

Submission 54 - Victorian Government

The Victorian Government made submission 13 to the inquiry into the Future of Australia's naval shipbuilding industry in the 44th Parliament.

This document is intended as a supplementary submission to the original submission 13.

All submissions received in the 44th Parliament can be accessed via the following link:

http://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Economics/Naval_shipbuilding/Submissions



Economic Development,
Jobs, Transport
and Resources

Inquiry into the Future of Australia's Naval Shipbuilding Industry

Victorian Government Submission

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Overview

The Commonwealth Government has committed over \$100 billion in the coming decades to build Australia's future naval vessels. This program of work will equip our Navy with a modern fleet and has enormous economic potential for our citizens if the opportunity for growing Australian business, jobs and skills is not squandered.

The Australian Government has selected French shipbuilder DCNS as the prime contractor for the \$50 billion Future Submarine program to be built in Adelaide. The build of the Future Frigate program (SEA 5000) and the first two Offshore Patrol Vessels (OPV, SEA 1180) will also take place in Adelaide, with the remaining OPVs and all Pacific Patrol Boats (SEA 3036) to be built in Western Australia. These projects are the beginning of a portfolio of work that will take place over many decades.

This Submission focusses on the need to integrate local content in all builds and subsequent sustainment. The Victorian Government believes that mandating local content is vital to maximise the benefit for the nation from this major investment in naval shipbuilding. Requiring local content in this work will create business opportunities, underpinning ongoing direct economic benefits in the form of jobs creation and supply chain creation throughout the country.

The Victorian Government suggests the adoption of an approach to mandating local content similar to the proven Victorian Industry Participation Policy (VIPP).

Shipbuilding is a strategically important advanced manufacturing capability and supports innovative industry development throughout the entire supply chain. The Commonwealth Government must ensure nationwide competition for supply chain work that provides opportunities for all businesses to compete, not just those businesses located in South Australia and Western Australia.

Australia's unique naval requirements mean designs must be customised. Only local partners can provide expertise about Australia's context. This expertise is required from the early design and engineering stages of the projects. Involving Australian suppliers in the design of future vessels provides the foundation for assuring our ongoing capability to provide through life support. The capability to provide through life support will build over time as knowledge is transferred. Local content in these projects is essential for assuring Australia's sovereign industrial capability, without which Australia's security is at risk. The Victorian Government suggests that an Australian Maritime Innovation Centre be established to coordinate Australia's industrial, design, research and development capabilities to support technology transfer to Australia and build sovereign capability in maritime design and engineering.

Victoria has deep defence industry capability that prime contractors can draw on to meet mandated local content requirements. We have proven expertise across many areas required for naval shipbuilding. Our expertise makes Victoria a natural base for leading science and research collaboration. Victoria also has extensive defence infrastructure that can be leveraged.

The Victorian Government considers that maintaining and developing defence industry capability is of national strategic and economic importance. It is crucial to Australia and Victoria's future as a centre for advanced defence manufacture and export.

Recommendations

Terms of Reference	Recommendations	Section
a) The development of contracts relating to naval ship and submarine building.	Recommendation 1: The Commonwealth Government require the utilisation of local content and creation of nation-wide supply chain opportunities in all contracts with prime contractors.	Sections 1.1, 1.2
b) The design, management and implementation of naval shipbuilding and submarine defence procurement projects in Australia.	Recommendation 2: The Commonwealth Government require local content at all stages of the project, including early design and engineering.	Sections 1.3, 1.4
c) The utilisation of local content and supply chains.	Recommendation 3: The Commonwealth Government mandate the proportion of local content and enforce the mandated requirement. Recommendation 4: The proportion of mandated local content increase throughout each shipbuilding project, both with each successive vessel and through the life of each vessel.	Section 1.5
d) The integration of offshore design work and supply chains in Australia.	Recommendation 2: The Commonwealth Government require local content at all stages of the project, including early design and engineering. Recommendation 6: The Committee support the development of an Australian Maritime Innovation Centre, to be located in Victoria.	Sections 1.3, 1.4, 2.2
e) Opportunities for flow on benefits to local jobs and the economy.	Recommendation 5: The Committee note that Victorian industry has competitive advantages in the areas of advanced manufacturing, research and development, engineering, systems integration, ICT and cyber technology and training.	Sections 2.1, 2.2
f) Any related matters.	Recommendation 7: The Committee note that the Commonwealth Government's current plans do not envisage any shipbuilding work for the Williamstown shipyard, at which 1,000 jobs have been lost since the completion of the Landing Helicopter Dock ships, with equipment now mothballed. Recommendation 8: The Committee note the strategic potential of the Fishermans Bend Employment Precinct and the Victorian Government's strategic investment in the former General Motors Holden site.	Sections 3.1, 3.2

1 Mandating local content is vital to maximise the benefit of this major investment

The Victorian Government submits that a high degree of local content is required to:

- Maximise the benefits of this major investment for all Australians
- Understand and respond to Australia's unique naval requirements
- Assure Australian industry continues to build its capability to provide through life support
- Protect our national security.

The Victorian Government submits the Commonwealth should mandate the specific local content requirements.

