

## **Defence Submission to the JCPAA Inquiry on the Auditor-General's Report No. 39 (2017-18) *Naval Construction Programs – Mobilisation***

The Department of Defence acknowledges the findings contained in the Audit report on the *Naval Construction Programs - Mobilisation* and has noted the overall positive findings in the conclusion of the report, that Defence continues to work towards effective planning and mobilisation of the Naval Shipbuilding Plan (the Plan) with Defence meeting current scheduled milestones for the Offshore Patrol Vessel, Future Frigate and Future Submarine construction programs.

As identified in the Australian Government's *2017 Naval Shipbuilding Plan*, most long-term government policy initiatives will take time to develop and mature. The Auditor-General's report supports this premise – and at the early stage of this process they made only a single recommendation which Defence asserts is already in place.

Defence responded to the Auditor-General on 23 March 2018 disagreeing with the recommendation on the basis that each shipbuilding program takes an enterprise approach to funding. Offsets are recommended if there is a shortfall between the funding requirement and existing provisions. The discrete shipbuilding projects are included in the Integrated Investment Program. The overall naval shipbuilding enterprise, including all associated workforce costs, will be met from within Defence's Integrated Investment Program funding.

At the Senate Economics Reference Committee Inquiry in May 2018, Defence reiterated that the Auditor-General's report highlights previous advice from Defence that the Naval Construction Programs carry high to extreme risk. On these risks, the report concludes that although Defence continues to work towards effective planning and mobilisation to deliver the Australian Government's Naval Shipbuilding Plan, successful implementation will depend on actively managing the high to extreme levels of associated risk.

Defence acknowledges that active management is necessary and is adopting an enterprise approach to risk mitigation for the naval shipbuilding endeavour by developing a national risk profile. Further, since those risks were identified by Defence, a number of mitigations have been put in place to reduce the level of risk to a manageable level.

Workforce stability is a key concern, while the management of the workforce is essentially a commercial matter, Defence and other agencies involved in the Shipbuilding Enterprise accept they have a major active role in working with industry to manage jobs during the transition between build programs. Defence is working with the Departments of Finance, and Jobs and Small Business on short term measures to mitigate the long-term risk associated with building a sustainable workforce to support continuous shipbuilding in South Australia.

The Naval Shipbuilding College has also been established to perform a critical role in ensuring the availability of a sufficiently sized and skilled naval shipbuilding workforce that meets industry's projected requirements for workers over the next decade and beyond.

Defence is committed to supporting the ambitious agenda that has been laid out for the creation of a national naval shipbuilding enterprise. In the year since the release of the Plan, Defence has progressed the key policy initiatives and critical milestones outlined in the Plan in a timely and coordinated way. Defence, in close collaboration with other Commonwealth agencies and State and Territory Governments, is taking an active and agile approach to transforming Australia's naval shipbuilding industry to ensure the long-term sustainability of this strategic national asset.

Implementation of the Plan is subject to unprecedented levels of oversight and accountability, including six-monthly reviews by government, independent oversight by the Naval Shipbuilding Advisory Board, and regular audits by the Auditor-General's office.

Policies and initiatives are being put in place to ensure that the defence industry can help meet our capability needs and support Australia's naval shipbuilding enterprise. These include the Defence Export Strategy, the Defence Industrial Capability Plan, both released earlier this year, and the Defence Skilling and Science, Technology, Engineering and Mathematics Strategy, whose implementation will be aligned with, and support, the Naval Shipbuilding Plan.

The Auditor-General's report raised a number of points which Defence has responded directly to previously, with the majority addressed above. However, noting the Committee's interest in the matter, and that some of these points were focussed on in isolation by the media following the release of the report, the below table is provided to address a number of these points specifically.

