base cost.

2.79 The Department of Finance (Finance) prepared an assessment that was included in the draft advice provided by Defence to its ministers at second pass. Finance drew attention to the

<sup>79</sup> In relation to the consideration of design maturity in defence acquisition decision-making, the ANAO's 2014 performance audit of the Hobart Class destroyer program (Air Warfare Destroyer) highlighted that immaturity in the destroyer's detailed design had a significant impact on the program's cost, productivity and schedule. See: Auditor-General Report No.22 2013–14 *Air Warfare Destroyer Program*, pp. 169–208. The Collins Class submarine construction was also affected by an immature design. See: RAND Corporation, *Learning from Experience Volume IV Lessons from Australia's Collins Class Submarine*, 2011, p. xix.

<sup>80</sup> As outlined in paragraph 2.25, remaining within the IIP provision was one of the five project objectives.

<sup>81</sup> As noted in paragraph 2.26 of Auditor-General Report No.7 2022–23 *Defence's Administration of the Integrated Investment Program,* Defence's whole-of-life cost estimate included an amount for sustainment comprising a provision in the IIP broadsheet for Hunter class sustainment plus the value of the existing sustainment cost for the current fleet of ANZAC class frigates.

The ANAO has previously reported that Defence also provided rough-order-of-magnitude sustainment cost estimates to government at second gate approval for the Offshore Patrol Vessel program. In that context the ANAO observed that this approach was contrary to the findings and recommendations of external reviews undertaken in Defence over the past two decades. See Auditor-General Report No.39 2017–18 *Naval Construction Programs—Mobilisation*, paragraphs 4.10–4.12. See also Auditor-General Report No.12 2020–21 *Defence's Procurement of Offshore Patrol Vessels — SEA 1180 Phase 1*, paragraph 1.13.

10 per cent cost reduction on the tendered production costs<sup>82</sup> and what it considered to be limitations in Defence's advice on cost. Finance noted that a sustainment provision had been provided in place of a sustainment cost estimate and that the requirement in the Budget Process Operational Rules applying to Defence had not been met.<sup>83</sup> Finance also noted that the selection of the preferred tenderer was based solely on capability, in the absence of whole of life cost estimates.

2.80 Finance supported Defence's recommendations to government, noting that over the life of the project Defence would return with further cost estimates and submissions for future project stages. That is, there would be further opportunity to refine the costs presented to government. Finance did not comment on Defence's approach to the procurement or lack of value for money assessment.<sup>84</sup>

2.81 Defence provided the ANAO with a number of spreadsheets that the department stated formed the basis of the tender assessment and consideration, and which contained cost information for government's consideration at second pass. The spreadsheets contained detailed information and formulae across thousands of cells. Most of these documents were not finalised in Defence's records management system, and the document history recorded in the Defence records management system indicates that all had been edited following the government's selection of the preferred tender.

#### Advice on capability transition and schedule

2.82 Defence advised the government at second pass that the ANZAC class frigate transition plan was under development and that the first ANZAC class frigate was expected to retire between 2030 and 2043.<sup>85</sup>

2.83 Defence also noted that overall project risk was high, with schedule risk assessed as high due to construction of the BAE Type 26 commencing in the UK in 2017.

#### Government second pass decision

2.84 At second pass in June 2018, the government agreed to:

- the selection of BAE Systems' 'Global Combat Ship Australia' as the design for the Future Frigate;
- the sale of ASC Shipbuilding to BAE Systems;

85 Defence's advice to government to extend the ANZAC class life-of-type to 2043 was not based on a transition plan or informed by an analysis of the frigates' physical capacity to deliver the required capability until then. See Auditor General Report No.30 2018–2019 *Anzac Class Frigates – Sustainment*, p.8.

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<sup>82</sup> This reduction was not applied to the design and productionisation scope and the government furnished equipment elements of the project, as submitted to government. The reduction was not applied to the cost model used for the source evaluation reports.

<sup>83</sup> The November 2017 'Budget Process Operational Rules - Defence Requirements' stated that: 'For Defence investment projects brought forward for Government consideration, whole-of-life cost estimates for all options presented must be included in the submission, in the current price basis, and out-turned for price and exchange.'

<sup>84</sup> Finance has whole-of-government responsibility for the Commonwealth procurement framework, including policy responsibility for the Commonwealth Procurement Rules (CPRs). As discussed in paragraph 2.91 of this audit report, the core rule of the CPRs is achieving value for money.

- funding of \$6,725.6 million (out-turned)<sup>86</sup>; and
- Ministers progressively returning to government to seek approval for the funding of construction of successive batches of three ships per batch.<sup>87</sup>

2.85 In summary, Defence's advice to the Australian Government at second pass on the selection of the preferred ship design did not include an assessment of value for money or include whole-oflife cost estimates as required by the Budget Process Operational Rules applying to Defence. These are long-established requirements for well-informed government decision-making and are intended to provide Parliament and the community with confidence regarding the proper use of public resources. As discussed in the next section, Defence's procurement and related advisory processes did not include a value for money focus, and this approach did not comply with the core rule of the Commonwealth Procurement Rules (CPRs), which state that:

4.4 Achieving value for money is the core rule of the CPRs. *Officials* responsible for a *procurement* **must** be satisfied, after reasonable enquiries, that the *procurement* achieves a value for money outcome [emphasis in original].

#### Consideration of value for money in the procurement

2.86 In its December 2022 response to the ANAO's preliminary audit findings, Defence advised that it did not agree that the procurement lacked a value for money focus. Defence informed the ANAO that:

The value for money assessment is inherent throughout Defence's management of the naval shipbuilding enterprise and, through this lens, the progress of the project between first and second pass. Defence recognises that value for money is not solely determined by the price. Key assessments in determining value for money commenced with the work RAND Corporation undertook in 2015 (*Australia's Naval Shipbuilding Enterprise – Preparing for the 21<sup>st</sup> Century*). This work underpinned the Government of the day taking a more strategic approach to establish continuous naval shipbuilding programs and a more structured approach to through-life management. This was announced in the *2016 Defence White Paper* and later expanded in the *2017 Naval Shipbuilding Plan*. In essence, the Government determined there to be value for money in establishing a sovereign, sustainable, cost-competitive continuous shipbuilding program

2.87 This response was repeated in substance and expanded on in Defence's formal response to the audit report, reproduced at Appendix 1:

The goals and purpose underpinning the planned procurement of nine future frigates was clearly enunciated in the 2016 Defence White Paper and the 2017 Naval Shipbuilding Plan.

...

Defence recognises that value for money is not solely determined by the price. The Government determined there to be value for money in establishing a sovereign, sustainable, cost-competitive continuous shipbuilding program in Australia. The tenders were therefore considered in line with the Government's policy around continuous naval shipbuilding.

<sup>86</sup> The approved funding was for the integration of the United States Aegis combat management system, the SAAB combat system interface, Australian CEAFAR2 radar, initial design and prototyping, long lead time items, and infrastructure requirements.

<sup>87</sup> The situation since second pass is discussed in footnotes 13 and 168 of this audit report.

2.88 Two key propositions in Defence's responses to the ANAO are inconsistent with the longstanding requirements of the Commonwealth procurement framework. These propositions are that:

- 'The value for money assessment is inherent throughout Defence's management of the naval shipbuilding enterprise ...'; and
- 'the Government determined there to be value for money in establishing a sovereign, sustainable, cost-competitive continuous shipbuilding program in Australia.'

2.89 In its responses, Defence has conflated an industry policy objective (establishing a continuous naval shipbuilding program in Australia) with the achievement of value for money in procurement as required by the Commonwealth Procurement Rules (CPRs) — in effect arguing that a procurement undertaken to help effect this policy objective will <u>necessarily</u> represent value for money.

2.90 As noted in paragraph 2.1, an entity's accountable authority has a duty, under paragraph 15(1)(a) of the *Public Governance, Performance and Accountability Act 2013* (PGPA Act) to promote the proper (efficient, effective, economical and ethical) use and management of public resources in accordance with the PGPA Act, including by complying with the CPRs. The accountable authority of a non-corporate Commonwealth entity (such as Defence) must also govern the entity in accordance with paragraph 15(1)(a) in a way that is not inconsistent with the policies of the Australian Government. In the procurement context, this means that government policy may be a relevant consideration in the assessment of value for money under the CPRs.

2.91 The CPRs are a legislative instrument issued by the Minister for Finance under the PGPA Act. The core rule of the CPRs is achieving value for money, regardless of the type of procurement process undertaken, such as a limited tender as in this case. Paragraph 4.4 of the CPRs states that:

4.4 Achieving value for money is the core rule of the CPRs. *Officials* responsible for a *procurement* **must** be satisfied, after reasonable enquiries, that the *procurement* achieves a value for money outcome [emphasis in original].

2.92 This is, in effect, an obligation on officials to assess value for money. The obligation on officials cannot be excluded from a procurement process, as in the 2017 Tender Evaluation Plan (TEP) for this procurement. Defence's TEP, discussed in paragraphs 2.31 to 2.35, stated that:

The TEP does not require the Tender Evaluation Organisation (TEO) to conduct a comparative evaluation of tenders and to determine a ranking of tenders based on a value for money assessment of the tenders. Rather the TEO is to provide Government with its assessment of the acceptability to the Commonwealth of the tenders against each of the evaluation criterion. Using the acceptability assessment it is proposed that Government will consider the value for money of the tenders.

2.93 Paragraph 2.2 of the CPRs provides that officials from non-corporate Commonwealth entities (including Defence) must comply with the CPRs when performing duties related to procurement. These specific requirements are underpinned by sections 25–29 of the PGPA Act, which impose a set of general duties for officials of Commonwealth entities. The general duties

include the consideration of, and where relevant, compliance with the finance law, which includes the PGPA Act and PGPA Rule and instruments made under the PGPA Act, such as the CPRs.<sup>88</sup>

2.94 The CPR requirements are reflected in paragraphs 6 and 7 of the Defence Procurement Policy Manual (DPPM), which reinforces the CPR requirement to assess value for money in all procurements and the obligation on officials to do so:

Division 1 of the CPRs (in Chapter 4 of the DPPM) sets out rules that apply to all procurements. This means that all Defence procurements are required to comply with Division 1 (and the additional Defence Procurement Policy Directives in Chapter 4 of the DPPM). This Division establishes 'value for money' as the core requirement of Commonwealth procurement. Defence officials responsible for a procurement need to be satisfied, after reasonable inquiries, that the procurement achieves value for money.<sup>89</sup>

2.95 Further, there is no evidence in relevant Australian Government policy statements to suggest that the government expects anything other than value for money to be achieved in the context of Australian naval shipbuilding.

2.96 The 2016 Defence White Paper noted that:

The Government requires Defence to be a smart buyer to maximise Defence capability and value for money for the Australian taxpayer.<sup>90</sup>

...

Efficient capability planning and procurement processes within Defence will ensure that the ADF has the capability it needs when it needs it, and the value for money Australia receives from its investment in Defence is maximised.<sup>91</sup>

#### 2.97 The 2017 *Naval Shipbuilding Plan* noted that:

If the Government is to ensure that the future Australian Defence Force remains a balanced force, with the highest levels of capability and protection our nation can afford, our industry base must deliver capability that is value for money and cost-competitive.<sup>92</sup>

<sup>...</sup> 

<sup>88</sup> Department of Finance, General duties of officials (RMG 203), December 2022, available from: <u>https://www.finance.gov.au/government/managing-commonwealth-resources/managing-risk-and-internal-accountability/general-duties-officials-rmg-203 [accessed 9 March 2023].</u>

<sup>89</sup> Defence Procurement Policy Manual, Version 1.1, 19 December 2017, paragraph 6, (which was in effect during the key decision-making period of the Hunter class procurement). The manual also notes at paragraph 4, that:

The DPPM incorporates both the CPRs and additional Defence Procurement Policy Directives that must be complied with by Defence officials in relation to procurement. Defence Procurement Policy Directives supplement specific CPRs in the context of the particular circumstances and needs of the Department of Defence ('Defence').

<sup>90</sup> Department of Defence, 2009 Defence White Paper, p. 109, available from <u>https://www.defence.gov.au/sites/default/files/2021-08/defence\_white\_paper\_2009.pdf</u> [accessed 18 November 2022].

<sup>91</sup> Department of Defence, 2009 Defence White Paper, p. 172, available from <u>https://www.defence.gov.au/sites/default/files/2021-08/defence\_white\_paper\_2009.pdf</u> [accessed 18 November 2022].

<sup>92</sup> *Naval Shipbuilding Plan,* paragraph 2.84, p. 43.

The Government will support the growth of a secure and sustainable Australian naval shipbuilding and sustainment industry through:

a. Careful management of the demand to meet both industry capacity and the Navy's strategic capability needs (Chapter Two);

b. Decisions on acquisition strategies that balance long-term program vision with value for money project development and program execution risk management, ensuring the Government supports the growth of a sustainable, cost-competitive naval shipbuilding sector.<sup>93</sup>

2.98 Auditor-General performance audits since 2016–17 (listed at paragraph 1.18), relating to naval shipbuilding procurements, have observed Defence activities to comply with the requirement to assess the achievement of value for money.

- Defence's competitive evaluation plan for the Future Submarine noted that the early selection of an international partner would support the achievement of value for money, as required for a procurement conducted under the CPRs.<sup>94</sup>
- Defence's competitive evaluation process for the Offshore Patrol Vessel (OPV) program was supported by appropriate governance, assurance and probity arrangements and a Tender Evaluation Plan that was applied consistently across the three invited tenders, to provide a basis for assessing value for money.<sup>95</sup> In contrast to the Hunter class frigate tender, the OPV Tender Evaluation Plan included the comparison of tenders and the making of a source evaluation recommendation to the Delegate.<sup>96</sup> The OPV Source Evaluation Report contained clear value for money assessments, comparisons and rankings.
- Defence's sole source procurement of six evolved Cape Class patrol boats included two assessments of value for money and the advice to government included Defence's assessments of value for money.<sup>97</sup>

2.99 Defence's general approach to applying the CPRs and the core principle of value for money in the Hunter class procurement, and the lack of understanding of CPR requirements reflected in its responses to the ANAO, suggests that further training and oversight may be required of Defence officials involved in high-level planning and advising on major capital acquisition projects, at all levels. There is also scope for more active engagement with the CPR policy owner, the Department

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<sup>93</sup> Department of Defence, Naval Shipbuilding Plan, 2017, p. 81.

<sup>94</sup> Auditor-General Report No.48 2016–17 *Future Submarine — Competitive Evaluation Process*, paragraph 2.24.

<sup>95</sup> Auditor-General Report No.12 2020–21 *Defence's Procurement of Offshore Patrol Vessels* — *SEA 1180 Phase 1*, paragraph 10. The OPV procurement received first pass approval at the time of the Hunter class frigate first pass approval in April 2016. The OPV tender closed the day prior to the opening of the Hunter class tender in March 2017.

<sup>96</sup> The OPV Tender Evaluation Plan noted that: 'The tender evaluation criteria will form the basis for the evaluation of tenders and assessments against which value for money recommendations will be made'.

<sup>97</sup> Auditor-General Report No.15 2021–22 Department of Defence's Procurement of Six Evolved Cape Class Patrol Boats, paragraphs 2.54–74 and 2.97.

of Finance, to ensure that procurement activity for major capital acquisition projects is compliant with both the letter and the spirit of the Commonwealth procurement framework.<sup>98</sup>

2.100 The hallmark of Defence's management of this procurement and related advisory processes is that they lacked a value for money focus, and in that sense the procurement did not comply with the core rule of the CPRs. The origins of this approach — which was reflected in the 2017 Tender Evaluation Plan — are not transparent, due to the shortcomings in Defence record keeping observed in this audit. As discussed in paragraphs 2.7 to 2.12, Defence's record keeping was not fully consistent with the CPRs, which state that maintaining records is one of the fundamental elements of accountability and transparency in procurement.

## **Recommendation no. 2**

2.101 The Department of Defence ensure that its procurement advice to the Australian Government on major capital acquisition projects documents the basis and rationale for proposed selection decisions, including information on the department's whole-of-life cost estimates and assessment of value for money.

#### Department of Defence response: Agreed.

2.102 Defence does ensure that all procurement advice to Government on major acquisition projects includes the basis and rationale for proposed decisions, including value for money and whole-of-life cost estimates, and contends that this did occur in relation to the Hunter class frigate project.

#### ANAO comment

2.103 As discussed in paragraph 2.85 of this audit report, Defence's advice to the Australian Government at second pass on the selection of the preferred ship design did not include an assessment of value for money or include whole-of-life cost estimates as required by the Budget Process Operational Rules applying to Defence.

<sup>98</sup> As discussed in paragraph 2.93, compliance with the CPRs is a duty of officials under the PGPA Act. Further, section 14 of the Australian Public Service Commissioner's Directions 2022 (dated 31 January 2022) provides that upholding the 'ethical' value in subsection 10(2) of the *Public Service Act 1999* requires the following: 'complying with all relevant laws' and 'acting in a way that is right and proper, as well as technically and legally correct or preferable'.

## 3. Contracting and delivery

#### Areas examined

This chapter examines the Department of Defence's (Defence) contracting arrangements for the procurement of Hunter class frigates and the effectiveness of Defence's contract management and delivery of the procurement.

#### Conclusion

Defence has established largely fit-for-purpose contracting arrangements for the design and productionisation stage, and largely effective contract monitoring and reporting arrangements to ensure adequate visibility of performance and emerging risks and issues. However, the contract management plan was established 44 months (3.6 years) after contract execution.

Defence's expenditure to date has not been effective in delivering on project milestones, and the cost of the head contract has increased. Lack of design maturity has resulted in an 18-month delay to the project and extension of the design and productionisation phase, at an additional cost to Defence of \$422.8 million. At January 2023 the project was forecast to exceed the whole of project budget approved by government by a significant amount.

#### Areas for improvement

The ANAO identified two opportunities for improvement relating to mapping contracted outcomes against negotiation directives, and the timely preparation of contract management documents.

3.1 On 14 December 2018 Defence entered into a head contract with ASC Shipbuilding, now trading as BAE Systems Maritime Australia (BAESMA), for the procurement of Hunter class frigates. The design and productionisation stage of the contract at contract execution was valued at \$1,904.1 million (GST exclusive). Effective management of the contract, to deliver the contracted objectives, involves:

- fit-for-purpose contracting arrangements to support management of contractor performance<sup>99</sup>;
- contract monitoring and reporting arrangements that ensure adequate visibility of performance and emerging risks and issues to aid decision-making; and
- delivery of project milestones on time and budget to achieve the value-for-money outcomes expected under the contract.

<sup>99</sup> For example, the head contract should set out the basis for a successful long-term production relationship between Defence and BAESMA.

## **Did Defence establish fit-for-purpose contracting arrangements?**

When it was executed in December 2018, the head contract reflected the contract negotiation outcomes reported to the delegate. However, the extent to which these outcomes were in line with Defence's original negotiation positions is not transparent because not all outcomes were clearly defined or reported against, and some negotiation issues were not finalised when the head contract was signed.