1.1 All Australians must benefit from this investment

The Victorian Government is pleased that the Commonwealth has promised significant local industry development outcomes from the future submarine and future shipbuilding programs.¹

Shipbuilding is a strategically important advanced manufacturing capability and supports innovative industry development throughout the entire supply chain.² Australia will miss a once-in-a-lifetime opportunity to establish itself as a competitor in global maritime supply chains if it does not maximise the investment by leveraging and building Australian capability.

The Commonwealth Government's decision to centre shipbuilding activities in Australia (Osborne, South Australia and Henderson, Western Australia) is welcomed. However, South Australia and Western Australia do not have the capability or capacity to deliver in isolation. A national effort is required.

The Victorian Government, through its business engagement network, is aware that Victorian firms are getting the impression that it would be advantageous to establish an operating presence in South Australia to be in close proximity of shipbuilding work. This is a major concern to Victorian businesses and the Victorian Government.

In developing national industry capabilities, the Commonwealth will need to develop mechanisms to ensure nation-wide competition for supply chain work that provides opportunities for all business to compete.

Local content and industry participation requirements need to be detailed as part of contracts with prime contractors to ensure we maximise the economic and social benefits of this investment.

1.2 Australia's unique naval requirements call for local partners

Australia's naval requirements are unique. Our location, security climate, geo-political setting, legislative framework, and socio-cultural milieu all need to be considered as part of the design for our future vessels. Customisation must include systems and subsystems integration into the local environment, localised operational and service manuals and training and ICT. For example, in the recent ANZAC Class Frigate Anti-Ship Missile Defence Upgrade program, BAE Systems Australia gained significant experience in local adaption through their role overseeing that project.

Ensuring customisation addresses our unique requirements calls for partnerships between overseas prime contractors with Australian suppliers from the beginning. This includes through local involvement in design and engineering.

Involving Australian suppliers in the design of future vessels provides the foundation for assuring our ongoing capability to provide through life support.

1.3 We must assure ongoing Australian capability to provide through life support

The Victorian Government, in its 2006 submission to the Senate Foreign Affairs, Defence and Trade Committee's *Inquiry into Naval Shipbuilding in Australia*, has previously argued constructing new ships in Australia will greatly improve the capabilities of local industry³.

The final 2006 Senate Foreign Affairs, Defence and Trade Committee, *Blue water ships: consolidating past achievements*, noted there is a widespread view that domestic construction would reduce repair and maintenance costs due to familiarity and experience with the ships and their systems⁴. Early knowledge-sharing with Australian industry will greatly enhance its integration into the supply chain of components, systems, sub-systems, training and development. These local capabilities will develop and innovate as Australia procures, deploys, operates, maintains and upgrades these vessel over the decades to come.

Knowledge transfer from overseas suppliers to local operators will be essential to the ongoing success of our naval assets. Maintenance and through life support of all ships will occur in Australia over the coming decades. If local suppliers are not integrated from the outset, there is a risk that Australian suppliers will not have the capability to provide through life support to our ships and submarines. The consequence is Australia would need to rely on international suppliers for the continuing operation of our naval vessels, putting the viability of our naval fleet at risk.

1.4 Local content protects our national security

The 2006 Senate Foreign Affairs, Defence and Trade Committee report, *Blue water ships: consolidating past achievements*, noted that Australia must have the capability to maintain, repair and upgrade its naval vessels to protect the nation's security interests⁵. The Victorian Government firmly supports this view.

A key outcome of incorporating local content will be growing and protecting Australian sovereign industrial capabilities that are essential to our national security. The Department of Defence has begun the process to establish what the required sovereign industrial capability will be. A sovereign industrial capability cannot be established without local content in both the design and the build phases of these projects.

Vessels must be sustained and adapted in Australia in response to changing circumstances; especially during times of crisis. ACIL Allen noted that the demands of a fleet can dramatically change should hostilities arise⁶. This includes:

- more intensive utilisation of the fleet, with direct implications for maintenance
- demands for rapid repair of damage caused by conflict
- demands for rapid adaptation of vessels to meet specific new tasking needs shaped by the specific nature of the conflict
- Possibly the need for rapid gearing up of a vessel replacement strategy, in the event that vessels are lost or badly damaged.

Local content must be incorporated across all relevant areas of the program to secure this national capability within our defence industry. The earlier in the research and design phase this occurs, the better.

1.5 There must be mandatory local content requirements that increase over time

Adopt the proven Victorian approach

The formal method of securing local content is through the Commonwealth Australian Industry Participation National Framework⁷. This Framework, the associated *Australian Jobs Act 2013* (Cth) and related policies and programs operate to ensure that prime contractors widely share information about bids for major projects, assist potential suppliers and (for large projects) develop an Australian Industry Participation (AIP) Plan.

AIP Plans do not mandate a minimum percentage of Australian content and are not enforceable.

The Victorian Government considers that the current AIP Framework does not place sufficient pressure on prime contractors, including the SEA 1000 Future Submarine international design partner DCNS, to achieve meaningful levels of Australian industry involvement over the life of the programs.