ANAO Comment	Defence response
<p><i>Defence has not updated or re-visited its cost assumptions for its naval construction programs.</i></p>	<p>Defence takes an enterprise approach to its Naval Construction Programs, adjusting cost assumptions twice a year.</p> <p>The shipbuilding provisions identified in the Integrated Investment Program are consolidated to enable Government to consider the affordability of the Naval Construction Program as each project is presented to Government.</p> <p>Offsets are recommended to Government if there is a shortfall between the funding requirement and an existing provision.</p> <p>Any changes have been reflected in Defence's Integrated Investment Program, including an update to the Future Submarine Program cost assumptions to reflect build in Australia of 12 submarines, noting the build cost will be refined during the design process.</p>
<p><i>Cost estimates of the Naval Shipbuilding College first phase have risen from \$25 million to \$62 million (approximately 2.5 times the original cost estimate).</i></p>	<p>There has not been any cost change associated with establishing the Naval Shipbuilding College.</p> <p>The contract value for the Naval Shipbuilding College is unchanged and remains \$62 million – as signed in March 2018.</p> <p>Defence, in reviewing the information from both Requests for Information and Tendered Information, chose to contract a work scope that resulted in a contracted amount higher than initially estimated in March 2017.</p>
<p><i>Offshore Patrol Vessel</i></p> <ul style="list-style-type: none"> <li><i>Selection was not based on reliable whole-of-life cost estimates,</i></li> <li><i>Reliable sustainment cost estimates were not provided to Government at second gate approval, and commercial arrangements between the selected ship builder and Australian shipbuilding firms had not been settled when the tender outcome was announced.</i></li> </ul>	<p>The Offshore Patrol Vessel project went forward to Government with sustainment data based on historical usage and designer forecasts.</p> <ul style="list-style-type: none"> <li>This is standard shipbuilding practice.</li> </ul> <p>As forecast to Government at the time of the decision, Defence is now engaging with industry to develop detailed sustainment outcomes.</p> <p>Defence provided Government with an indicative life cycle cost for the Offshore Patrol Vessel project across a 20 year life.</p> <ul style="list-style-type: none"> <li>This indicative cost was based on previous programs, historical usage, and usage and upkeep data provided by the tenderers. This is typical for a shipbuilding project at this stage.</li> </ul> <p>Defence issued an invitation to register interest to industry for the Offshore Patrol Vessel sustainment system, and this process will inform a subsequent request for tender to be released in 2019.</p> <p>The contract to construct the 12 Offshore Patrol Vessels was signed with Luerksen Australia on 31 January 2018.</p> <p>This is a fixed price contract – Defence understands precisely how much the ship will cost to build in South Australia and Western Australia.</p>
<p><i>Future Frigate program</i></p> <ul style="list-style-type: none"> <li><i>Constraints associated with the accelerated schedule to enable a 2020 construction start;</i></li> <li><i>Schedule compression presented such extreme risk that cost and schedule over-run was likely, and that to proceed on the current schedule had the potential for severe reputational damage to Defence and the Government.</i></li> <li><i>Lack of supporting analysis for commencing construction in 2020 with 'prototyping activities'</i></li> </ul>	<p>The assessment that the naval construction programs carry high to extreme risk identified in the ANAO's report relates to advice provided by Defence in 2016 associated with the integration of the Future Frigate's combat management system.</p> <p>This risk has since been mitigated through the Government's decision in early 2017 to commence Future Frigate prototyping in 2020 and construction of the first frigate to commence within 24 months thereafter.</p> <p>In addition to prototyping, risk has been further mitigated by:</p> <ul style="list-style-type: none"> <li>the Government's announcement in October 2017 to take an enterprise approach to combat management systems and bring forward the Future Frigate combat management decision from Q2 2018 to Q3 2017– this allowed for the commencement of studies activities prior to the Future Frigate decision; and</li> <li>decoupling of shipyard Infrastructure from shipbuilding projects, including the creation of ANI – this allowed for the early commencement of shipyard design and construction in Osborne ahead of the Future Frigate decision.</li> </ul> <p>Undertaking production prototyping activities will demonstrate that the ship design, the ship yard processes and workforce are production ready.</p> <p>Prototyping activities are intended to reduce technical uncertainty, provide critical processes and to generate information to improve the quality of subsequent decision making. Prototyping activities tend to focus on systems and sub-systems that are the most complex or high risk.</p> <p>Prototyping activities allow Defence to test concepts, tools and processes, as well as providing practical training opportunities. Prototyping is widely used around the world including in the construction of the UK's Queen Elizabeth II class aircraft carrier, the new River-class Offshore Patrol Vessels and the US Littoral Combat Ship program.</p>

<p><i>Risks associated with the potential inclusion of the Ballistic Missile Defense capability for the Future Frigate program.</i></p> <ul style="list-style-type: none"> <li>• <i>substantially increase the design and integration risk; and</i></li> <li>• <i>would require significant development work and be a departure from the Government's guiding principle of minimising unique Australian design changes.</i></li> </ul>	<p>The ANAO incorrectly states that there is design and integration risk emerging in respect to the Future Frigate program due to recent decisions to integrate the Aegis Ballistic Missile Defence capability.</p> <p>The Government announced that Future Frigates will have an Aegis combat management system with a tactical interface developed by SAAB Australia.</p> <ul style="list-style-type: none"> <li>• Defence has previously advised the ANAO of this correction.</li> </ul> <p>Defence has advised the ANAO that the integration of the Aegis combat management system does not add to the cost of the Future Frigate and that the decision is consistent with the Government agreed design changes at first pass.</p>
<p><i>The 2016 Defence White Paper identified a: 'commitment to maximising Australian industry without compromising cost, capability, schedule or risk'. The integration of the Future Submarine build—a developmental program which operates outside of the Government's guiding principles—into the overall naval shipbuilding enterprise, presents Defence with an ongoing risks (sic) in containing costs and managing the demand for labour resources.</i></p>	<p>Through the Future Submarine Competitive Evaluation Process, Defence sought proposals from participants that included an option to build all Future Submarines in Australia.</p> <p>There was also a requirement for participants to address the involvement of Australian industry in the Program, while managing cost, capability and schedule. The assessment of these proposals informed Government's decision to build all Future Submarines in Australia.</p> <p>Naturally, there are risks in a submarine program, but these need to be balanced against the capability need for regionally superior submarines, which cannot be acquired off-the-shelf.</p> <p>As in any program, risks need to be properly identified and managed. This is being achieved through:</p> <ul style="list-style-type: none"> <li>• The establishment and maintenance of a highly competent program office, including key personnel with experience in submarine programs;</li> <li>• Strong and ongoing engagement with industry partners (Naval Group and Lockheed Martin Australia) to understand and guide program execution to manage cost, schedule and capability;</li> <li>• Structured tracking and management of risks;</li> <li>• Work across Departments to ensure a whole-of-government approach to managing risks where necessary; and</li> <li>• Coordination across all naval construction programs to address risks in a holistic manner.</li> </ul>