Milestones under the head contract have clear entry and exit criteria and due dates, with the first milestone payable on contract execution.

Performance expectations are clearly set out in the contracted statement of work and are linked to performance measures, with processes to manage poor performance included in the conditions of contract. Commercial levers to incentivise the prime contractor (BAE Systems Maritime Australia) and drive value for money outcomes in project delivery are limited. Key commercial levers such as profit moderation provisions were not active at the time the head contract was executed. On 29 June 2022 Defence signed a contract change proposal activating profit moderation for the Scope Fee from 1 July 2022, enlivening a key commercial lever in the head contract.

The head contract established processes for managing contract change proposals (CCPs). As of 31 March 2023, there were 93 contract changes and the number of key milestones had increased from 25 to 37. Thirty-six of the 93 CCPs approved by Defence were price impacting and the cost of the contract has increased by \$693.2 million. This represents a 36 per cent increase to the design and productionisation cost of the Hunter class.

Amendments to the head contract mean that between December 2018 (contract execution) and March 2023, the contract has increased in price from \$1,904.1 million (GST exclusive) to \$2,597.4 million (GST exclusive). The contract price remained within the (PGPA Act) section 23 commitment approval amount as of 31 March 2023.

3.2 Following the government's selection of the Global Combat Ship–Australia design in June 2018, in September 2018 Defence entered into an advanced work arrangement contract with BAE Systems to support the commencement of work prior to finalisation of the head contract. The advanced work arrangement covered the development of key plans and reports, mobilising staff, establishing supply chain arrangements and progressing the Hunter class design.

#### Head contract negotiations

3.3 Defence held negotiations for the head contract between October and December 2018. The negotiation process was guided by the following.

• An overarching Contract Negotiation Strategy, approved by the General Manager, Ships (SES Band 2/two-star equivalent) on 30 August 2018, which documented the intended contracting approach timeframe and phases. The strategy noted the need to 'set the

foundation for the mutually-beneficial relationship that can be built upon by subsequent generations of project personnel to meet and exceed the parties' objectives'.<sup>100</sup>

• A Contract Negotiation Directive, endorsed by the Director-General, Combat Management and Payload Systems (SES Band 1/one-star equivalent) on 10 October 2018. The Directive established the role of the lead negotiator, negotiation secretariat and work groups to support the negotiation process.

3.4 Defence engaged contractors as the Lead Negotiator and Deputy Lead Negotiator.<sup>101</sup> Both their contracts concluded before the negotiation was completed, and the General Manager, Ships approved replacing the Lead Negotiator with a Defence official (Executive Level 2) to complete the final seven days of negotiation on the Commonwealth's behalf.

3.5 The ANAO reviewed the endorsed Contract Negotiation Directive dated 10 October 2018, which set out 35 negotiation topics and the Commonwealth's positions.<sup>102</sup> The Commonwealth's negotiation positions were documented for 34 of the 35 topics.<sup>103</sup> The sources and rationale behind the negotiation positions were not clearly identified in the directive. For the 34 topics with documented negotiation positions, Defence provided:

- clear and defined directions on its preferred position for 24 topics and did not state a preferred position for 10 topics<sup>104</sup>; and
- clear and defined directions on its minimum position for five topics there were 17 topics with a minimum position that was largely the same as the preferred position and 12 topics did not have clear and defined minimum positions.<sup>105</sup>

#### Negotiation outcomes

3.6 The Contract Negotiation Report, dated 11 December 2018, outlined the negotiation outcomes for 37 negotiation topics and listed 18 negotiation outcomes as 'significant'. Negotiation topics in the report did not fully align with those listed in the Contract Negotiation Directive.<sup>106</sup>

106 The Contract Negotiation Report included new negotiation topics on ship performance, the sovereign capability and option deed, and a limit on rework as an allowable cost under a target cost estimate.

<sup>100</sup> The strategy also noted that there were factors that would make it not feasible to sign the head contract in the period July to September 2018. These factors included that: BAE Systems had yet to respond to large parts of the draft contract, the Commonwealth had yet to determine changes needed to the head contract drawn from the ASC transaction and that for a number of contracting issues neither party had yet determined a fixed position.

<sup>101</sup> As noted in footnote 52, the lead negotiator was a former Director, Maritime of BAE Systems Australia and a member of the Expert Advisory Panel established by Defence under the Tender Evaluation Plan.

<sup>102</sup> The negotiation topics included: conditions of contract (such as intellectual property, termination, Australian industry content); finance (such as allowable costs); operating model (such as design management arrangements); engineering (such as engineering process lifecycle and shipyard facilities); and schedule (such as design and productionisation milestones).

<sup>103</sup> The Contract Negotiation Directive did not state Defence's position for the statement of work. As discussed in Chapter 2, the statement of work to be included in the head contract at contract execution was to be jointly developed.

<sup>104</sup> For 10 topics, a clear preferred position had not been determined. For example, the directive stated that the Commonwealth would discuss with BAE Systems particular matters related to the negotiation topic.

<sup>105</sup> In ten of these cases, the Directive left Defence's minimum position up to the discretion of the lead negotiator. Defence considered the lead negotiator's declaration and considered that apparent conflicts were manageable, without paying particular regard to the specific topics where the outcomes were at the discretion of the lead negotiator.

3.7 The Contract Negotiation Report did not state whether Defence's preferred or minimum position for each topic was achieved. The report noted one instance where Defence achieved less than its minimum position.

3.8 Ten negotiation issues were not finalised at contract execution, including the Continuous Naval Shipbuilding Strategy.<sup>107</sup> The ANAO's analysis indicates that the head contract, as executed, reflected the finalised Contract Negotiation Report outcomes.

#### **Opportunity for improvement**

3.9 To support an assessment of the extent to which contract negotiation objectives have been achieved by the negotiation team, and to help identify areas of potential risk in the contractual relationship going forward, it is important to clearly map reported outcomes to contract negotiation directions and strategies.

#### Establishing the head contract

3.10 A (PGPA Act) section 23 commitment approval for the Hunter class head contract was signed on 12 December 2018 by the General Manager, Ships.<sup>108</sup> The minute seeking section 23 commitment approval included advice regarding value for money and relevant attachments (the Contract Negotiation Report and legal, probity and financial advice). The delegate was advised that the achievement of value for money was supported in the negotiated head contract through the following arrangements.<sup>109</sup>

- Commonwealth oversight and control arrangements including comprehensive access and audit rights, contractual levers to actively control BAESMA's spending and performance, and pricing models to incentivise BAESMA to remain on budget and schedule.
- Performance monitoring and management arrangements including Special Performance Requirements which if not achieved would require up to a capped amount of rework costs, and Strategic Performance Measures to moderate fees for management services.
- Liability arrangements including liability caps, limits to recoverable costs for termination on a walk-away basis and a Deed of Guarantee and Indemnity.

3.11 Defence entered into the head contract for delivery of the design and productionisation phase of the program on 14 December 2018. A contract effective date of 4 February 2019 was set out in the head contract.

3.12 The statement of work in the head contract requires BAE000SMA to:

<sup>107</sup> The status of the Continuous Naval Shipbuilding Strategy is outlined in paragraphs 3.127–3.139.

<sup>108</sup> The delegate also approved, under subsection 23(1) of the PGPA Act: Defence's entry into the Sovereign Capability and Option Deed (between the Commonwealth, ASC Shipbuilding Pty Ltd and BAE Systems Australia Limited); and a Side Deed (between the Commonwealth, ASC Pty Ltd, ASC AWD Shipbuilder Pty Ltd and ASC OPV Shipbuilder Pty Ltd).

<sup>109</sup> The advice to the delegate also noted Australian Industry Capability and Continuous Naval Shipbuilding – including Australian Contract Expenditure targets – as elements supporting the achievement of value for money.

- a. progress design maturity of the Mission System and Support System sufficient to successfully exit the final Production Readiness Review;
- b. conduct logistics support analysis to define the Support System up to the equivalent of a Support System Critical Design Review; and
- c. conduct prototyping activities to provide increased certainty that the shipyard facilities, production systems and processes, workforce and supply chain and finance systems are capable prior to the commencement of ship construction.

#### Amendments to the head contract

3.13 The head contract establishes processes for Contract Change Proposals (CCPs). The head contract had been subject to 93 CCPs as of 31 March 2023. Thirty-six of the 93 CCPs (39 per cent) approved by Defence were price impacting, with a total increase in contract price of \$693.2 million. This represented a 36 per cent increase to the design and productionisation price, resulting in a total contract price of \$2,597.4 million (GST exclusive). The contract price remained within the (PGPA Act) section 23 commitment approval amount as at 31 March 2023.

3.14 The approved price-impacting CCPs related to: shipyard lease costs; 'Hunter Hobart Harmonisation Mobilisation'<sup>110</sup>; the Interim Arrangement<sup>111</sup>; removal of the combat management system Australian interface scope; Functional Baseline updates; and incorporation of Australian Industry Capability (AIC) investment funding. In addition, 67 engineering change proposals had been technically endorsed as at 31 March 2023.

3.15 The milestones in the head contract have also been amended. At execution, the head contract included 25 key milestones. As at March 2023, there were 37 key milestones in the head contract (see Appendix 3). The first milestone was paid on contract execution. The remaining milestones have criteria to be met/delivered and due dates.<sup>112</sup> The 37 key milestones include clear entry and exit criteria and payment amounts. There are also 75 project delivery milestones, which do not include payments, although some correspond to key milestones.

3.16 As at 31 March 2023, the price of the head contract recorded in AusTender had increased to \$2,980.4 million, with nine variations totalling \$721.4 million (GST exclusive). The variations amount to an increase of approximately 32 per cent of the original published contract value of \$2,259 million. Defence was unable to provide evidence to the ANAO of how it calculated the value of one variation in AusTender with a value of \$393,151,056.

3.17 The January 2023 project review by the Surface Ships Advisory Committee (SSAC) identified the following issues with the contract change proposal process:

In previous reviews, the SSAC [Surface Ships Advisory Committee] have expressed concern about the time it takes for Contract Changes (CCPs) to be processed (on HCF [Hunter class frigates] and other projects). Complex Projects like the HCF that span years typically involve hundreds of Contract Change Proposals (CCPs). Following our previous comments, the HCF Project has been working to determine CCP processing timelines and working with BAESMA to understand the

<sup>110</sup> This relates to mobilisation activities intended to support the harmonisation of the Hunter class batch one build (three frigates) and batch two design with the SEA 4000 Phase 6 Hobart class Aegis combat systems upgrade.

<sup>111</sup> Refer to paragraphs 3.104–3.117 for further information on the Interim Arrangement.

<sup>112</sup> The first milestone (with a payment of \$2.5 million to BAESMA) aligned with the date on which the contract became effective and was described as 'Workforce Retention'. This milestone had no criteria.

process and seek to improve cycle time. They have identified that "simple" CCPs take 6-8 weeks from initial identification/planning to execution while "complex" CCPs take 4-24 months. The SSAC consider this to be excessive and putting additional risk on schedule. The Project/BAESMA team have flow charted the CCP process with all its steps, drafting, multiple reviews and approvals and it appears to us to be far from being a streamlined process. The SSAC *recommends* that Defence leadership review this process with the HCFP/BAESMA team, identify roadblocks and opportunities for improvement in the process ... and the SQEP [suitably qualified experienced people] contracting resources assigned to the Project and BAESMA teams to determine if additional staffing is needed.

The significant changes in the Commonwealth's (MIWS') [Maritime Integrated Warfare Systems] and BAESMA's roles and responsibilities in the design, development, integration and testing of the HCF CS [combat system] are not fully reflected in the Head Contract. Furthermore, absent the detailed schedules and costings associated with MIWS executing its enhanced roles and identifying the attendant reductions in BAESMA's Head Contract costs, the net impact has not been determined. Currently, Batch 1 pricing is proceeding on the basis of roles and responsibilities as described in the Head Contract. The SSAC *recommends* that these changes be agreed and a CCP be incorporated as soon as practicable to remove ambiguity and enable effective scheduling and costing for CS related effort. [emphasis in original]

#### Performance measures

3.18 The head contract includes performance measures and commercial levers to support Defence's monitoring and management of BAESMA's performance.

3.19 The contract states that 'the purpose of the Performance Measures is to support the Commonwealth to measure the Contractor's performance against the Contract in terms of achieving the Outcomes.' Defence has established three Strategic Performance Measures (SPMs) in the head contract which are to be used to measure the contractor's performance against the Strategic Relationship Principles.<sup>113</sup> The three SPMs are:

- Relationship: BAESMA's demonstration of positive relationships with the Commonwealth, subcontractors and other third parties.
- Best for Defence: BAESMA's ability to balance its commercial interests and other interests for the benefit of the project and Defence.
- Data Transparency: BAESMA's demonstration of full data transparency.

3.20 Two other types of performance measure are to be developed for Batch 1 (the build of the first three frigates). These are Enterprise Key Performance Indicators and Other Performance Measures.

#### **Commercial levers**

3.21 Defence has included a range of levers in the contracting arrangements with BAESMA. These include profit moderation, scope adjustment and fee moderation.

<sup>113</sup> The SPMs are assessed against a set of defined criteria set out in the Head Contract. If BAESMA's performance for any of the SPMs is assessed by Defence as 'amber' (fair) for two consecutive review periods or 'red' (poor) for any Review Period, Defence may require BAESMA to submit an SPM Remediation Plan. Once an SPM Remediation Plan is approved by Defence, BAESMA is required to complete all steps and activities contained in the plan within the period specified. BAESMA's entitlement to payment of the Management Services Fee may be affected by its compliance with the SPM Remediation Plan requirements.

3.22 Profit moderation is a key commercial lever that Defence has the option of applying, to ensure BAESMA performs satisfactorily. Defence has agreed a management services fee (an agreed percentage) on the management services component of the contract price, and a scope fee (also an agreed percentage) on the design and productionisation scope component of the contract price. Both fees are to be adjusted to exclude pass through expenses, unrecoverable transaction costs, and allowable costs in respect of long lead time items from the calculation.<sup>114</sup> If BAESMA does not meet performance expectations against key milestones, a total of 50 per cent of BAESMA's scope fee is to be put at risk, with a 10 per cent reduction of the payable fee for every seven-day period beyond the due date.

3.23 Profit moderation of the management services fee was potentially triggered when BAESMA's performance against the Data Transparency SPM was rated amber (fair) for a second consecutive quarter for the November 2019 to January 2020 period (subsequent to the grace period allowed under the head contract). To trigger profit moderation, Defence would have needed to require a remediation plan from BAESMA. Defence advised the ANAO that no remediation plan had been required as at 20 March 2023.

3.24 The head contract makes provision for the inclusion of stop payment milestones. These provisions are not currently active in agreed contractual arrangements for the design and productionisation stage.

3.25 Defence can terminate or reduce the scope of the head contract, including by terminating a scope and on a walk-away basis, if Defence and BAESMA are not able to agree a scope statement. In terms of scope termination, liability is limited to payments in respect of work performed prior to termination or reduction and directly attributable reasonable costs incurred by BAESMA. The Scope Fee moderation provisions were identified by the Finance sub-Tender Evaluation Working Group as 'insufficient to positively influence contractor behaviour and will not provide adequate Commonwealth control of Contractor schedule performance.'

3.26 On 29 June 2022 Defence signed a CCP activating profit moderation for Scope Fee from 1 July 2022, enlivening a key commercial lever in the head contract.<sup>115</sup> This step was taken as BAESMA did not achieve Integrated Baseline Review 2, which would have otherwise commenced Scope Fee moderation arrangements.

3.27 The head contract does not contain arrangements to manage potential undue benefits to BAE Systems Australia's sustainment work under the Warship Asset Management Agreement

<sup>114</sup> BAESMA is not entitled to the Management Services Fee if: Defence has required BAESMA to submit an SPM Remediation Plan and BAESMA has not submitted the plan; Defence has rejected the plan and not approved a resubmitted plan; or if Defence considers that BAESMA has not complied with the plan. If a key milestone is not achieved by the due date and BAESMA achieves the following two key milestones by the respective due dates, BAESMA is entitled to additional scope fee equal to 50 per cent of the amount by which the key milestone payment for the missed milestone was reduced.

<sup>115</sup> As at 31 March 2023, moderation of Scope Fee as outlined above does not apply to Interim Arrangement key milestones and did not apply to Key Milestones 9, 11 and 13, which related to Contract Data Requirements List (CDRL) Deliverables for 2020 and 2021 and Technical Data and Software Rights verification. If BAESMA does not achieve an Interim Arrangement key milestone by the due date and subsequently achieves the missed milestone prior to 31 December 2023, BAESMA is entitled to claim 100 per cent of the relevant scope fee. BAESMA claimed Key Milestone 9, 11 and 13 after the relevant due dates and in each case Defence agreed to pay 100 per cent of the relevant scope fee despite all exit criteria not being met (see paragraphs 3.65–3.68).

(WAMA).<sup>116</sup> A November 2021 review of the program commissioned by the Minister for Defence observed that Defence had 'minimal leverage over BAE [BAESMA] ... which will make it very difficult to maintain commercial pressure over time.'<sup>117</sup> These potential limitations of the Commonwealth's commercial leverage were noted in Auditor-General Report No.30 2018–19 *ANZAC Class Frigates* – *Sustainment* which tabled in March 2019:

In transitioning from the ANZAC class to the Hunter class frigates, Defence's commercial leverage over BAE Systems for any cost or schedule overruns in the Hunter class design and build, will be limited due to the existing commercial relationship with BAE Systems to sustain the ANZAC class. For example, any liquidated damages applied to BAE Systems for underperformance on the Hunter class program, may be offset by the benefit received by BAE Systems through the extended sustainment of the ANZAC class. The ANAO found no arrangement within the WAMA [Warship Asset Management Agreement] contract to deal with this issue.<sup>118</sup>

3.28 The head contract does not include liquidated damages clauses or liquidated damages milestones to compensate Defence for costs that may be incurred over the life of the project due to project delays.<sup>119</sup> However, the head contract does make provision for applying a fixed price cost model to a future scope (that is, the build scopes) and sets out that liquidated damages will be included in any fixed price model scope.

# Has Defence established effective contract monitoring and reporting arrangements?

The contract management plan was established 44 months (3.6 years) after execution of the head contract. Defence has managed the contract largely in the absence of an approved contract management plan, and BAE Systems Maritime Australia's (BAESMA's) contract master schedule remained unapproved as of March 2023.

Contracted requirements for BAESMA to report and meet with Defence have been established. Additional reporting requirements have been established in response to delays in the delivery of a contractable offer for the batch one build scope from BAESMA.

Governance and oversight arrangements — to manage and oversee project performance, risks and issues — have generally been established in a timely manner. Defence records indicate that

119 Liquidated damages provisions within acquisition contracts can be an appropriate measure to protect the interests of the Commonwealth in relation to time, budget and the required quality.

<sup>116</sup> The WAMA was examined in Chapter 4 of Auditor-General Report No.30 2018–19 ANZAC Class Frigates — Sustainment, available from: <u>https://www.anao.gov.au/work/performance-audit/anzac-class-frigates-sustainment</u>.

<sup>117</sup> The review's terms of reference included: identification of lessons learnt successfully applied to the program; overall review of capability, commercial, governance, schedule and workforce program elements; and identification of recommendations that would improve the future success of the program.

<sup>118</sup> Auditor-General Report No.30 2018–19 ANZAC Class Frigates — Sustainment, available from: <u>https://www.anao.gov.au/work/performance-audit/anzac-class-frigates-sustainment</u>, paragraph 4.28. In December 2022 Defence informed the ANAO as follows:

Defence notes that the WAMA is an alliance agreement between multiple entities, of which BAE Systems Australia is just one. There are suitable incentives and significant remedies in the Hunter head contract with BAESMA to manage performance issues in the Hunter class frigate program. Commercially, it is extremely challenging to negotiate cross-contract recovery mechanisms (that would not be considered punitive) to an unrelated, long-standing contracting arrangement.

governance bodies have met at the expected cadence and with the required Defence senior leadership attendance.

Defence has established appropriate project and program monitoring arrangements. These include performance monitoring mechanisms to inform Defence of relevant developments overseas, and Independent Assurance Review (IAR) processes. IARs have found insufficient resources, in particular skills and expertise in the project team, and that increased senior leadership attention was needed to manage realised risks and mitigate risks exceeding project risk appetite.

More generally, the Surface Ships Advisory Committee (SSAC) was asked to review cost, schedule and risk across the project and provide input to the Australian Government's Defence Strategic Review. Defence advised the Parliament in February 2023 that the SSAC's review had not resulted in any changes in scope to the project.

#### Contract management plan

3.29 CASG's Defence Contract Management Handbook sets out that:

The CMP [contract management plan] documents the operational, management and executive governance arrangements for managing performance and risk, provides clarity, accountability and responsibility for both contract governance and administration activities via a RACI [Responsible, Accountable, Consulted and Informed] matrix, and addresses how the relationship with the contractor will be managed as a key enabler to successful contract outcomes.

3.30 Defence's contract management plan for the head contract was approved on 9 August 2022. This was 44 months (3.6 years) after contract execution. The plan states that:

This Head Contract Management Plan (HCMP) provides direction for the ongoing management of the Head Contract, describing and detailing how it will be governed, managed and administered.

#### **Opportunity for improvement**

3.31 There would be merit in Defence preparing key contract management documents in a timely manner, to support effective contract management by officials.

#### **Risk management**

3.32 The Defence Capability Manual notes that governance arrangements in the acquisition phase include arrangements for 'risk management to ensure emerging risks are identified and appropriately treated'. The Capability and Sustainment Group's (CASG) Capability Acquisition and Sustainment Risk Management Manual mandates that:

There are three key artefacts that need to be established and maintained by projects to capture their risk management activities, comprising:

- a. Risk Management Plan (RMP);
- b. Predict! (Risk Register); and
- c. Contingency Budget Log.

3.33 The Risk Management Plan was first approved on 24 April 2017, with the most recent version approved on 4 October 2022. The plan outlines the governance and reporting arrangements

for the management of risks and issues for the project, including roles and responsibilities, assessment and recording, treatment, communication and consultation, monitoring and review, and reporting. Risks are categorised as strategic and tactical.

3.34 Tactical risks are to be managed by CASG in Predict!.<sup>120</sup> Of the 46 tactical risks recorded in Predict! at March 2023, 12 were rated as 'High' and two as 'Very High' (pre-treatment).<sup>121</sup> The tactical risks rated as 'Very High' at March 2023 were: 'Total budget for Design and Construct is insufficient'; and 'Combined capital requirement is not affordable by year'.

3.35 Strategic risks are to be managed by Navy, as the capability owner, in the CapabilityOne system. As at 20 May 2022, 14 strategic risks and one issue were recorded as 'active' in CapabilityOne, and seven risks were rated high or higher (pre-treatment). One issue and one risk were rated 'extreme' (pre-treatment), as follows.<sup>122</sup>

- Issue: 'The acquisition and sustainment of Hunter Class Frigate is not achievable with the allocated funding.'<sup>123</sup>
- Risk: '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'.<sup>124</sup>

3.36 Agendas and minutes examined by the ANAO indicated that risks were discussed at governance meetings and escalated in accordance with the established arrangements under the risk management plan.<sup>125</sup>

<sup>120</sup> Predict! is Defence's mandated risk management tool, which is used to record, describe and rate project risks.

<sup>121</sup> The Risk Management Plan sets out that tactical risks rated as 'Very High' are risks for which the impact would be so severe that 'the related activity MUST cease immediately. Risk must be treated with the highest priority and reviewed and reported on a weekly to fortnightly basis. Risk requires escalation. The Risk Advisory Committee (RAC) to review and report the management of HIGH and VERY HIGH risks.' [emphasis in original] In relation to tactical risks rated as 'High', the Risk Management Plan states that 'Treatment strategies aimed at reducing the risk level should be developed and implemented as soon as possible. Risk must be reviewed and reported on a monthly basis. Risk may require escalation.'

<sup>122</sup> The Risk Management Plan sets out that Strategic Risks rated as 'extreme' are risks for which the impact 'would be so severe that the related activity would need to cease immediately. The risk cannot be accepted. Risk must be treated with the highest priority and reviewed and reported on a weekly to fortnightly basis. In some circumstances the risk may need to be escalated.'

<sup>123</sup> Proposed treatments included: raising escalating labour rate concerns to senior management for assistance; investigating commercial incentives for BAESMA and other contractors to control costs; reviewing the Integrated Investment Program (IIP) provision with Head Navy Capability and Defence Finance Group; and early engagement with Maritime Systems Divisions and Defence Finance Group regarding financial treatment of the transition plan between the ANZAC and Hunter classes.

<sup>124</sup> Proposed treatments included: Surface Combatants and Aviation and Hunter Class Frigates Branches establishing a team focussed on Batches 2 and 3 capability needs and requirements; defining and delivering SEA 5000 Phase 3 (Hunter Class Frigates Capability Assurance Program); implementing lessons learned from in-service capabilities, including the ANZAC and Collins classes, in the management of margins through the life of Hunter class capability; and reviewing the Hunter Class Frigates Batch Strategy, which provides guidance on how the capability might evolve across batches, against risk profile and design timelines. Defence's management of program affordability and design maturity challenges is discussed in paragraphs 3.86–3.126 of this audit report.

<sup>125</sup> The ANAO reviewed meeting agendas and minutes for 11 Integrated Project Team Working Group meetings, four One-Star Capability Program Steering Group meetings, 27 Two-Star Capability Manager's Steering Group meetings, and six Three-Star Capability Manager's Steering Group meetings. The ANAO also reviewed Project Risk and Issue Assessment reports prepared for these groups, from contract signature in December 2018 to July 2022.

#### Public reporting

3.37 Defence has reported to the Parliament that as at 30 June 2022:

The Project is currently managing risks and issues at both a strategic and tactical level. Strategic risks and issues ... 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.<sup>126</sup>

#### Establishment of contractual reporting and meeting requirements

3.38 To aid Defence's monitoring and reporting on contract delivery, the contract requires BAESMA to report regularly to Defence through Contract Status Reports and Earned Value Performance Reports and to attend monthly coordination meetings and quarterly progress meetings with Defence. ANAO review of reports and meeting minutes (see Appendix 4) found that BAESMA has delivered reports as required and meetings had occurred.

3.39 In addition to these standard arrangements, Defence added a requirement to the head contract through the execution of a CCP on 23 March 2022 as a result of BAESMA not submitting a contractible offer for the batch one build scope. BAESMA is required to submit monthly Cost, Risk and Uncertainty Management Reports and attend monthly Cost, Risk and Uncertainty Management Program meetings. The new provisions apply until a batch one build scope is incorporated into the head contract. As at March 2023, BAESMA had submitted 13 Cost, Risk and Uncertainty Management Reports. The thirteenth report covered the February 2023 reporting period and indicated that cumulative reduction of cost risk and uncertainty for batch one was ahead of plan as of February 2023.

3.40 As discussed in paragraph 1.16, the head contract between the Commonwealth and BAESMA commits the parties to work to develop a strategic relationship in accordance with a set of principles. The February 2022 Independent Assurance Review (see paragraphs 3.49 to 3.50) recommended:

A determined effort now to re-set the relationship with BAES [BAESMA], utilising a whole-of-Defence approach to ensure commercial leverage, in order to establish a true strategic partnership, overcome the tensions and adversarial nature of the current engagements, and mitigate the risk of the emergence of the worst features of a monopoly (excessive cost and schedule).

3.41 In March 2022 BAESMA wrote to the Minister for Defence outlining improvement opportunities to the governance arrangements for the program. Opportunities noted by BAESMA included: establishing a 'Team Hunter' approach in CASG (an integrated team of CASG, Navy and

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<sup>126</sup> Defence Project Data Summary Sheet (PDSS), appearing in Auditor-General Report No.12 of 2022–23, 2021-22 Major Projects Report, p. 139. Defence's MPR reporting on major project risks and issues is reproduced in Appendix 5 of this audit report and discussed further at paragraph 3.98.

BAESMA personnel); co-location of the project team at Osborne; establishing an organisation at Osborne empowered to make acceptance, engineering and technical decisions; appointment of an independent chairperson overseeing program performance and reporting directly to the Minister for Defence; and a regular dialogue on the Integrated Master Schedule.

3.42 In July 2022 Defence established a Team Hunter Enterprise Plan comprising 24 initiatives to be implemented by the end of 2022. These included breaking down silos with forums to share information across boundaries, the development of an infrastructure approval process, and streamlining the engineering change process to ensure that necessary change can be efficiently enacted.

3.43 The meeting minutes for the August 2022 monthly coordination meeting noted that the Project Director intended to propose the cancellation of the quarterly progress meetings and six-monthly management reviews. This was due to the introduction of a bi-monthly Joint Program Team Review in June 2022 (quarterly as of December 2022), involving senior representatives of BAESMA and Defence (the First Assistant Secretary (FAS) Ships and the Director-General Hunter Class Frigates). Defence advised the ANAO in December 2022 that it did not intend to amend the head contract to reflect this change:

There is no intention to change the Head Contract. That is, the contractual requirement for a Monthly Coordination Meeting (MCM), Quarterly Progress Meeting (QPM), and Management.

Review (MR) (at intervals of no greater than six months) will not be changed. The contractual requirement is now being met through the:

- CoA [Commonwealth of Australia] attendance at the BAESMA Monthly Business Review (MBR) for the MCM; and
- Conduct of a Quarterly Joint Program Team Review (QJPTR) (attended by MD [Managing Director] BAESMA and FAS MSCCS [First Assistant Secretary Major Surface Combatants and Combat Systems]<sup>127</sup>) for the QPM and MR.

## Establishment of program and project governance and oversight arrangements

3.44 Delivery of the contracted outcomes established in the head contract contributes to the achievement of the Hunter Class Frigate Program and Defence capability objectives. To support the successful delivery of outcomes, Defence policies and guidance require governance documentation to be established. The ANAO reviewed Defence documentation and found that Defence had established the required capability and program governance and project management arrangements set out in the Defence Capability Manual and CASG policy and guidance. High-level capability and program governance and project managements are outlined in Table 3.1 below.

<sup>127</sup> With the creation of the Naval Shipbuilding and Sustainment Group, FAS Ships became FAS Major Surface Combatants and Combat Systems.

Key governance document	ANAO comment
Materiel Acquisition Agreement	As required in CASG's Project Management in Defence manual, the agreement sets out the agreement between the Lead Delivery Group and the Capability Manager and establishes the project performance baseline for scope, budget, schedule, and quality, as well as detailing reporting requirements. First approved on 25 July 2014, the most recent revision was
	approved on 11 October 2018. Delivery agreements are approved at the SES Band 2/two-star level.
Project Execution Strategy	As required under CASG's Project Management in Defence policy, the high-level risk-based execution strategy for the project has been documented.
	The most recent revision was approved on 21 February 2018.
Integrated Project Management Plan (IPMP)	As required by CASG's Project Management in Defence manual, the current version sets out directions for the delivery of the required products and services in the context of overarching capability requirements, fundamental inputs to capability integration, and product delivery for the project. The IPMP also sets out roles and responsibilities for project management and delivery, as well as coordination of fundamental inputs to capability and enabling delivery.
	The current version was approved on 9 July 2019 by the Assistant Secretary Ship Acquisition – Surface Combatants.
Program Governance Framework	Issued under the Defence Functional Manual (CP) 001–Quality Management System and mandated by Director-General Ships Acquisition–Surface Combatants.
	Approved on 17 December 2018 by the Project Director.
	The Framework outlines key governance master documents and program operations, contract, capability assurance and coordination arrangements.

#### Table 3.1: Key governance documents and ANAO comments regarding delivery

Source: ANAO analysis of Defence documents.

3.45 The governance, oversight and coordination arrangements for the project, as documented in the conditions of contract and the governance documents described above, include higher-level oversight and coordination arrangements for Defence's naval shipbuilding activity as a whole<sup>128</sup>, as well as project-specific governance and oversight bodies. Defence records indicate that meetings have occurred at the expected cadence and have been attended by the nominated Defence senior leaders. Governance arrangements have also been established in alignment with capability and CASG project management policy requirements.

<sup>128</sup> Oversight and governance arrangements for naval shipbuilding activity have been established within Defence to provide governance, policy and coordination for the overarching National Naval Shipbuilding Enterprise. This includes governance committees such as the Naval Shipbuilding Coordination Group (chaired by the Defence Secretary) and capability management steering groups (the SES Band 3/three-star CMSG is chaired by the Chief of Navy).

## Establishment of project and program monitoring arrangements

3.46 Project and program monitoring and reporting arrangements inform decision-makers of areas of risk to schedule, capability and budget. Defence has introduced the following arrangements.

- Established monthly project performance monitoring and reporting, on the Project Performance Review Information Platform (PPRIP)<sup>129</sup>, which is collated into reports provided to senior internal and external stakeholders.
- Established formal regular meetings with international governments and navies to inform itself of relevant developments overseas.<sup>130</sup>
- Conducted four Independent Assurance Reviews (IARs) to inform senior Defence officials as to whether projects are on track to deliver approved objectives and ready to progress to the next stage of activity.

## Project monitoring and reporting – Project Performance Review Information Platform (PPRIP)

3.47 The ANAO examined 29 monthly PPRIP reports from the commencement of reporting in August 2020 to 31 March 2023.<sup>131</sup> As of March 2023, six of the 11 performance measures were rated 'red'. These were: cost, risk, schedule milestone performance, scope, contract earned value management and achievements and concerns.<sup>132</sup>

#### Meetings with international governments and navies

3.48 The Australian Government has established memoranda of understanding (MOU) with the governments of the United Kingdom and Canada relevant to the Hunter class project, which include forums for the exchange of information.<sup>133</sup> Key international forums include:

- Australia-UK Ministerial consultations;
- a National Armaments Directors Forum, co-chaired by Australia's Deputy Secretary National Naval Shipbuilding and their UK counterpart;

<sup>129</sup> On 3 August 2020 PPRIP replaced Defence's existing Monthly Reporting System as Defence's primary system for reporting on the performance of its acquisition projects. PPRIP is a web-based tool that uses standardised project data from Defence financial and risk systems (such as BORIS, ROMAN and Predict!) to obtain a project data overview. The platform reporting can also use information from an MAA to support monitoring of a project's performance against agreed deliverables (such as schedule and cost).

<sup>130</sup> In addition to the formal arrangements, there was evidence of informal arrangements including: a bimonthly teleconference co-chaired by Defence's First Assistant Secretary Ships and senior UK counterparts; and weekly discussions between senior staff from the Global Combat Ship User Group, which includes the UK and Canada.

<sup>131</sup> No PPRIP reporting was prepared for January 2021, January 2022 and January 2023.

<sup>132</sup> A further four performance measures were rated 'amber' — fundamental inputs to capability, interdependencies, commercial, and workforce plan. One performance measure was rated 'green' — Australian industry.

<sup>133</sup> The MOU with the United Kingdom includes the following sub-agreements: Secondment of Civilian Personnel Arrangement; Project Security Instruction; Joint Instruction – Transfer of Information; and Joint Instruction – Export Controls. Under the MOU with Canada there is a project arrangement concerning transfer of information for frigate programs, with a Joint Security Instruction and Information Exchange Joint Instruction in development. In October 2022 a trilateral information exchange agreement between Australia, Canada and the United Kingdom was finalised.

- a Global Combat Ships User Group, co-chaired by Australia's Director-General Hunter Class Frigates and their UK and Canadian counterparts; and
- a steering committee for the MOU with the UK, co-chaired by Australia's FAS Major Surface Combatants and Combat Systems and their UK counterpart.<sup>134</sup>

#### Independent Assurance Reviews

3.49 As of 31 March 2023, four IARs (May 2019, August 2020, May 2021 and February 2022) for the Hunter class frigate program had been conducted since the execution of the head contract.<sup>135</sup> The IARs have included the following recurring themes.

- Immaturity of key project artefacts, including the Integrated Master Schedule and BAESMA's Contract Master Schedule, and the performance management baselines.<sup>136</sup> This has limited the completeness and reliability of progress and performance information.
- Lack of clarity in relation to specific performance measures and tracking and assessing success, particularly in relation to Australian Industry Capability (AIC) and Continuous Naval Shipbuilding (CNS) and how sovereign capability will be achieved.
- Risks posed by Hunter class project delays to the ANZAC transitional arrangements.
- Insufficient resources, in particular skills and expertise in the project team.
- Increased attention needed to manage realised risks, including increased oversight at the two- and three-star level governance forums.
- Challenges to design separation and production commencement due to weight growth, power and cooling margins, and the Type 26 design not reaching the anticipated level of maturity, contributing to delays to key milestones.<sup>137</sup>

3.50 The most recent (February 2022) IAR report, which was finalised in May 2022, noted that the project met the criteria to be listed as a project of concern and recommended that Defence consider elevating it to the projects of concern list.<sup>138</sup> In September 2022 the Minister for Defence Industry noted that Defence did not recommend adding the project to the projects of concern list at that time, in the context of the review of the project by the Surface Ships Advisory Committee.

<sup>134</sup> Under the UK MOU steering committee, there are working groups for the Secondment of Civilian Personnel Arrangement, Project Security Instruction, Joint Instruction – Transfer of Information, and Joint Instruction – Export Controls.

<sup>135</sup> Defence also conducted two gate reviews of the procurement prior to the commencement of the IAR process in 2016.

<sup>136</sup> The Contract Master Schedule remained unapproved as of March 2023. See paragraphs 3.67–3.68.

<sup>137</sup> Since August 2021, implementation of IAR recommendations is to be tracked in PPRIP reporting. As at 31 March 2023, there were 11 IAR recommendations recorded in PPRIP for the project. Seven were reported as 'closed', three were rated 'green', one was rated 'amber' and one had no reported status.

<sup>138</sup> The projects of concern regime was established by Defence as a framework to manage the remediation of underperforming materiel acquisition projects. See Auditor-General Report No.31 2018–19 *Defence's Management of its Projects of Concern*. The regime is also reported on in the annual Defence Major Projects Report, available at <u>https://www.anao.gov.au/pubs/major-projects-report</u>.

## Other reviews

3.51 More generally, the Surface Ships Advisory Committee (SSAC) was asked to review aspects of the project and provide input to the Australian Government's Defence Strategic Review (DSR).<sup>139</sup> Defence advised the Parliament in February 2023 that the scope of the SSAC's review was to look at the cost, schedule and risk across the Hunter class program, and that the review and its findings were shared with the DSR. Defence further advised that the review had not resulted in any changes in scope to the project.<sup>140</sup> These reviews are discussed below.

# Has Defence's expenditure to date been effective in delivering on project milestones?

Actual project expenditure at 31 January 2023 was \$2,225.9 million, with \$1,308.4 million spent on the head contract with BAE Systems Maritime Australia (BAESMA). Defence has made milestone payments without all exit criteria being met and extended milestone due dates in response to project delays.

In June 2021 the Australian Government agreed to extend the design and productionisation period, and to an 18-month delay to the cut steel date for ship one, to enable Defence and BAESMA to improve design maturity and develop a contractable offer for the first batch of ships. The June 2022 contract change proposal to extend the design and productionisation phase increased the contract price by \$422.8 million (GST exclusive).

Design immaturity has affected Defence's planning for the construction phase, led to an extension of the design and productionisation phase at additional cost to Defence, and diverted approved government funding for long lead time items to pay for the extension and other remediation activities. Planning for the transition from the existing ANZAC class frigates to the Hunter class capability has also been affected.

In December 2021 Defence advised the Australian Government that it considered that BAESMA would recover the schedule delay over the life of the project and deliver the final ship as planned in 2044.

The January 2023 Surface Ships Advisory Committee (SSAC) report noted that BAESMA had advised that a risk adjusted schedule would add 16 months to the delivery of the first Hunter class, moving delivery from early 2031 to mid–2032.

As of January 2023, Defence's internal estimate of total acquisition costs, for the project as a whole, was that it was likely to be significantly higher than the \$44.3 billion advised to government at second pass in June 2018. The SSAC considered that current efforts by Defence and industry were unlikely to result in a cost model within the approved budget. As of March 2023, while Defence had advised portfolio Ministers that the program is under extreme cost

<sup>139</sup> See footnote 26 for further information on the DSR.

<sup>140</sup> Testimony of the Deputy Secretary Naval Shipbuilding and Sustainment Group at the 15 February 2023 hearings of the Senate Foreign Affairs, Defence and Trade Legislation Committee. See Senate Foreign Affairs, Defence and Trade Legislation Committee, 2022–2023 Supplementary Budget Estimates, Proof Committee Hansard, 15 February 2023, pp. 60–61. Available at: <u>https://www.aph.gov.au/Parliamentary\_Business/Hansard/Estimates\_Transcript\_Schedule</u> [accessed 20 April 2023].

pressure, it had not advised government of its revised acquisition cost estimate, on the basis that it is still refining and validating the estimate.

Defence has approved BAESMA's Continuous Naval Shipbuilding and Australian Industry Capability (AIC) strategies and plans, with an Australian contract expenditure target of 58 per cent of total contract value and 54 per cent of the design and productionisation phase.

The February 2022 Independent Assurance Review (IAR) was not assured that there was a clear path to realising the policy objective of a local surface combatant ship designing capability, due to delays in transferring relevant personnel and skills to Australia.

In early 2023 the project remained in the design and productionisation phase, which is intended to inform Defence's planning and contracting for the ship build, including Defence's final estimate of construction costs. Defence advised the Parliament in February 2023 that the project is managing a range of complex risks and issues and is considering remediation options. Defence further advised that the Hunter class is one of the capabilities being reviewed by government in the context of the Defence Strategic Review, which presented its final report to ministers on 14 February 2023. A public version of the final report was released on 24 April 2023.

3.52 This section examines: whether the Hunter class program is meeting milestones for schedule, cost and delivery of the required capability; and the program's alignment with the government's continuous naval shipbuilding plan and enterprise.

## Expenditure under SEA 5000 Phase 1

#### Total expenditure

3.53 Total project expenditure as of 31 January 2023 was approximately \$2.2 billion. As outlined in Table 3.2, the majority of program expenditure (approximately \$1.3 billion or 59 per cent) comprised payments to BAESMA under the head contract (design and productionisation scope only), as of 31 January 2023. Payments to other contractors represented 22 per cent of expenditure.

Vendor <sup>b</sup>	Expenditure (\$AUD)	Percentage of total (%)
ASC Shipbuilding / BAE Systems Maritime Australia (BAESMA)	1,308,374,406	59
BAE Systems Surface Ships Limited	29,698,945	1
BAE Systems Australia	27,151,256	1
CEA Technologies	46,140,904	2
Fincantieri	29,669,022	1
Navantia <sup>c</sup>	36,194,389	2
RAND Corporation <sup>d</sup>	5,911,903	<1
Saab Systems	18,770,610	<1

Table 3 2	Expenditure under SEA 5000 Phase 1 to contractors, as of 31 January 2023 <sup>a</sup>
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Vendor <sup>b</sup>	Expenditure (\$AUD)	Percentage of total (%)
Foreign Military Sales (FMS) Account	7,606,582	<1
Not Assigned	400,412,734	20
Balance of contractors (<\$1 million each)	16,179,029	<1
Balance of contractors (>=\$1 million each)	263,267,192	12
Total	2,225,929,493°	100% <sup>e</sup>

Note a: Total expenditure represents project accrual position as of 31 January 2023. Vendor categories other than 'Not Assigned' represent cash expenditure. 'Not Assigned' includes accruals against the project, as well as costs including travel, overseas post costs, and Defence purchasing card costs.

Note b: Payments to named vendors other than BAE primarily relate to: participant services contracts; Advance Work Arrangements; and contracts for the Analysis of Alternatives report and the competitive evaluation process with Fincantieri and Navantia).

Note c: Navantia includes Navantia Australia, Navantia S A and Navantia SA SME.

Note d: RAND Corporation includes both RAND Corporation and RAND Corporation (Australia).

Note e: Totals for percentages and values do not add up due to rounding.

Source: ANAO analysis of data from the Defence ROMAN finance system.

#### Actual vs planned expenditure

3.54 ANAO analysis of Defence data identified an underspend of \$134.7 million against the management services (MSE) scope compared to the phased pricing set out in the head contract from execution to 30 June 2022. There was also an underspend of \$328.1 million against the design and productionisation (D&P) scope compared to the phased pricing set out in the head contract from execution to 30 June 2022. The underspend was consistent with Defence's analysis of BAESMA's Earned Value Performance Reports, which indicated that BAESMA was behind schedule between work accomplished (earned value) and work planned (planned value) by \$93.33 million as at January 2023.

3.55 Defence advised the ANAO in April 2023 that: contributing factors for the underspend against the MSE scope included BAESMA not achieving planned resourcing levels; and contributing factors for the underspend against the D&P scope included delayed achievement of the System Definition Review (see paragraphs 3.76 to 3.82) and BAESMA not achieving planned contract execution for Long Lead Time Item contracts.

3.56 Figure 3.1 shows phased contract pricing and actual expenditure to 31 January 2023.

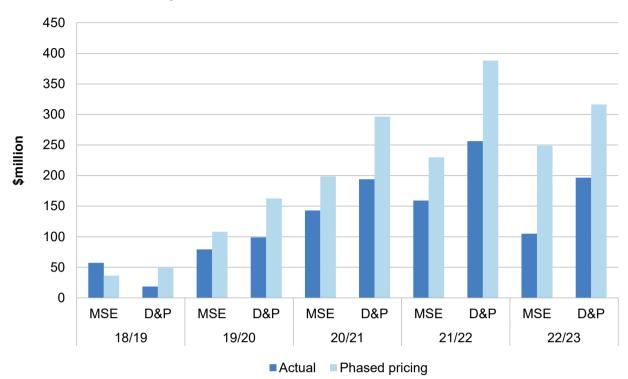


Figure 3.1: Head contract, actual expenditure vs phased pricing by financial year, to 31 January 2023

Note:Phased pricing for 2022–23 reflects the phased contract price for the whole financial year.Source:ANAO analysis of Defence documentation and data.

3.57 In January 2023, the Director-General Hunter Class Frigates advised the First Assistant Secretary Major Surface Combatants and Combat Systems, and the Head Navy Capability, that the design and productionisation phase was forecast to be completed within the out-turned second pass approval amount.<sup>141</sup>

#### Payment and cost assurance

3.58 The head contract price consists of two components — management services, and design and productionisation scope — which are invoiced monthly in arrears.<sup>142</sup> Monthly and biannual allowable costs reviews are provided for under the contract.

3.59 To guide the conduct of the monthly and biannual allowable costs reviews, Defence undertakes risk planning against an assurance framework and develops a plan for each allowable cost review, including regular and emerging risks to be tested. The process applied by Defence in

<sup>141</sup> Noted risks to this outcome included: increasing supply chain costs with impact on the approved scope; and under-estimation of required design effort to incorporate the Australian changes into the Reference Ship Design.

<sup>142</sup> BAESMA may claim any actual allowable costs in excess of management services payments received and is required to pay the Commonwealth any unspent management services estimate amount. The head contract includes allowable cost rules which set out guidance on what will be considered allowable costs including costs of depreciation of buildings owned by the contractor, depreciation of plant and equipment owned by the contractor, and environmental costs incurred by the contractor to prevent, abate or remediate damage to the environment.

undertaking the biannual reviews has included validating actual costs against monthly invoice data, controls testing and sample-based transaction testing.

3.60 The ANAO examined six biannual costs reviews conducted to 30 June 2022.<sup>143</sup>Defence documented review outcomes, including instances where BAESMA had invoiced disallowable costs.<sup>144</sup> The reports indicated that Defence had reviewed adjustments required from the prior review period, to ensure these had been credited on the next monthly invoice by BAESMA, and documented that the required adjustments had been actioned by BAESMA.

## Delivery of planned design and productionisation milestones

3.61 The ANAO examined all key milestones due under the head contract as of 31 March 2023, to assess the timeliness of key milestone delivery and determine the value of key milestone payments to date (see Appendix 3, which includes milestone descriptions).

## Key milestones

3.62 At 31 March 2023, 21 key milestones were due under the head contract. Of these 21 milestones, all had been approved and an additional milestone had been approved which was not yet due.<sup>145</sup> Of the 22 approved milestones, 11 were delivered by the due date and 11 were delivered between two and 505 days late, including five that were delivered more than 100 days late. The achieved key milestones have been delivered, on average, 64 days late.

3.63 The ANAO also examined changes to key milestone dates as a result of Contract Change Proposals (CCPs). On 29 June 2022 Defence signed a CCP which: delayed the due dates for all remaining major design and productionisation milestones that are key milestones; reassigned Key Milestone 18 to the Preliminary Design Review, which gave it a due date and attached payment to its achievement; added an additional Support System Critical Design Review key milestone; and redistributed remaining Scope Fee equally between key milestones on a financial year basis.<sup>146</sup>

<sup>143</sup> In December 2022 Defence informed the ANAO that the January to June 2022 allowable costs review was expected to be completed in Quarter 1 of 2023. The review had not been completed as of 31 March 2023.

<sup>144</sup> Disallowable costs identified by Defence included: \$54,875 invoiced for Christmas cards and decorations for non-Hunter class personnel; \$1,470 related to gym memberships; and £133 related to corporate purchasing card transactions for travel. These costs were required by Defence to be credited on the next monthly invoice from BAESMA. Defence records indicate that this occurred for the disallowable costs identified by Defence. Defence also queried the reasonableness of costs including \$100,000 claimed for a leadership conference, which Defence considered 'at best marginal as an allowable claim' and excessive in terms of total activity cost, and 'a tax efficient scheme to support overall tax cost to the organisation, linked to avoid potential exposure to the Medicare Levy Surcharge'. Defence accepted these costs.

Additionally, the ANAO identified that on 25 July 2022 Defence advised BAESMA that \$3,700 for a Team Hunter social event including an 'Adventure Room' and dinner, at which Defence representatives were to be in attendance, was 'in accordance with the principles and intent of "Team Hunter" and would 'improve and build upon the collaborative nature of the Supply Chain teams in BAESMA and CoA [Commonwealth of Australia].' Defence records indicate that the Director-General Hunter Class Frigates had verbally 'endorsed Team Hunter activities as an allowable cost.' Defence advised the ANAO in April 2023 that the relevant transactions, which totalled \$2,633, would be examined in the July to December 2022 allowable costs review.

<sup>145</sup> This excludes Key Milestone 7, which was split into Key Milestones 25–27 and removed from the head contract.

<sup>146</sup> This CCP reflected adjustments to the key milestones identified during Integrated Baseline Review 1 (see paragraphs 3.69–3.75) as being required to reflect the activities scheduled for the remainder of the design and productionisation scope.

3.64 As of 31 March 2023, there was schedule slippage for remaining major design and productionisation milestones that were key milestones, with slippage from originally contracted due dates ranging between 17 and at least 31 months (see Appendix 3 of this audit report).

3.65 The ANAO reviewed key milestone acceptance certificates, associated correspondence and invoices for key milestones due as of 31 March 2023. Defence records indicated that Defence had approved five key milestones for payment — worth \$22.3 million (18.5 per cent of total key milestone payments) — without all exit criteria being met. Defence's advice to BAESMA notifying approval of one of these milestones noted that:

The Commonwealth remains fully committed to the principles of Team Hunter and the collaborative ways of working that will underpin our relationship in delivering the scope of the Contract. Notwithstanding, the award of this KM [key milestone] without having fully met all Criteria should not be interpreted as a precedent for this approach being seen as normal practice. Going forward, with future KM payments being subject to fee moderation for late achievement, it is essential that BAESMA deliver outcomes that meet all KM Criteria in full before submitting a Progress Certificate for payment.

3.66 The status of seven key milestones pertaining to delivery of the contract master schedule and significant reviews points during the design and production phase are discussed below.

#### Contract Master Schedule

3.67 The head contract requires BAESMA to develop and deliver a Contract Master Schedule. The Schedule establishes the performance measurement baseline and is to be used as the primary schedule for managing the contract. The schedule was to be delivered within 20 days of the Integrated Baseline Review 1 (IBR 1) milestone, which was determined by Defence to have been met on 2 March 2022.

3.68 Approval of the Contract Master Schedule and an update were exit criteria for Key Milestones 9 and 13 respectively. As of 22 March 2023, Defence had not approved a Contract Master Schedule (12 months after IBR 1 was met).<sup>147</sup> Nonetheless, Defence advised BAESMA that the intent of these milestones was sufficiently met to pay the \$12.1 million attached to the milestones<sup>148</sup>, and payment was agreed to on 14 August 2022. The Defence brief prepared for the Director-General Hunter Class Frigates, seeking agreement to pay against Key Milestones 9 and 13, noted as part of the rationale for payment that:

Further delays to BAESMA's ability to claim these overdue Fee Payments due to these two Data Items is causing a financial impact that is now disproportionate to the impact to the Project Objectives, and is not consistent with the spirit of the 'Team Hunter' collaborative relationship that we are working hard to develop.<sup>149</sup>

<sup>147</sup> Defence considered that the Contract Master Schedule as submitted by BAESMA was 'not sufficiently compliant with the relevant Data Item Description to justify Approval.' Defence records note progress towards compliance.

<sup>148</sup> Progress certificates certifying the achievement of these milestones were signed by Defence on 26 August 2022.

<sup>149</sup> ANAO comment: Defence had reviewed the Contract Master Schedule monthly, along with the Contract Work Breakdown Structure, and provided comments on these drafts. Comments on draft versions of the Contract Master Schedule and Contract Work Breakdown Structure were followed-up in the comments on subsequent monthly submissions of the draft documents. The assessment contained in the IARs, conducted as of March 2023, on the impact of the immaturity of the Contract Master Schedule is summarised at paragraph 3.49.

## Integrated Baseline Review 1

3.69 The exit criteria for Key Milestone 4 – Integrated Baseline Review 1 (IBR 1) included Defence approval of: any mandated system review action plan to address risks and issues identified during IBR 1; and Major Corrective Action Requests (CARs) being closed or downgraded to 'Minor' status.

3.70 On 13 August 2020, Defence approved the IBR 1 Corrective Action Plan (that had been submitted by ASC Shipbuilding), which set out 119 'Major' CARs.

3.71 On 29 September 2020 Defence approved payment of the IBR 1 key milestone prior to the closure of all Major CARs or their downgrade to Minor status, and before formal exit from IBR 1.

3.72 The decision brief for the delegate (First Assistant Secretary, Ships) noted that:

These CARS [Corrective Action Requests] ... act to strengthen and provide a solid project management foundation within ASC Shipbuilding.

... While significant progress has been made to date, CAR closure is taking longer than anticipated and is unlikely to meet the targets set in the agreed CAP [Corrective Action Plan]. However, based on progress to date, and subject to ASC Shipbuilding agreement to additional controls and measures ... it is recommended that ASC Shipbuilding be paid Key Milestone KM-004.

... Payment of KM-004 will promote goodwill between the CoA [Commonwealth of Australia] and ASC Shipbuilding while working together towards the MAA [Materiel Acquisition Agreement] cardinal milestones. It also demonstrates the CoA's trust in ASC Shipbuilding's ability to prioritise and manage this important activity to its conclusion.

The Project does not expect the withholding of payment under KM-004 until all Major CARs have been closed (or downgraded to Minor) will drive better performance from ASC Shipbuilding over the months ahead. Rather, by paying KM-004 now, the CoA believes performance will be enhanced by strengthening the relationship and confirming the CoA's trust in ASC Shipbuilding's ability and commitment to improve the PMB [performance measurement baseline].

3.73 In agreeing to the payment of Key Milestone 4, the delegate noted: that the project and BAESMA would continue to track CAR closure against the IBR 1 Corrective Action Plan on a weekly basis; and that closure of the IBR 1 Major and Minor CARs would form an entry criterion to Integrated Baseline Review 2, then planned for 2021.

3.74 On 27 October 2020 Defence advised BAESMA that sufficient progress had been made in closing Major CARs to support the IBR 1 key milestone payment, valued at \$2.8 million (GST exclusive). At that time IBR 1 was ongoing and it was expected that formal exit would occur in early 2021, with 81 Major CARs remaining open.

3.75 On 2 March 2022, 491 days after payment was approved, Defence advised BAESMA that it was satisfied that all Major CARs had been closed and IBR 1 had concluded. Defence also advised BAESMA that it had reviewed all IBR 1 entry and exit criteria and was satisfied that the criteria had been met or were not applicable.

## Systems Definition Review and Integrated Baseline Review 2

3.76 At execution, the head contract included Key Milestone 7, encompassing the closure of the Systems Definition Review and Integrated Baseline Review 2, with a due date of 20 November 2020.

3.77 The February 2022 Independent Assurance Review (IAR) noted that the Systems Definition Review was being undertaken progressively, with key exit requirements (Land Based Test Site and

Mission System Systems Definition Reviews closure) occurring in November 2021, with 11 Major and 37 Minor open actions. The remaining key exit requirement for the Systems Definition Review, the Support System Systems Definition Review (SS SDR), was reported to be delayed to mid-2022 at the earliest.

3.78 On 16 May 2022 Defence signed a CCP splitting Key Milestone 7 into three new key milestones — these were Key Milestones  $25-27^{150}$  (see Appendix 3 of this audit report).

3.79 On 23 December 2022 Defence advised BAESMA that 'the Commonwealth confirms that BAESMA has achieved KM-026'. Defence's letter to BAESMA also stated that:

In signing the KM-026 Progress Certificate, the Commonwealth is acutely aware that a case could be made to not award the KM [key milestone] based on the Criterion that states: Commonwealth has given notice that it is satisfied that the MSR [Mandated System Review] indicates that sufficient technical progress has been achieved. Noting the views of the SS SDR [Support System Systems Definition Review] Co-Chairs ... it could be argued that 'sufficient technical progress' has not been achieved and hence the Criterion has been not met. The counter-argument, which is the basis for the Commonwealth's decision to award the KM, is that that no other Defence maritime project has ever attempted to do what BAESMA and the Commonwealth have embarked upon (in designing an enterprise-wide Support System for the HCF [Hunter class frigate] capability) and as such Team Hunter is setting a standard that hasn't been attempted and/or achieved by Defence in the past. The Commonwealth believes that this fact hasn't been taken into account by the Co-Chairs who have made their assessment within a paradigm of a more conventional approach. The Commonwealth is satisfied that sufficient technical progress has been achieved, taking the following into consideration:

a. the ambitious nature of the scope of the SS SDR and associated artefacts;

b. the imperative to continue building a long-term collaborative relationship that enables the naval shipbuilding enterprise to grow Integrated Logistics Support (ILS) and Logistics Engineering capability and capacity in Australia;

c. the effort undertaken by both BAESMA and the Commonwealth to achieve an outcome as close as possible to that contemplated when the Head Contract was negotiated in December 2018, and the subsequent ILS [Integrated Logistics Support] CCP executed in February 2021; and

d. the establishment of a HCF Support System Steering Board ... which will oversee the Team Hunter ILS program, thus ensuring there is a realistic and achievable plan for upcoming Support System focused MSRs leading into the Support System Critical Design Review (SS CDR) in 2027.

3.80 The Hunter Class Frigate Program Support System Systems Definition Review (HCFP SS SDR) Design Review Certificate documented the assessment of the review's BAESMA and Commonwealth co-chairs. It stated that:

On completion of SS SDR the Co-Chairs concluded that much of what had been expected for SS SDR had not been addressed or was still work in progress ... the level of maturity required for SS SDR had not been achieved. Actions were subsequently raised to ensure these areas would be addressed going forward in order to reach the level of maturity required to strike a Functional

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<sup>150</sup> Key Milestone 25 concerns the Mission System Systems Definition Review, for which a progress certificate was issued on 24 May 2022. Key Milestone 26 relates to the Support System Systems Definition Review, for which a progress certificate was issued on 23 December 2022.

Baseline. The Co-Chairs recommended proceeding to the next phase, while noting the actions raised were intended to ensure that areas of relative immaturity would be addressed in advance of striking a Functional Baseline.

An unconventional approach had been taken, but this approach was poorly documented and had to be teased out during the review. The joint team did support briefings to assessors and key stakeholders in order to facilitate a better understanding of the approach taken.

The way ahead beyond completion of SS SDR was equally unclear and had to be teased out in briefings and workshops supported by the joint team. Actions were issued to add clarity to the path ahead, and to ensure an appropriate degree to oversight and governance is applied going forward.

3.81 A Systems Definition Review Harmonisation Event was held on 17 November 2022 to align and confirm coherence between the 'functional baselines' resulting from the Mission System, Support System and Land Based Test Site Systems Definition Reviews. The Harmonisation Event Certificate stated that all objectives had been adequately addressed.<sup>151</sup>

3.82 Defence conducted the IBR 2 event between 31 October and 11 November 2022 and finalised a report on the outcomes on 12 December 2022. The report identified 12 Major CARs and 10 Minor CARs. One of the Major CARs was identified as 'Critical', with an 'Overarching need to consolidate and develop the optimum Programme organisation that engenders clarity on roles, responsibilities, direction and integration.'<sup>152</sup> As at 22 March 2023, six Major and nine Minor CARs remained open, of the original 22, and Defence had not approved the Corrective Action Plan due to the two versions submitted by BAESMA not adequately addressing all Major CARs.<sup>153</sup> As of that date, five of the seven criteria to formally exit IBR 2 were 'not met' pending approval of the Corrective Action Plan and closure or downgrading of Major CARs to Minor status. One of the criteria was partially met pending approval of the Contract Work Breakdown Structure, which Defence records indicated was in the final stages of approval.<sup>154</sup>

#### Preliminary Design Review

3.83 The June 2022 Contract Change Proposal had set the due date for the Preliminary Design Review (PDR) milestone for 23 October 2022.

3.84 However, the May 2022 monthly coordination meeting papers reported that the PDR was likely to occur in July 2023 and would be based on a reduced review scope.<sup>155</sup> Details of subsequent

<sup>151</sup> The objectives of the event were to review: checklist criteria not adequately addressed during the Systems Definition Reviews; specification gaps between the 'functional baselines'; Systems Definition Review Major CAR status; and system safety risks identified and under assessment for whole system scope.

<sup>152</sup> A critical CAR requires immediate management action and/or attention to address the risk it presents to the project.

<sup>153</sup> BAESMA submitted a third version of the Corrective Action Plan to Defence for approval on 6 April 2023, which reported all Major CARs downgraded to Minor status.

<sup>154</sup> While approval of the Contract Master Schedule formed part of one of the exit criteria for IBR 2, Defence decided to accept data from BAESMA's live scheduling tool to demonstrate sufficient progress on the Contract Master Schedule against relevant CARs to 'meet the intent of the Checklist criteria.'

<sup>155</sup> The January 2023 Surface Ships Advisory Committee report noted that the PDR entry/exit criteria had been tailored to recognise that some aspects of the design had matured more quickly and PDRs for all subsystems, as contemplated by the head contract, would not be feasible. The committee considered that the primary risks for achieving PDR were the immaturity of the Reference Ship Design, design resource constraints, and slower than anticipated performance in determining major equipment required to be known to the designers. The committee considered that PDR entry and exit could be achieved as scheduled.

reviews pertaining to the remainder of the intended PDR scope were still being developed. The August 2022 Contract Status Report reported that a final PDR checklist was agreed between BAESMA and Defence on 5 September 2022.

## **Developing project cost estimates**

3.85 The Hunter class project is in the design and productionisation stage, which will inform Defence's planning and contracting for construction and Defence's final estimate of construction costs.

3.86 Active management of identified risks and issues — including what Defence has described as risks to 'overall budget affordability'<sup>156</sup> — is essential for program success. Defence reported to Parliament, in the context of the 2020–21 Major Projects Report, that the following risk had been realised and transitioned into an issue: 'Acquisition of the Hunter Class Frigate may be affected by overall funding or programming issues arising from internal cost growth / forecasting accuracy and external budget constraints, leading to an impact on capability and schedule'.<sup>157</sup> Defence further reported, in the context of the 2021–22 Major Projects Report, that: 'The acquisition and sustainment of Hunter Class Frigates is not achievable with the allocated funding'.<sup>158</sup> In further advice to Parliament in February 2023, Defence stated that 'there's very high risk around the budget for the Hunter class program'.<sup>159</sup>

3.87 As of January 2023, Defence's internal estimate of total acquisition costs, for the project as a whole, was that it was likely to be significantly higher than the \$44.3 billion (2018–19 Budget out-turned) advised to government at second pass in June 2018. As of March 2023, the government had not been advised of Defence's revised acquisition cost estimate, which Defence has been refining in preparation for returning to government for approval of the batch one build scope. Defence advised the ANAO in April 2023 that:

It would be inappropriate to provide Government an updated estimate when a large amount of uncertainty remains in elements of the estimate, including the BAESMA Head Contract element for which a final price will not be received until mid 2023.

3.88 The following sections outline the rising project cost estimates developed by Defence, and internal Defence assessments of the key drivers behind those estimates.

<sup>156</sup> This was among the major risks and issues identified in Defence's public reporting in the most recent Defence Major Projects Report (MPR), presented to Parliament on 9 February 2023. See Defence Project Data Summary Sheet (PDSS), appearing in Auditor-General Report No.12 of 2022–23, 2021–22 Major Projects Report, p. 139. Other major risks and issues in the project are discussed in paragraph 3.37 and paragraphs 3.98–3.99 of this audit report.

<sup>157</sup> Defence Project Data Summary Sheet (PDSS), appearing in Auditor-General Report No.13 of 2021–22, 2020– 21 Major Projects Report, p. 142.

<sup>158</sup> Defence Project Data Summary Sheet (PDSS), appearing in Auditor-General Report No.12 of 2022–23, 2021–22 Major Projects Report, p. 145.

<sup>159</sup> Testimony of the Defence Secretary at the 15 February 2023 hearings of the Senate Foreign Affairs, Defence and Trade Legislation Committee. See Senate Foreign Affairs, Defence and Trade Legislation Committee, 2022–2023 Supplementary Budget Estimates, Proof Committee Hansard, 15 February 2023, p. 57. Available at: <u>https://www.aph.gov.au/Parliamentary\_Business/Hansard/Estimates\_Transcript\_Schedule</u> [accessed 20 April 2023].

## Cost estimates – advice to government since second pass

3.89 In August 2020 Defence advised government that the total acquisition cost estimate was \$45.6 billion out-turned (pre-Expenditure Review Committee 2020–21), which reflected the second pass total acquisition cost estimate updated for foreign exchange movements.<sup>160</sup>

3.90 In its June 2021 advice to government seeking approval to delay the cut steel date for ship number one by 18 months, Defence noted the risk that the project may exceed its cost envelope (this is discussed further at paragraphs 3.105 to 3.106). In relation to this risk, the advice noted that the delay would allow additional time to address supply chain challenges and drive down procurement costs for the batch one build (comprising three ships).

3.91 Defence advised the government in February 2022 that final batch one<sup>161</sup> build scope costs would be provided at the second pass approval stage for batch one, in the third quarter of 2022–23.<sup>162</sup>

3.92 In October 2022, Defence advised its portfolio Ministers that 'there are significant pressures on the budget driven by the impact that the COVID-19 pandemic has had on supply chain costs and delays, freight costs and workforce absences. The current [design and productionisation] phase of the contract is not at risk, however, there is extreme pressure on the batch 1 costs with the increases in supply chain and labour costs'.

## Cost estimates – internal updates

3.93 Internal advice of January 2023 to the First Assistant Secretary (FAS) Major Surface Combatants and Combat Systems, and the Head Navy Capability, was that the project 'remains unaffordable within the Integrated Investment Program (IIP) provision'.<sup>163</sup> That is, while the current design and productionisation stage remains within its approved budget allocation, the total estimated acquisition cost would exceed both approved funding and the unapproved IIP provision.<sup>164</sup>

3.94 The First Assistant Secretary's annotation on this internal advice was that 'it appeared that BAE underestimated the combat system design, whole ship design and construction even considering the scope adjusted changes.' Head Navy Capability's annotation on the advice was that 'the cost model continues to be updated, however the scale of the cost estimate from Second Pass

<sup>160</sup> The \$45.6 billion includes a non-negotiated 10 per cent tender cost reduction to the acquisition estimate applied to the tendered production costs.

<sup>161</sup> At this time planning was based on building three ships as part of batch one.

<sup>162</sup> Defence's 2022 Incoming Government Brief described the Hunter class frigate batch one build as a 'future decision'. The brief did not contain any updates on the risks and estimated cost of the acquisition.

<sup>163</sup> The advice noted that the cost modelling did not include the impact of approximately 180,000 hours of 'technical debt' forecast by BAESMA, resulting from the design and productionisation phase of the project, that would need to be addressed following commencement of production and would manifest in rework for ship 1 and potentially ship 2. The Surface Ships Advisory Committee noted in its January 2023 report that the estimate provided by BAESMA is in the range of 200,000 hours.

<sup>164</sup> The January 2023 advice noted that significant drivers of unaffordability included \$2.3 billion in Osborne shipyard lease costs, the effects of out-turning, and increasing supply chain costs. The advice also outlined a \$639.7 million improvement in affordability, primarily from cost reduction activities undertaken by the Hunter Class Frigate and Maritime Integrated Warfare Systems branches of the Naval Shipbuilding and Sustainment Group, regarding Government Furnished Equipment inputs. In its January 2023 report, the Surface Ships Advisory Committee considered there was little chance cost reduction efforts would result in a cost model that would meet the Acquisition Cost Estimate provided at Second Pass.

is so significant, it is no longer about capability trade at the margins. It is fundamentally now a discussion about increasing the provision held by the IIP through offset of other capability (ie. no new money) or a reduction in the number of vessels to be delivered by the project.'

#### Internal reviews - observations on project costs

3.95 The February 2022 Independent Assurance Review (IAR) also reported a very high risk that the nine ship build will 'not be affordable within the current IIP provision' and that:

Even if the enhanced prototype blocks are used in the Batch 1 build as planned, the schedule extension inherent in the Interim Arrangement will introduce increased costs. Also, supply chain costs have increased significantly. There is a strong likelihood that Batch 1 will consume a significantly higher proportion of the overall IIP provision than previously anticipated, placing financial pressure on the nature and scale of re-design/configuration changes that can be undertaken or are affordable in Batches 2 and 3.<sup>165</sup>

#### 3.96 Further, the February 2022 IAR reported that:

the UK design and build has not yet provided a firm basis upon which to finalise the HCF [Hunter class frigate] design or to derive reliable estimates of the likely HCF schedule and cost.

#### 3.97 A Surface Ships Advisory Committee (SSAC) Report dated 24 April 2022 reported that:

lack of design maturity means that cost and schedule uncertainty is still very high ... This high uncertainty will almost certainly be reflected in the BAESMA Cost Model that will be submitted for Build Scope 1, thus challenging affordability.<sup>166</sup>

#### Defence's management of other key risks and issues to delivery

3.98 In addition to the affordability risks discussed in the previous section, a number of key project risks and issues have emerged or have been identified as requiring active management. These include: slower than expected design maturity progress; the impact of COVID-19 on schedule and cost; workforce issues; the vessels' capability to counter threats; and design challenges relating to weight growth, power and cooling margins. Defence's public reporting on the project's major risks, issues and remedial actions — released in the context of the Defence Major Projects Report (MPR) for 2021–22 — is reproduced in Appendix 5 of this audit report.

<sup>165</sup> ANAO comment: see paragraphs 3.107–3.117 of this audit report regarding the construction of 'prototype blocks'.

<sup>166</sup> ANAO comment: see paragraphs 3.99–3.126 of this audit report regarding the maturity of the reference ship design. In January 2023 the SSAC had also reported that:

many decisions during HCF [Hunter class frigate] design have been made by Defence that have added cost (to the Head Contract and to GFx [government furnished equipment, facilities, information and materials]) as well. The decisions made will enhance security, sovereign capability and HCF Combat System performance. ... it is the SSAC's view that while security and capability were considered deeply in every case, the cost (and schedule) ramifications of these decisions were not robustly estimated before decisions were taken (in fact, for some changes made, the final cost and schedule impact is still yet to be determined – for example the net total final cost of the AI [Australian combat system interface]). ... Some of the decisions/changes made were bound to have significant cost implications. Other decisions, taken individually, may have small impact, but when taken together also have had significant cost implications. Accordingly, the SSAC *recommends* that Defence Leadership review and amend as appropriate the process being used (and the documentation being generated) on projects of this nature to define the cost and schedule ramifications of decisions/changes being proposed (before they are made for significant changes/decisions, and through periodic assessments of the cost/schedule impact for multiple small changes). [emphasis in original]

3.99 The following section examines the impacts on the project of design immaturity, COVID-19 and some workforce issues. The ANAO has not reviewed the detailed design, engineering and construction issues — such as those relating to ship weight, power and cooling<sup>167</sup>, construction drumbeat<sup>168</sup>, and military capability<sup>169</sup> — which are being worked through as part of the design process and construction planning.

#### Internal reviews – observations on design maturity

3.100 The February 2022 Independent Assurance Review (IAR) reported that:

The Type 26 was not a mature Reference Ship Design (RSD), has matured much more slowly than anticipated and some critical design aspects are still to be resolved; a number of key performance parameters have not yet been met ...

...

The COVID pandemic has impacted significantly (in both schedule and cost) on the development of the UK and Australian designs and the supply chain for major equipment and sub-systems, and on the availability and mobility of key personnel to participate in project events and reviews.

#### 3.101 In its January 2023 report the Surface Ships Advisory Committee (SSAC) stated that:

When Government selected the BAE Systems Type 26 as the Reference Ship Design in 2018, it was clearly understood that they were selecting an approach that was highest in risk (compared to the baseline versions of the other two competing options) with respect to design maturity (whilst also highest in potential for capability/performance). The Type 26 was yet to be fully designed, built and tested. Because of this, cost growth was anticipated and was reflected in risk and uncertainty provisions in the cost model that was used for the Acquisition Cost Estimate provided at Second Pass, however, the extent of the Type 26 design maturity was over-stated and therefore, the extent of cost and schedule risk was under-estimated. The Type 26 design is just now nearing completion and the first ship has just been launched, but not yet finished and tested.

See Senate Foreign Affairs, Defence and Trade Legislation Committee, 2022–2023 Supplementary Budget Estimates, Proof Committee Hansard, 15 February 2023, p. 58. Available at:

https://www.aph.gov.au/Parliamentary Business/Hansard/Estimates Transcript Schedule [accessed 20 April 2023].

<sup>167</sup> The 2022 IAR for example, stated that: 'Changes to the UK RSD [reference ship design] and those associated with Australianisation for the HCF [Hunter class frigate] have led to some of the performance parameters sought being challenged and, more importantly, the anticipated and desirable platform margins (weight, power and cooling) at Batch 1 delivery are not being realised.'

<sup>168</sup> Construction planning has involved building nine frigates in three batches of three ships. In discussions with the ANAO during this audit, the Deputy Secretary Naval Shipbuilding and Sustainment Group indicated that other options were being considered for the construction strategy, to improve productivity and manage cost.

<sup>169</sup> Defence has stated publicly that options are being considered regarding the military capability of the Hunter class. At the 15 February 2023 hearings of the Senate Foreign Affairs, Defence and Trade Legislation Committee, the Chief of Navy advised as follows.

<sup>• &#</sup>x27;Like the rest of the surface combatant force, we are looking at options to increase the lethality of its offensive suite as well.'

<sup>• &#</sup>x27;It absolutely is challenged, as is every other asset in the Australian Defence Force, with keeping up with the rate of change of the threat environment in the Indo-Pacific, which is one of the focal areas of the *Defence strategic review*. This is also one of those capabilities that have been and are being reviewed by the Australian government.'

Chief of Navy was responding to questions on Defence reporting at page 144 of the 2021–22 Major Projects Report (MPR) of an emergent risk that: 'The delivered HCF (and future batches) has insufficient capability to counter current and emerging threats.' The MPR guidelines define (at p. 330) 'emergent risks' as 'risks not previously identified but have emerged during 2021-22'.

#### 3.102 Further, the SSAC observed that:

BAESMA is behind schedule on the HCF [Hunter class frigate] design for several different reasons – one of which is limited design resources. HCF design is being undertaken mostly in the UK by BAESMA's parent company (BAE Systems Naval Ships), and partly in Australia. More design and engineering resources are already needed in both locations and at the same time, attrition rates (currently 15% in the UK and 12% in Australia as advised by BAESMA) are higher than normal. Accordingly, there is no reason to believe at present that the remaining design work will progress at a faster rate than is currently being achieved thus putting design and production schedules at further risk.

3.103 The Contract Status Report for the February 2023 reporting period indicated that BAESMA was 89 per cent resourced to plan, with key resourcing gaps including 16 FTE (full-time equivalent personnel) for 'Platform – Detailed Design'.

#### Impacts of design immaturity

3.104 Design immaturity has affected Defence's planning for the construction phase, led to an extension of the design and productionisation phase, and diverted approved government funding for long lead time items to pay for the extension and other remediation activities.

3.105 To progress the build of the Hunter class frigates, on 7 July 2020 Defence issued BAESMA with a scope notice for the batch one (three ships) build scope, to which BAESMA responded on 31 May 2021.<sup>170</sup> Defence's assessment of BAESMA's response indicated 'extreme' risk for Defence to achieving a contractable batch one build scope offer from BAESMA, due to: 'immaturity across all submitted artefacts and Contract Deliverables'; and BAESMA adopting 'a much lower risk appetite than the Commonwealth expected of its long term strategic partner.'

3.106 In June 2021 the Australian Government agreed to extend the design and productionisation period, and to an 18-month delay to the cut steel date for ship one, to enable Defence and BAESMA to improve design maturity and develop a contractable offer for the batch one build scope. This is called the 'Interim Arrangement'.<sup>171</sup> The government's decision was based on Defence advice that the commencement of Type 26 construction in the UK was based on low design maturity, creating a design backlog. Defence further advised government that COVID had exacerbated the design backlog, and that it was not until late 2020 that the actual state of the UK Type 26 design was communicated to Australia following a change in senior leadership at BAE Systems.<sup>172</sup>

<sup>170</sup> Under the head contract, if Defence requires the incorporation of a scope into the contract, Defence must issue BAESMA: a scope notice setting out a description of the supplies to be provided and the work to be performed; a draft scope statement; the date by which BAESMA is to provide a response; and any supporting information or documents Defence considers are required by BAESMA to respond to the notice.

<sup>171</sup> With a view to ensuring that the objectives of the Interim Arrangement were met, Defence and BAESMA agreed to the following key principles for the Interim Arrangement: '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 'reduce cost, risk, and uncertainty while improving design maturity and schedule durations to ensure the parties can execute an arrangement for the Batch 1 Build Scope, which is affordable and acceptable to the Commonwealth.'

<sup>172</sup> Defence's advice to government did not outline the consequences of the 18-month delay to the withdrawal schedule of ANZAC class frigates. The advice noted that a future submission on the ANZAC Class Capability Assurance Program would consider the maintenance and upgrade of the ANZAC class frigates. Navy's planned transition from the existing ANZAC class to the Hunter class is discussed further at paragraphs 3.118–3.126.

3.107 While agreeing to an 18-month delay, the Australian Government also required Defence to explore the following two options and provide further advice on these in mid-2022.

- Undertaking additional enhanced (Hunter class) prototyping activities at the Osborne (South Australia) shipyard.<sup>173</sup> This would involve the prototyping of ship one blocks only, with the removal of ship two blocks from the build sequence.
- Producing Type 26 blocks in Australia for export into the UK's Type 26 program.

3.108 In December 2021 Defence advised the Australian Government that the opportunity to export blocks into the UK's Type 26 program as part of extended prototyping had been explored, but was assessed as not viable, as it would increase schedule risk. Defence further advised that it considered that BAESMA would recover the schedule delay over the life of the project and deliver the final ship as planned in 2044.<sup>174</sup>

3.109 The February 2022 Independent Assurance Review (IAR) subsequently noted that there was 'not yet sufficient information or evidence to provide confidence that the ship delivery schedule can be recovered by Batch 3.' The IAR further noted that:

The extension of the D&P [design and productionisation] period was justified in part on the basis of an expected ability subsequently to reduce the ship build period. However, there is not presently any credible basis for planning a reduced ship build period (below 7.5 years) or for anticipating a capacity to achieve efficiencies/reductions in the subsequent ship builds — noting that the Australian build involves uncertainty about a range of new work (e.g. the build of the complex mast structure) and associated schedule/cost risk and the level of automation is likely to be less than anticipated with a higher level of manual welding and handling.

3.110 In February 2022, the Australian Government agreed to re-purpose \$590.4 million (MYEFO 2021–22 out-turned) of the long lead time item funding approved at second pass, to fund: four additional prototyping blocks to be used in Batch 1; and continuation of BAESMA management services and related head contract activities from July 2022 to June 2024.<sup>175</sup> The government also agreed to re-purpose \$189.4 million of the approved long lead time item funding for continuation of Defence project management activities from July 2022 to December 2024. Defence's advice to government noted that the proposal to re-purpose approved funding included \$8.9 million for Hunter class frigate future batch development and design studies, as set out in the Surface Combatant Capability Transition Plan.

3.111 Defence advised the ANAO in April 2023 that:

<sup>173</sup> Defence provided the ANAO with evidence that Australian steel was being used in prototype blocks, consistent with the June 2018 media release by the Prime Minister, Minister for Defence, Minister for Defence Industry and Minister for Finance, 'The Hunter class – defending Australia and securing our shipbuilding sovereignty', joint media release, 29 June 2018, available from <a href="https://www.minister.defence.gov.au/minister/marise-payne/media-releases/joint-media-release-prime-minister-defence-minister-1">https://www.minister.defence.gov.au/minister/marise-payne/media-releases/joint-media-release-prime-minister-defence-minister-1</a> [accessed 26 October 2022]. Defence further advised the ANAO in April 2023 that Australia did not have the capability to produce all the necessary variants of steel and accordingly 20 per cent of steel plate and 100 per cent of steel profile material would be sourced from overseas.

<sup>174</sup> In December 2022 Defence informed the ANAO that 'the delay to the cut steel for ship 1 is being offset through the use of schedule protection blocks (previously referred to as enhanced prototyping blocks), which will be used in ship 1 (the cost will be offset from the cost of the batch 1 scope)'.

<sup>175</sup> Defence advised government in its advice seeking approval to repurpose this funding that the cost of manufacturing the additional prototyping blocks would be offset from the batch one build price.

The re-purposing of funds from Long Lead Time Items (LLTI) to the Interim Arrangement has not impacted the establishment of the BAESMA Supply Chain. ... BAESMA was experiencing delays with establishment of the Supply Chain when the Interim Arrangement was initially considered.

In June 2022 a Supply Chain Steering Board was established. Co-chaired by senior executives from both BAESMA and Defence (BAE Acquisition Director and DG [Director-General] Hunter Class Frigate), the Steering Board meets weekly to review the performance of the combined Supply Chain team in establishing the 60 Long Lead Time Item (LLTI) contracts required for Batch 1.

Since the establishment of the Steering Board, the number of contracts executed by BAESMA for LLTI items has increased from 10 (which had taken three years to contract) to 22 (as at 20 Mar 23). The current forecast is 56 LLTI contracts executed by December 2023.

3.112 A (PGPA Act) section 23 commitment approval to the value of \$529.1 million (GST inclusive and escalated to Budget 2022–23 out-turned) was signed by the Director–General Hunter Class Frigates on 1 June 2022. The relevant Contract Change Proposal (CCP) was executed on the same day. The CCP increased the contract price by \$422.8 million (GST exclusive) and incorporated the following objectives critical to schedule: 'the VAD [vessel acceptance date] for ship one is no later than December 2031' and 'the VAD for Ship 9 is no later than 2044.'<sup>176</sup>

3.113 Defence advised the ANAO in April 2023 that it expected the \$422.8 million would be offset from the price of the planned batch one build scope.<sup>177</sup>

3.114 Of this \$422.8 million, \$265.1 million was allocated to the management services scope of the head contract and \$157.8 million was allocated to the design and productionisation scope. As noted in paragraph 3.54, at 30 June 2022 there was an underspend against phased contract pricing of \$134.7 million for the management services scope, and an underspend of \$328.1 million for the design and productionisation scope.

3.115 The CCP for the 'Interim Arrangement' also added Interim Arrangement key milestones, to which payment of Scope Fee for the relevant period was attached.

3.116 The February 2022 Independent Assurance Review questioned the appropriateness of attaching Scope Fee to the Interim Arrangement milestones:

The rationale for profit on the extended management services in the Interim Arrangement should also be reviewed. It is inappropriate to pay profit on rework or on costs arising from schedule delay due to inadequate program execution on the part of BAESMA. The arrangements must ensure the long term partnership does not allow BAESMA to enshrine inefficient practices and unjustified management overheads in the absence of competition.<sup>178</sup>

3.117 In its January 2023 report, the Surface Ships Advisory Committee (SSAC) made a number of observations on planning for the delivery of ship one in 2031.

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<sup>176</sup> The key contract changes were: extension of management services to 31 December 2023; extended prototyping activities and interim arrangement key milestones; and requirements to develop, update and implement a production management plan and prototyping plan, and develop production performance metrics.

<sup>177</sup> Defence confirmed its December 2022 advice, outlined in footnote 174, about its management of block production and planned cost offsets.

<sup>178</sup> In December 2022, Defence informed the ANAO that the observation from the February 2022 Independent Assurance Review was noted by the project office and senior executives within the Naval Shipbuilding and Sustainment Group but was not actioned.

As of the time of this review, BAESMA has a deterministic (i.e., not risk adjusted) schedule showing Ship 1 delivery in early 2031. BAESMA advises that when constraints are removed and a schedule risk assessment is made at P70 level [70 per cent probability], 16 months are added (moving delivery to mid 2032).

...

BAESMA is looking at ways to improve the schedule and a key objective in driving to achieve a 2031 delivery is to increase productivity such that they build a unit (portion of a ship block) at the rate of one every 10 days. ... On the initial Prototype blocks, they were achieving a rate of about 25 days per unit. ... when the SSAC asked how they expect to get it down to 10 days per unit (especially on a first of class vessel), the response was that they are looking at the likely need for a full second shift during production of ships 1 and 2.<sup>179</sup>

# Assessing and managing the impact of changes to the Hunter class delivery schedule on existing capability

3.118 Defence must manage both the Hunter class delivery schedule and the sustainment of its existing ANZAC class frigate capability, to maintain operational relevance and prevent a capability gap. This section reviews issues arising from the delayed Hunter class delivery schedule and actions taken to assess and manage capability issues.

3.119 Defence advised the Senate Foreign Affairs, Defence and Trade Legislation Committee, at Budget Estimates hearings in April 2022, that it had undertaken studies confirming the viability of the ANZAC class into the 2040s and beyond, with no prohibition on the ANZAC class being extended further than planned.<sup>180</sup>

3.120 Other options to manage capability are also being considered, including unsolicited proposals. For example, on 9 November 2022 Defence informed the Senate Foreign Affairs, Defence and Trade Legislation Committee that the government had received an unsolicited proposal from Navantia to build three additional Hobart class destroyers and the response was being considered under the Defence Strategic Review:

We have received an unsolicited proposal from Navantia. In fact, we have received two. They have just recently submitted a second unsolicited proposal to us. They will follow a standard process that we use when we receive unsolicited proposals, and Navantia have told us that they have made

6. The ability of the Combat System Enterprise to deliver the Combat System design and integration that has been defined, along with all the GFx [government furnished equipment, facilities, information and materials] they are now responsible to deliver, is still to be proven.

180 Defence has previously delayed the planned withdrawal of the ANZAC class from 2033 to 2043 to accommodate the introduction into service of the Hunter class. See Auditor-General Report No.30 2018–19 ANZAC Class Frigates — Sustainment, p. 30.

<sup>179</sup> The committee noted that key risks and uncertainties for delivering the first of class by 2031 were:

<sup>1.</sup> The first Reference Ship (UK Type 26) has only just been launched and is yet to be tested, trialled and delivered.

<sup>2.</sup> The HCF [Hunter Class Frigate] Design is still years from completion.

<sup>3.</sup> Although the concept of "minimum change" is often identified as one of the objectives of the HCF Program, the extent of change between the Type 26 and the HCF is substantial.

<sup>4.</sup> Procurement of major equipment (both contractor furnished and Government furnished) is behind schedule.

<sup>5.</sup> The ability of BAESMA to achieve 'full rate production' sufficient to achieve a 2031 delivery is still to be proven.

similar submissions to the Defence Strategic Review. How the review weighs it is a matter for the review.<sup>181</sup>

3.121 These two unsolicited proposals were a proposal for the acquisition of three new Hobart class destroyers, received in May 2022, and a subsequent proposal for six corvettes. Defence has engaged the RAND Corporation to undertake a feasibility study for the acquisition of three new Hobart class destroyers.<sup>182</sup>

3.122 Defence records indicate that capability risk for the surface fleet has been drawn to the attention of Defence senior leaders. For example, the February 2022 Independent Assurance Review (IAR) reported that:

There is a Very High risk that the first [Hunter class] ship will not be delivered by the proposed 2031 date; the Board assesses that the risk is almost certain to be realised, and the consequences would be critical, in terms of the implications for the major combatant surface fleet and the transition from the ANZACs.<sup>183</sup>

3.123 The April 2022 Surface Ships Advisory Committee (SSAC) Report noted that:

The SSAC understands that CASG intends to undertake the Transcap [Transitional Capability Assurance Program] CS [Combat System] upgrade on the ANZAC Frigates and the DDG [Hobart class destroyer] CS Upgrade in advance of the integration/testing of the HCF [Hunter class frigate] combat system as a de-risking measure. Whilst the SSAC recognize the potential for this approach to de-risk HCF from a technical perspective, the SSAC are concerned that it may actually increase schedule and cost risk because much of this work will be done with significant schedule overlap.

3.124 The January 2023 Surface Ships Advisory Committee report observed the interaction between the Hunter class project and other naval projects, including workforce transition issues.

The HCFP [Hunter class frigate project] is not happening in isolation and other Defence projects happening in parallel will impact the Resource picture. The first 2 Offshore Patrol Vessels (OPVs) being constructed under the SEA 1180 Project are being constructed at Osborne with a workforce that will transition to the HCFP. Previous planning had that workforce being handed back to BAESMA in March 2023 for work on Prototyping and Schedule Protection Blocks, but OPVs 1 and 2 are behind schedule and that transition is not going to happen as planned, therefore, BAESMA has now been advised that the OPV workforce will be released in December 2023. The Commonwealth intends to carry out the ANZAC Class Frigate Transition Capability Assurance Program (TRANSCAP) in Perth and the Hobart Class Destroyer Upgrade project in Osborne in parallel with HCF design and production. At present, BAESMA does not have the scope of work and schedule for the Hobart Class Destroyer Upgrades so the combined resource demand on BAESMA is not yet known and thus far has not been accounted for in their resource demand planning for HCF engineering and production. ... we **recommend** that Defence Leadership ensure

<sup>181</sup> Testimony of the Deputy Secretary Naval Shipbuilding and Sustainment, Senate Foreign Affairs, Defence and Trade Legislation Committee, 2022–2023 Budget Estimates, Official Committee Hansard, 9 November 2022, p. 57. Available at: <u>https://www.aph.gov.au/Parliamentary\_Business/Hansard/Estimates\_Transcript\_Schedule</u> [accessed 20 April 2023].

<sup>182</sup> Defence engaged RAND through an official order under an existing standing offer arrangement, at a cost of \$1.1 million (GST inclusive).

<sup>183</sup> The IAR recommended that Defence: 'Undertake further contingency planning against the risk of slippage in the schedule for ship delivery, both for capability (HCF numbers/capability within the surface combatant fleet, design options for capability uplift in the Batch 2 and/or Batch 3 builds, and the HCF/ANZAC transition) and for the shipyard/national naval shipbuilding (capacity/demand/workload)'.

that the Resources needed to cope with that overlap are understood and achievable [emphasis in original].

3.125 The transition from the existing ANZAC class frigate capability is to be managed through Defence's Surface Combatant Capability Transition Plan. The transition arrangements include upgrades as part of the ANZAC Midlife Capability Assurance Program and Transitional Capability Assurance Program.<sup>184</sup> To support the transition, additional funding (approved under Project SEA 5014-1) will supplement ANZAC class sustainment funding to maintain capability and ensure sufficient margins of space, weight and power to enable upgrades through margin reclamation.<sup>185</sup> On 12 September 2022, government approved \$631 million in SEA 5014-1 funding over five years as part of a six monthly Surface Combatant Capability Transition Plan update.

3.126 Hunter class frigate project delays have resulted in changes to the planned withdrawal of ANZAC class frigates and the overall size and composition of the frigate fleet. Defence informed the ANAO in December 2022 that:

the original plan had the first Anzac retiring on the acceptance of the second Hunter, transitioning Navy to a 9-ship frigate force at the beginning, now the first Anzac will be retired on delivery of the first Hunter, transitioning Navy to a 9-ship frigate force at the end of the program.

## Government naval shipbuilding objectives

3.127 The 2017 *Naval Shipbuilding Plan* outlined the Australian Government's naval shipbuilding objectives as follows:<sup>186</sup>

Delivering the Naval Shipbuilding Plan will result in a national approach to the delivery of affordable and achievable naval capability through a sovereign Australian industrial base that is reformed, secure, productive and cost-competitive.

3.128 The Hunter class head contract includes requirements relating to Continuous Naval Shipbuilding (CNS) and Australian Industry Capability (AIC).

<sup>184</sup> HMAS Anzac is planned to be the first to commence the Transitional Capability Assurance Program in October 2023. The Program is expected to complete in April 2026.

Project SEA 5014-1 is also intended to fund major equipment obsolescence (if a change to planned withdrawal has meant that equipment can no longer be sustained) and fund increased costs associated with aging platforms, commencing in the early 2030s. A Defence Science and Technology Group study found that increasing ANZAC class displacement above a certain tonnage could risk hull integrity and reduce hull life for transition. Defence plans to use a 'weight-on/weight-off' strategy to incorporate Transitional Capability Assurance Program upgrades while remaining within this parameter. The second ship to undergo the Transitional Capability Assurance Program, HMAS Warramunga, if fitted with all expected equipment, could exceed the weight parameter. Defence has identified that administrative measures such as reduced fuel loading will be required if further weight saving activities are not agreed and funded. Defence is considering additional weight remediation options. Capability improvements are being funded externally to ANZAC sustainment funding and SEA 5014-1.

<sup>186</sup> *Naval Shipbuilding Plan,* available from: <u>https://www.defence.gov.au/business-industry/naval-shipbuilding/plan</u> [accessed 30 January 2023].

3.129 The contracted requirements are reflected in BAESMA's CNS Strategy and Plan.<sup>187</sup> Other key documents addressing CNS and AIC include the Sovereign Capability and Option Deed (SCOD)<sup>188</sup>, Workforce Management Plan, and Supply Chain Management Plan.

3.130 The CNS Strategy was initially approved on 25 October 2019 and incorporated into the head contract through a Contract Change Proposal on 22 November 2019.<sup>189</sup> Under the CNS Strategy it is envisioned that there will be a separate CNS Plan for each scope, along with separate Workforce Management and AIC Plans. The CNS Strategy states that at the completion of each scope, overall performance of the CNS Strategy will be evaluated.<sup>190</sup>

3.131 At contract execution, the head contract included a draft CNS Plan, draft AIC Strategy and draft AIC Plan. The CNS Plan was approved on 7 May 2020 and incorporated into the head contract on 2 July 2020.<sup>191</sup> The CNS Plan is largely structured around the four key enablers identified in the 2017 *Naval Shipbuilding Plan*.<sup>192</sup>

3.132 The AIC Strategy outlined an Australian contract expenditure target of 58 per cent of total contract value and 54 per cent for the design and productionisation phase.<sup>193</sup> The draft AIC Plan outlined, in more detail than the AIC Strategy, ASC Shipbuilding's approach to maximising opportunities for Australian industry participation, and AIC management, monitoring and reporting arrangements.<sup>194</sup> The AIC Plan was first approved on 24 October 2019.<sup>195</sup>

- 188 The SCOD includes four technical objectives:
  - assist in the development of an independent sovereign naval ship design and construction capability in Australia through BAESMA to support Australia's continuous shipbuilding program;
  - support the development of the broader Australian shipbuilding industry;
  - take advantage of any potential future domestic/export opportunities; and
  - support the Commonwealth's strategic national interest in the sovereign capability as contemplated under the SCOD and through complying with the obligations under the head contract.
- 189 The most recent version of the CNS Strategy was approved on 6 April 2023.
- 190 This evaluation is intended to have regard to whether the strategies, principles and approaches outlined in the CNS Strategy are achieving the anticipated outcomes and the status of each capability against a development road map and the maturity framework.
- 191 The most recent version of the CNS Plan was approved on 6 April 2023.
- 192 The four key enablers identified in the 2017 Naval Shipbuilding Plan were: Naval Shipbuilding and Sustainment Infrastructure; Naval Shipbuilding and Sustainment Workforce; Industrial Base; and National Approach.
- 193 The first iteration of the AIC Strategy was substantially the same format and largely covered the same matters as the most recent approved version, approved on 4 April 2023. The AIC Strategy: outlines AIC goals and principles; how opportunities for Australian industry participation will be maximised; Australian industry development and technology transfer strategies and plans; and AIC governance, assurance, monitoring and reporting arrangements. Australian Contract Expenditure commitments (discussed in the next footnote) have remained unchanged to date.
- 194 Australian Contract Expenditure is defined in the AIC Strategy as 'expenditure on work performed within the Australian supply chain by Australian Industry as defined in the AIC DID [Data Item Description] and includes actual work performed and local overheads. Actual work performed is referred to as Local Industry Activities (LIAs) and represents the value of Australian industry work performed in Australia or New Zealand in support of SEA5000 HCFP [Hunter class frigate program] acquisition activities. Local Overheads represents the value of expenditure on Australian taxes, custom duties, insurances, bank fees, Commercial/Military off the Shelf hardware, software and supplies, infrastructure, corporate overheads, goods and services.'
- 195 The most recent version of the AIC Plan was approved on 4 April 2023.

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<sup>187</sup> The CNS Strategy and Plan have been updated at least annually since approval in accordance with the requirements set out in the head contract.

3.133 Government has agreed to a proportion of approved project funding to be used to invest in Australian industry, on a case-by-case basis, to lift the level of Australian industry participation above the contracted level of AIC over the life of the project. Funding of \$600 million has been set aside for AIC purposes and is excluded from the contract price. The release of this funding to BAESMA is subject to a business case development and approval process outlined in the AIC Strategy and Plan, and the approval of a Contract Change Proposal.<sup>196</sup>

3.134 Achievement of the government's naval shipbuilding objectives is being measured through the Continuous Naval Shipbuilding (CNS) Capability Maturity Assessment Framework contained in the CNS Strategy and Plan and through the Strategic Performance Measures under the head contract. Contract Status Reports include a graphical representation of CNS maturity assessed against the CNS Capability Maturity Assessment Framework and exception based narrative reporting.<sup>197</sup>

3.135 BAESMA's February 2023 assessment of CNS maturity, compared to the baseline established at the commencement of the design and productionisation phase, is that there had been an improvement in CNS maturity over the life of the project, with five of the six capabilities assessed as improving from 'Limited' to 'Reliant'. CNS maturity, as assessed by BAESMA against the CNS maturity framework for the February 2023 CSR reporting period, is shown in Figure 3.2.

<sup>196</sup> In December 2022 Defence informed the ANAO that:

As at 4 December 2022, BAE Systems Maritime Australia had committed \$13.314m of contract funds to Local Industry Investment (LII). On 5 December 2022 Defence approved a Contract Change Proposal (CCP) to increase the LII budget within the Head Contract to \$22.664m (excl GST). The increased budget will fund forecast LII expenditure as new Long Lead Time Item (LLTI) contracts are placed throughout 2022 and 2023.

<sup>197</sup> This includes: baseline CNS capability assessment at commencement of design and productionisation work scope; current aggregate maturity state for each Project Naval Shipbuilding Capability; and current maturity state per contributing input.

**CNS Maturity Framework** 2 3 1 5 4 (None) (Limited) (Reliant) (Independent) (Sovereign) R&T Infrastructure Design & Engineering Workforce IP Supply Chain R&T Infrastructure **Combat Systems & Systems** Workforce Integration IP Supply Chain R&T Infrastructure Program Management Workforce 3 IP Supply Chain R&T Infrastructure Shipbuilding & Production Workforce IP **Supply Chain** R&T Infrastructure Target – Batch 3 Supply Chain Management Workforce Target – Batch 2 IP Supply Chain Target – D&P R&T Current Level of Infrastructure Sustainment Workforce **D&P** Commencement Current Average Contributing Inpu IP Contributing Input Supply Chain

Figure 3.2: Continuous Naval Shipbuilding (CNS) capability maturity assessment as at February 2023 contract status report (CSR) reporting period

Source: Defence documentation.

3.136 As of March 2023, the two following CNS 'medium' level risks were recorded in Defence's CapabilityOne system.

- 'The level of capability contribution achieved to build a sovereign CNS industry does not meet expectations'.
- 'There is a chance that BAESMA and the T26 OEMs [Type 26 frigate original equipment manufacturers] do not maximise opportunities for Australian Industry participation in each batch and achieve sovereign shipbuilding capability for Australia'.

3.137 The Australian Government's 2017 *Naval Shipbuilding Plan* identified four 'key enablers' for the naval shipbuilding enterprise, one of which was: 'a motivated, innovative, cost-competitive and sustainable **Australian industrial base**, underpinned initially by experienced international ship designers and builders who transfer these attributes to Australian industry' [emphasis in original].<sup>198</sup> The February 2022 Independent Assurance Review (IAR) commented that:

The [IAR] Board was not assured that there is a clear path to, or any basis for confidence about, the Australian ship design capability planned to be available by Batch 3 to support the design of the next generation surface combatant, with delays already in the transfer to and development in Australia of the personnel and skills.

3.138 The January 2023 Surface Ships Advisory Committee (SSAC) report concluded as follows:

the SSAC considers that the HCFP [Hunter class frigate program] is a viable, yet still High Risk program that is the foundation for Continuous Naval Shipbuilding in Australia and thus our *recommendation* to 'stay the course'. The HCFP Enterprise participants are committed to working collaboratively through the "Team Hunter" approach and whilst continuing efforts on effective collaboration are required, the SSAC have seen good indications that this "Team Hunter" approach is taking hold across the Enterprise. The SSAC have endeavoured to identify what we believe are the current key risks and issues and have provided 15 recommendations in this report to help address them. Some of those recommendations have been raised previously by the SSAC and/or in other independent reviews in one form or another and we believe that they comprise the priorities for Defence Leadership [emphasis in original].

3.139 Defence advised the ANAO in April 2023 that shipbuilding capability risks would be managed through the Sovereign Capability and Option Deed (the SCOD, discussed in paragraph 3.129 and footnote 188 of this audit report) via a Sovereign Capability Implementation Plan required for the acceptance of ship one. The SCOD requires that the plan be updated and resubmitted at least 20 working days prior to acceptance of each subsequent ship. Defence further advised that obligations under the SCOD were being managed by a Naval Shipbuilding and Sustainment Enterprise Headquarters with responsibility for implementing the 2017 *Naval Shipbuilding Plan*<sup>199</sup>:

<sup>198</sup> Department of Defence, *Naval Shipbuilding Plan*, Commonwealth of Australia, 2017, paragraph 1.5.

<sup>199</sup> Defence describes the role of the Naval Shipbuilding and Sustainment Enterprise Headquarters as providing governance, policy and coordination for the enterprise in delivering continuous naval shipbuilding and sustainment. The Naval Shipbuilding and Sustainment Enterprise Headquarters is responsible for implementing the 2017 Naval Shipbuilding Plan and the development of an updated policy framework for the future of naval shipbuilding and sustainment activities. The First Assistant Secretary (FAS) Naval Shipbuilding and Sustainment Enterprise Headquarters leads the Naval Shipbuilding and Sustainment Enterprise Headquarters. See Australian Government Directory, available from: <a href="https://www.directory.gov.au/portfolios/defence/department-defence/naval-shipbuilding-and-sustainment-group/enterprise-headquarters">https://www.directory.gov.au/portfolios/defence/department-defence/naval-shipbuilding-and-sustainment-group/enterprise-headquarters</a> [accessed 12 April 2023].

More broadly for the naval shipbuilding and sustainment enterprise, shipbuilding capability risk is being addressed through a multi-pronged approach aimed at developing and promoting sovereign growth throughout the supply chain. This includes the development of [a] Naval Shipbuilding and Sustainment Enterprise Strategy framework which seeks to assist Government and industry to prioritise investments in critical sovereign industry capability.

3.140 The public version of the Defence Strategic Review commissioned by the government, which was released on 24 April 2023, made the following recommendation on naval shipbuilding:

The Government should confirm its commitment to continuous naval shipbuilding through an updated National Naval Shipbuilding Enterprise Strategy and updated supporting Naval Shipbuilding and Sustainment Plan.<sup>200</sup>

3.141 Government agreed to the recommendation.<sup>201</sup>

### Summary

3.142 In summary, as at February 2023 Defence faced the challenge of managing risks and issues in the Hunter class frigates project on a wide front. Defence has reported to the Parliament that:

The Project is currently managing risks and issues at both a strategic and tactical level. Strategic risks and issues ... 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.<sup>202</sup>

3.143 As identified by internal Defence reviews, including Independent Assurance Reviews and reports of the Surface Ships Advisory Committee, active Defence leadership and contract management are essential to address identified risks and issues and for the successful delivery of the project. The effective management of consequential and related risks — for other naval shipbuilding and sustainment projects, and for Navy capability — is equally essential for the delivery of the Australian Government's naval shipbuilding policy and national security objectives as understood when the project commenced.

3.144 Defence advised the Parliament on 15 February 2023 that the Hunter class 'is also one of those capabilities that have been and are being reviewed by the Australian government' in the context of the Defence Strategic Review commissioned by the government.<sup>203</sup> The final report of

<sup>200</sup> Defence Strategic Review, 24 April 2023, available from: <u>https://www.defence.gov.au/about/reviews-inquiries/defence-strategic-review</u> [accessed 26 April 2023], p. 67 and p. 104.

<sup>201</sup> Ibid., p. 104.

<sup>202</sup> Defence Project Data Summary Sheet (PDSS) for SEA 5000 Phase 1, found in Auditor-General Report No.12 of 2022–23, 2021–22 Major Projects Report, p. 139. Presented to the Parliament on 9 February 2023.

<sup>203</sup> Testimony of the Chief of Navy, Senate Foreign Affairs, Defence and Trade Legislation Committee, 2022–2023 Supplementary Budget Estimates, Proof Committee Hansard, 15 February 2023, p. 58. Available at: <u>https://www.aph.gov.au/Parliamentary\_Business/Hansard/Estimates\_Transcript\_Schedule</u> [accessed 20 April 2023]. For additional context, see footnote 169 of this audit report.

the reviewers was handed to the Prime Minister and Minister for Defence on 14 February 2023. The Prime Minister stated that the review would help 'ensure Defence's capability and structure is fit for purpose and delivers the greatest return on investment.'<sup>204</sup> As noted in paragraph 3.140, a public version of the review was released on 24 April 2023<sup>205</sup>, which included the following recommendations:

- An independent analysis of Navy's surface combatant fleet capability should be conducted in Q3 2023 to ensure its size, structure and composition complement the capabilities provided by the forthcoming conventionally–armed, nuclear-powered submarines. The analysis must assess: the capability requirements to meet our current strategic circumstances as outlined in the Review, as well as the cost, schedule, risks and the continuous shipbuilding potential of each option.
- The acquisition of a conventionally–armed, nuclear-powered submarine capability in the shortest possible timeframe should be prioritised as part of AUKUS Pillar I.<sup>206</sup>

3.145 The Australian Government has agreed to these recommendations and the proposed timeframe, with the final report of the independent analysis team to be provided to government in Quarter 3 2023.<sup>207</sup> The independent analysis is to be undertaken by a former United States Navy Vice Admiral, a former Secretary of the Department of Finance, and a retired Royal Australian Navy Vice-Admiral.<sup>208</sup>

A Hehi

Grant Hehir Auditor-General

Canberra ACT 10 May 2023

<sup>204</sup> Prime Minister and Minister for Defence, joint media release, 'Defence Strategic Review handed to government', 14 February 2023, available at <u>https://www.minister.defence.gov.au/media-releases/2023-02-14/defence-strategic-review-handed-government</u> [accessed 5 March 2023].

<sup>205</sup> Defence Strategic Review, 24 April 2023, available from: <u>https://www.defence.gov.au/about/reviews-inquiries/defence-strategic-review</u> [accessed 26 April 2023]

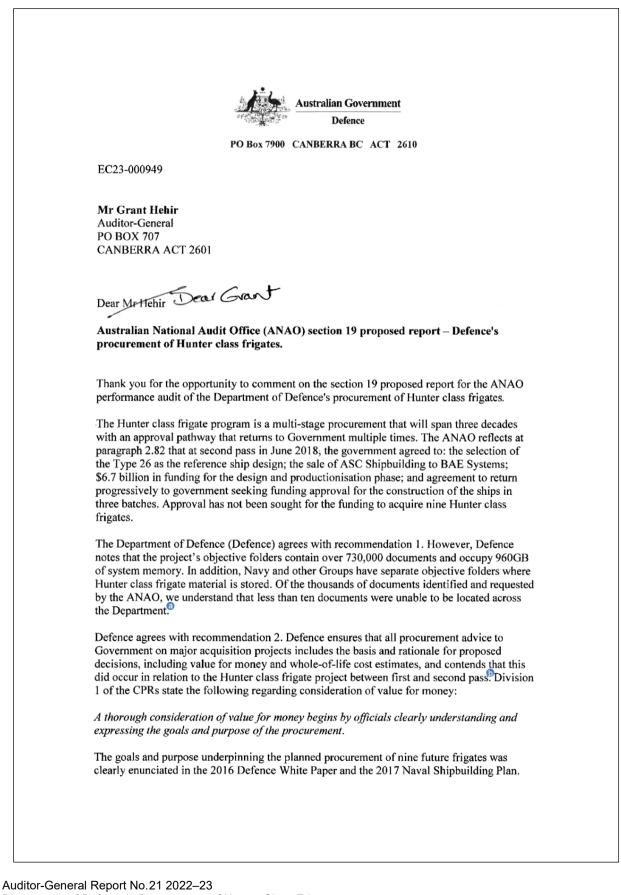
<sup>206</sup> Ibid., p. 58 and p. 104.

<sup>207</sup> Ibid., p. 104.

<sup>208</sup> The composition of the review panel was announced by the Minister for Defence Industry on 26 April 2023. A recording of the announcement is available from: <u>https://www.abc.net.au/news/2023-04-25/retired-us-admiral-to-review-australias-warship-fleet/102262644</u> [accessed 28 April 2023].

Appendices

## Appendix 1 Entity responses



It is important to take into consideration: stakeholder input; the scale and scope of the business requirement; the relevant entity's resourcing and budget, obligations and opportunities under other existing arrangements; relevant Commonwealth policies; and the market's capacity to competitively respond to a procurement.

2

In 2015, Defence commissioned RAND to deliver a detailed analysis of shipbuilding in Australia, taking into account stakeholder input, the scale and scope of the enterprise, budget and resourcing requirements, including the value for money of continuous shipbuilding, relevant Commonwealth policies, and industry's capacity to support it. This is clearly detailed in RAND's report *Australia's Naval Shipbuilding Enterprise – Preparing for the 21<sup>st</sup> Century*. Defence then further commissioned RAND to conduct a market scan and shortlisting of suitable candidate shipbuilders and products, assessing the market's capacity to competitively respond, which was then framed in the request for tender. The request for tender described the scale and the scope of the project, set against Defence's resourcing and budget to deliver the project. The evaluation then examined the offered responses, considering stakeholder input and relevant Commonwealth policies.

Procurements should: encourage competition and be non-discriminatory; use public resources in an efficient, effective, economical and ethical manner that is not inconsistent with the policies of the Commonwealth; facilitate accountable and transparent decision making; encourage appropriate engagement with risk; and be commensurate with the scale and scope of the business requirement.

The tender process Defence conducted encouraged competition and was non-discriminatory. The tender evaluation was conducted in an ethical manner with appropriate mechanisms around probity. Defence recognises that value for money is not solely determined by the price. The Government determined there to be value for money in establishing a sovereign, sustainable, cost-competitive continuous shipbuilding program in Australia. The tenders were therefore considered in line with the Government's policy around continuous naval shipbuilding. It is important to note that Defence was not seeking approval to procure nine frigates and expend \$45 billion; the procurement sought was to enter into the design and productionisation phase. Value for money assessments were formally described in the procurement approvals before the contract was executed (as reported by the ANAO in chapter 3 of the report).

When conducting a procurement, an official must consider the relevant financial and nonfinancial costs and benefits of each submission including, but not limited to: the quality of the goods and services; fitness for purpose of the proposal; potential supplier's relevant experience and performance history; flexibility of the proposal (including innovation and adaptability over the lifecycle of the procurement); environmental sustainability of the proposed goods and services; and whole-of-life costs.

The tender evaluation clearly considered the relevant financial and non-financial cost and benefits of each tender, the fitness for purpose, the supplier's relevant experience, performance history and corporate structure. Given that all of the ships under consideration included modifications to accommodate Australia's unique requirements, a rough order of magnitude sustainment estimate was sought but was unsuitable for evaluation – the sustainment provision was used as a fair substitute in offering a whole-of-life cost estimate. This was done transparently.

All of the considerations listed above were inherent in the setting of requirements, engagement of stakeholders, conduct of the competitive evaluation process, and the final advice provided to Government. Defence demonstrably considered value for money throughout the procurement process.

3

Attached to this letter are Defence's Proposed Amendments, Editorials and Comments (Annex A), Defence's Response to Requests for Information (Annex B), Defence's Response to the Proposed Recommendations (Annex C) and Defence's Summary Response (Annex D). These, together with this letter, constitute Defence's formal response to the Section 19 proposed report.

Our point of contact is the ANAO Liaison Officer who can be contacted via email at: anao.lo@defence.gov.au.

Yours sincerely

Greg Moriarty Secretary

2 April 2023

Angus J Campbell, AO, DSC General Chief of the Defence Force

6 April 2023

#### Annexes:

- A) Defence's Proposed Amendments, Editorials and Comments
- B) Defence's Response to Requests for Information
- C) Defence's Response to the Proposed Recommendations
- D) Defence Summary Response

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## ANAO comments on Department of Defence response

- (a) As outlined in paragraphs 2.7 to 2.15 of the audit report, shortcomings in Defence record-keeping are discussed throughout the report. In the context of the competitive evaluation process, Defence did not retain complete records of the key decisions made during the shortlisting process for the evaluation activity, including: the basis for the Ship Building Steering Group's decision to approve seven ship designs for further analysis and the rationale for the Defence Secretary's (the decision maker's) selection of the BAE Type 26 over the French FREMM (DCNS) as the third option. In the context of Defence's development of advice for second pass government approval, the minutes of the relevant Defence Committee meeting were not retained and it is unclear what deliberations took place. The hand-written notes provided to the ANAO as evidence did not include references to the relative value for money of the tenders (discussed in paragraphs 2.64 to 2.66).
- (b) As outlined in paragraphs 2.53 to 2.102, Defence's advice to government at second pass on the selection of the preferred ship design did not include an assessment of value for money or include whole-of-life cost estimates as required by the Budget Process Operational Rules applying to Defence.
- (c) As outlined in paragraphs 2.30 to 2.44, in accordance with the Tender Evaluation Plan, the Source Evaluation Report did not include a value for money assessment and did not recommend a preferred tenderer; and the Source Evaluation Report Supplement did not include a value for money assessment (which had been identified as an objective of the Offer Definition and Improvement Activities) or recommend a preferred tenderer. As discussed in paragraphs 2.32 to 2.35, the approach to tender evaluation adopted by Defence was not consistent with the Commonwealth Procurement Rules (CPRs) or the Defence Procurement Policy Manual 2016, which applied at the time.
- (d) As outlined in paragraphs 2.86 to 2.102, Defence has conflated an industry policy objective with the achievement of value for money in procurement, as required by the CPRs — in effect arguing that a procurement undertaken to help effect this policy objective will necessarily represent value for money. The effect of paragraph 4.4 of the CPRs is to establish an obligation on officials to assess value for money, which cannot be excluded from a procurement process, as in the 2017 Tender Evaluation Plan for this procurement (discussed in paragraphs 2.31 to 2.35).
- (e) As outlined in paragraph 3.10, the minute seeking *Public Governance, Performance and Accountability Act 2013* section 23 commitment approval for the Hunter class head contract advised the delegate that the achievement of value for money was supported through arrangements in the negotiated head contract, but did not document a formal assessment of value for money.
- (f) As outlined in paragraph 2.79, the Department of Finance noted that Defence, in providing a sustainment provision in place of a sustainment cost estimate, had not met the requirement in the Budget Process Operational Rules applying to Defence to provide whole-of-life cost estimates.
- (g) As outlined in paragraphs 2.99 to 2.100, a feature of Defence's management of this procurement and related advisory processes is that they lacked a value for money focus, and in that sense the procurement did not comply with the core rule of the CPRs.



#### **Australian Government**

#### **Department of Finance**

Jenny Wilkinson PSM Secretary

Mr Grant Hehir Auditor-General Australian National Audit Office 38 Sydney Avenue FORREST ACT 2603

Dear Mr Hehir

Thank you for your correspondence of 16 March 2023, providing an extract of the draft ANAO Report *Department of Defence's Procurement of Hunter Class Frigates*, to the Department of Finance (Finance) for response.

In relation to the procurement process conducted by Defence, I note that a key Finance role is to issue and support the Commonwealth Procurement Rules (CPRs) which set out the rules that officials must comply with when undertaking procurement. It is the responsibility of the Accountable Authority to provide a framework and instructions to relevant entity officials to enable them to carry out procurement processes in a manner that is compliant with the CPRs. The CPRs do not include a requirement to consult Finance on compliance with the CPRs. However, Finance maintains and promotes a CPRs advisory function that entities can consult when undertaking procurements.

In formulating its advice to Government, Finance drew on information provided by Defence throughout the procurement process and in the lead up to the Government decision. This provided Finance with visibility of Defence's assessment of a number of matters (including quality of the goods to be acquired, how well the goods would meet their intended purpose, relevant experience and performance history of potential suppliers and whole-of-life costs) that went to the consideration of value for money. Finance highlighted these Defence considerations in our advice to Government.

Yours sincerely

Jenny Wilkinson Secretary

April 2023

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#### ANAO comments on Department of Finance response

(a) As outlined in paragraphs 2.79 to 2.80 of the audit report, Finance prepared an assessment that was included in draft second pass advice provided by Defence to its ministers. Among other things, Finance drew attention to what it considered to be limitations in Defence's advice on cost, and noted that the selection of the preferred tenderer was based solely on capability. Finance did not comment on Defence's approach to the procurement or lack of value for money assessment.

## Appendix 2 Improvements observed by the ANAO

1. The existence of independent external audit, and the accompanying potential for scrutiny improves performance. Improvements in administrative and management practices usually occur: in anticipation of ANAO audit activity; during an audit engagement; as interim findings are made; and/or after the audit has been completed and formal findings are communicated.

2. The Joint Committee of Public Accounts and Audit (JCPAA) has encouraged the ANAO to consider ways in which the ANAO could capture and describe some of these impacts. The ANAO's 2021–22 Corporate Plan states that the ANAO's annual performance statements will provide a narrative that will consider, amongst other matters, analysis of key improvements made by entities during a performance audit process based on information included in tabled performance audit reports.

3. Performance audits involve close engagement between the ANAO and the audited entity as well as other stakeholders involved in the program or activity being audited. Throughout the audit engagement, the ANAO outlines to the entity the preliminary audit findings, conclusions and potential audit recommendations. This ensures that final recommendations are appropriately targeted and encourages entities to take early remedial action on any identified matters during the course of an audit. Remedial actions entities may take during the audit include:

- strengthening governance arrangements;
- introducing or revising policies, strategies, guidelines or administrative processes; and
- initiating reviews or investigations.

4. In this context, the below actions were observed by the ANAO during the course of the audit. It is not clear whether these actions and/or the timing of these actions were planned in response to proposed or actual audit activity. The ANAO has not sought to obtain assurance over the source of these actions or whether they have been appropriately implemented.

• On 9 August 2022, Defence approved a Contract Management Plan for the Hunter class frigates contract with BAE Systems Maritime Australia, 44 months (3.6 years) after contract execution.

Milestone	Milestone description	Current value (AUD)	Execution milestone dateª	Contracted milestone date <sup>b</sup>	Milestone slippage <sup>c</sup>	Claimed date	Difference between claimed and scheduled (days)
ED1	Workforce Retention Milestone	\$2,500,000	04-Feb-19	04-Feb-19	N/A	04-Feb-19	0
1	Low voltage architecture options report issued for CEAFAR radar	\$5,002,620	28-Feb-19	28-Feb-19	N/A	25-Feb-19	-3
2a	Integrated Logistics System (ILS) Scoping Study Contract Change Proposal (CCP)	\$1,425,044	31-Aug-19	30-Mar-20	7 months	19-Jun-20	81
2b	ILS Scoping Study CCP	\$1,425,044	31-Aug-19	30-Nov-20	15 months	19-Mar20	231
3	Systems Requirements Review (SRR)	\$2,850,089	30-Sep-19	30-Sep-19	N/A	26-Sep-19	-4
4	Integrated Baseline Review (IBR) 1	\$2,850,089	30-Nov-19	30-Nov-19	N/A	14-Oct-20	319
5	Contract Data Requirements List (CDRL) Deliverables (1)	\$2,882,567	01-Apr-20	01-Apr-20	N/A	03-Apr-20	2
6a	Australian Industry Capability (AIC) — Continuous Naval Shipbuilding (CNS) Plan Delivery	\$2,709,714	30-Jul-20	29-Nov-19	-8 months	03-Dec-19	4
6b	AIC — CNS Plan Delivery	\$1,221,886	30-Jul-20	30-Jul-20	N/A	10-Jul-20	-20
8	Prototyping Readiness Review	\$3,961,863	30-Nov-20	30-Nov-20	N/A	17-Dec-20	17
9	CDRL Deliverables (2)	\$4,526,972	1-Apr-21	01-Apr-21	N/A	12-Aug-22	498
10	Mission Systems Specification (MSS) Final	\$4,526,972	30-Jun-21	30-Oct-21	4 months	01-Nov-21	22
11	Technical Data and Software Rights Verification	\$3,645,373	30-Sep-21	30-Sep-21	N/A	20-Dec-22	446
12	Prototyping Block B Preparation & Fabrication Unit B32 complete	\$8,180,461	30-Nov-21	30-Nov-21	N/A	01-Nov-21	-29
13	CDRL Deliverables (3)	\$7,632,758	01-Apr-22	01-Apr-22	N/A	12-Aug-22	133

## Appendix 3Hunter class frigate head contract key milestones, at 31 March 2023

Milestone	Milestone description	Current value (AUD)	Execution milestone dateª	Contracted milestone date <sup>b</sup>	Milestone slippage <sup>c</sup>	Claimed date	Difference between claimed and scheduled (days)
14	Interim Data Management System	\$3,645,373	01-Jul-22	01-Aug-22	1 month	24-Jun-22	-38
15	Mission System Critical Design Review (MS CDR)	\$3,150,799	30-Nov-22	TBC (25/26)	At least 31 months	-	_
16a	01 SB-200 Production Management Plan Final Release, incorporating Prototyping Learning from Experience	\$3,658,474	30-Oct-22	15-Nov-22	1 month	13-Oct-22	-33
16b	VLS Contractor Furnished Information (CFI)	\$3,873,095	30-Oct-22	31-Jan-24	15 months	-	_
17a	Production Readiness Review (PRR)	\$3,873,095	15-Dec-22	31-May-24	17 months	_	_
17b	IBR4	\$4,208,557	15-Dec-22	29-Jul-24	19 months	_	_
18	Preliminary Design Review <sup>d</sup>	\$3,869,306	28-Feb-23	30-Oct-23	N/A	-	_
19	CDRL Deliverables (4)	\$3,869,306	1-Jul-23	01-Jul-23	N/A	-	_
20	Block 19 – Block Readiness Review (BRR)	\$4,189,138	30-Oct-23	30-Mar-25	17 months	-	_
21	Stage 2 Detail Design - 12DZ - FZIR Design Zone Review	\$4,189,138	30-Apr-24	26-Jun-25	14 months	-	-
22	Final Critical Design Review (FCDR)	\$3,843,767	30-Jun-24	TBC (26/ 27)	At least 25 months	-	-
23	2024/2025 Milestone to be decided prior to IBR 2	-	TBC	TBC	N/A	-	-
24	2025/2026 Milestone to be decided prior to IBR 2	-	TBC	TBC	N/A	-	-
25	Mission System Systems Definition Review	\$1,324,988	30-Nov-20	30-Apr-22	17 months	20-May-22	20

Milestone	Milestone description	Current value (AUD)	Execution milestone dateª	Contracted milestone date <sup>b</sup>	Milestone slippage <sup>c</sup>	Claimed date	Difference between claimed and scheduled (days)
26	Support System Systems Definition Review <sup>e</sup>	\$3,678,572	30-Nov-20	31-Mar-23	28 months	20-Dec-22	-101
27	IBR 2	\$3,678,572	30-Nov-20	28-Apr-23	29 months	-	-
28	Support System Critical Design Review (SSCDR)	\$3,150,799	N/A	TBC (25/26)	N/A	-	-
Sub-total		\$109,544,432					
IA-1	Batch one Acquisition Phase Cost Model (APCM) Update #1 Draft Release to Commonwealth	\$1,134,612	29-Jul-22	29-Jul-22	N/A	29-Jul-22	0
IA-2	Batch one Acquisition Phase Cost Model (APCM) Update #2 Draft Release to Commonwealth	\$1,134,612	30-Nov-22	30-Nov-22	N/A	30-Nov-22	0
IA-3	Delivery of a draft batch one build scope Response	\$3,403,837	31-Mar-23	31-Mar-23	N/A	31-Mar-23	0
IA-4	Delivery of a binding batch one build scope Response	\$4,538,450	30-Jun-23	30-Jun-23	N/A	-	-
IA-5	Batch one scope Statement Signed	\$1,134,612	30-Dec-23	30-Dec-23	N/A	-	-
Sub-total	·	\$11,346,124					
Total		\$120,890,556					

Note a: This column sets out milestone due dates as at contract execution. Where milestones have been split, the due date of the original milestone is used. Where milestones have been incorporated post-execution, the due date when they were incorporated into the head contract is used.

Note b: As at 31 March 2023.

Note c: For any of the cells marked N/A in this column, the original milestone has not slipped, including cases where milestones were repurposed.

Note d: This milestone corresponded to a second Combat Systems Critical Design Review, with no due date for the Preliminary Design Review, at head contract execution.

Note e: The key milestone criteria for KM-026 include that a harmonisation event has been completed and the Commonwealth has given notice and is satisfied that sufficient harmonisation of the Land Based Test Site, Mission System and Support System has been achieved.

Source: ANAO analysis of Defence documentation.

## Appendix 4 Contracted monitoring and reporting arrangements

Requirement	ANAO comment
<b>Contract Status Reports</b> Contract Status Reports (CSRs) are to include reporting on progress, planned activities, problems and risks, Australian Industry Capability (AIC) and Continuous Naval Shipbuilding (CNS). Timing: Monthly	As of March 2023, BAESMA had reported to Defence on 48 occasions, with reports largely provided monthly with the exception of two instances where two reports were combined. <sup>a</sup> Defence's review comments noted issues with the quality of the reports, including: the accuracy and consistency of the information reported; use of appropriate Defence terminology; and the level of detail and information provided.
Earned Value Performance Reports An Earned Value Management System is a project management tool used by Defence to measure project progress. <sup>b</sup> Earned Value Performance Reports compare BAESMA's achievement of earned value against planned value and actual cost. Timing: Monthly	Defence's analysis of the Earned Value Performance Report provided by BAESMA for the January 2023 period (the most recent available to the ANAO as at March 2023) indicated that BAESMA was behind schedule between work accomplished (earned value) and work planned (planned value) by \$93.33 million, although cost was \$60.98 million less than budgeted for the earned value. Defence's analysis noted that schedule performance had worsened since the December 2022 period, at which time BAESMA was behind schedule by \$83.87 million. Defence's analysis also identified issues with the quality of earned value management information being provided in BAESMA's Earned Value Performance Reports.
Monthly coordination meetings Timing: Monthly	Prior to the introduction of Joint Program Team Review meetings in June 2022 (discussed at paragraph 3.43), 34 monthly coordination meetings had been held between Defence and BAESMA. <sup>c</sup> Coordination meetings have included discussions on: safety; health and environment concerns; upcoming reviews; supply chain issues; and engineering challenges.
Quarterly progress meetings Timing: Quarterly	Prior to the introduction of Joint Program Team Review meetings in June 2022, 13 quarterly progress meetings had been held between Defence and BAESMA. These meetings focussed on higher level challenges, including upcoming reviews, the quarterly Strategic Performance Measure (SPM) assessment, and milestone achievement and barriers.
	Contrary to the requirement under the head contract, Quarterly Progress Meeting minutes did not always record discussion of the SPM assessment for the reporting period. Other key issues discussed in the meeting minutes included: supply chain challenges; the pathway to achieving planned submission dates for BAESMA's batch one build scope offer; and the program objectives and progress towards achieving them.

Requirement	ANAO comment
Management reviews Bi-annually	Prior to the introduction of Joint Program Team Review meetings in June 2022, five management review meetings were held between Defence and BAESMA.
	These reviews are expected to consider: contract performance; monitoring of progress, strategic and other performance measures; any problems, opportunities, risks and issues identified by either Defence or BAESMA; and project strategic direction and priorities. Due to the similar subject matter discussed at management reviews and quarterly progress meetings, these meetings have been combined when they overlap.

Note a: Cumulative Australian contract expenditure as reported in the February 2022 period CSR was \$917 million, or 37 per cent of the total design and productionisation value.

Note b: Earned value management measures earned value (budget cost of work performed) against planned value (budgeted cost of work scheduled). BAESMA measures performance using two indicators: schedule performance index (earned value divided by planned value); and cost performance index (earned value divided by actual costs).

Note c: Some of the coordination meetings overlapped with quarterly progress meetings and management reviews. The number of meetings recorded includes instances where these meetings overlapped.

Source: Defence documentation.

# Appendix 5 Major risks and issues – public reporting in the 2021–22 Defence Major Projects Report

SEA 5000 Phase 1, Hunter Class Frigate Design and Construction, Major Risks and Issues, extract from Department of Defence Project Data Summary Sheet (PDSS), appearing in Auditor-General Report No.12 of 2022–23, 2021–22 Major Projects Report, pp. 144–45.

### **Major Project Risks**

Identified risks (risk identified by standard project risk management processes)		
Description	Remedial action	
The HCF [Hunter class frigate] 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	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.	

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achieve sovereign shipbuilding capability for Australia.	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 bu	t 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.

Source: Defence PDSS appearing in Auditor-General Report No.12 2022–23, 2021–22 Major Projects Report, pp. 144–45.

## 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 [Memorandum of understanding] 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 [Global Combat Ship User Group] now being business-as- usual combined with the progress that has been made in the roll-out of the DMS [Data

	Management System] 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.

Source: Defence PDSS, appearing in Auditor-General Report No.12 2022–23, 2021–22 Major Projects Report, pp. 144–45.