The stipulations under the Defence Procurement Policy Manual, the Australia-United States Free Trade Agreement and the Commonwealth Procurement Rules that certain military purchases are exempt from the requirement not to preference local business are welcome⁸, but do not go far enough.

A better approach to securing local content in government procurement is the Victorian 'Local Jobs First' initiative, as implemented through the *Victorian Industry Participation Policy* (VIPP)⁹. The VIPP mandates local content for Strategic Projects over \$50 million.

VIPP demonstrates that local industry benefits through mandated levels of local content. For example, in Victoria the High Capacity Metro Trains project to build 65 new trains for the Melbourne rail network mandated at least 50 per cent local content¹⁰. The winning consortium, *Evolution Rail*, committed to 60 per cent local content, supporting 1,100 jobs¹¹. Mandating local content requirement has underpinned a commitment to establish a bogie manufacturing facility in Australia.

Mandatory local content requirements are proven and should be adopted for this program. In the absence of a mandated proportion of local content, the Commonwealth must specify how it will assure local industry participates effectively in naval shipbuilding and submarine projects.

Increase mandatory content requirements over time

To maximise the benefits of local content, the framework for setting mandatory Australian industry participation should incorporate increases in the proportion of local content with each successive build. The Australian defence industry will mature over time through knowledge-sharing and investment, so with each successive vessel local capability will increase. This requirement should be included in contracts.

The Victorian Government expects that ongoing maintenance will largely be done locally and replacement components will be locally built. The Commonwealth Government's procurement framework and contract should require an increasing proportion of local content for this through life support period.

Recommendation 1

The Commonwealth Government require the utilisation of local content and creation of nation-wide supply chain opportunities in all contracts with prime contractors.

Recommendation 2

The Commonwealth Government require local content at all stages of the project, including early design and engineering.

Recommendation 3

The Commonwealth Government mandate the proportion of local content and enforce the mandated requirement.

Recommendation 4

The proportion of mandated local content increase throughout each shipbuilding project, both with each successive vessel and through the life of each vessel.

2 Victoria's defence industry capability stands ready to support the nation

To meet its commitments to incorporate local content, the Commonwealth Government and relevant prime contractors will draw on the enormous breadth and depth of defence industry excellence across Australia. The Victorian Government believes that cooperation between states and with the Commonwealth, rather than competition for opportunities, will yield the best results for us all¹².

Victoria's Defence Technologies Sector Strategy clearly lays out our key defence industry strengths in engineering, science and research, infrastructure, advanced manufacturing, ICT systems and cyber technologies¹³. Victoria is ready and able to supply capability in design, management and implementation for naval shipbuilding and submarine defence projects.

2.1 Victoria has proven expertise across many areas required for naval shipbuilding

Victoria has a long history of defence industry capability and excellence. The Victorian defence industry includes more than 300 businesses and employs around 7000 workers. These businesses provide strong and reliable supply chains for national and international markets¹⁴. Overall, defence has an annual economic impact of up to \$8 billion to Victoria's gross state product¹⁵.

Victoria has demonstrated its expertise in the construction of the ANZAC-class frigates¹⁶, the Air Warfare Destroyers¹⁷, Canberra Class Amphibious Assault Ship (Landing Helicopter Dock)¹⁸ and our highly successful contribution to the supply chain and sustainment of the Collins Class submarines, and their ongoing sustainment¹⁹. Victorian industry has recently proven expertise in a large number of niche areas required for naval shipbuilding. These include²⁰:

- electronics, digital and electronic technology
- systems engineering, platform information systems, autonomous systems, safety systems, communication systems
- human protection and performance
- propulsion and energy storage (battery systems)
- simulation and modelling
- metal fabrication, and manufacturing processes
- composite manufacturing development
- ICT, electronic surveillance
- radar and sonar systems, communications and robotics
- professional services
- through life support.

The Victorian Government argued in 2006, that locations with a more dynamic economic base and relatively greater availability of resources for the project maximise the overall economic benefits stemming from the project for the nation as a whole²¹. The Victorian Government maintains this view.

As South Australia and Western Australia have been already mandated by the Commonwealth as the build location of the future submarine and shipbuilding programs, every effort should be made by the Commonwealth to enhance Victoria's involvement to take advantage of its dynamic economic base and availability of capable resources for shipbuilding projects.

Victoria is also building our future capability with a strong pipeline of skills including nearly 30 per cent of Australia's engineering graduates and 34 per cent of Australia's digital technology enrolments in tertiary courses²². We also have one of the highest VET participation rates in the country²³.

The Victorian Government strengthened the Victorian defence maritime industry through significant investment in relevant skills and training, including links to industry. For example, in conjunction with the Commonwealth Government and TAFE, we have supported the Marine Engineering Training and Research Centre at Williamstown. Work has also been undertaken in Victoria to link industry into the

Commonwealth's Skilling Australia's Defence Industries program, which upskills defence industry employees where skills shortages are recognised.

Victoria has a strong engineering workforce to support naval ship building

Victoria's advanced manufacturing capability is derived from the strength and critical mass of the engineering workforce. Australia has a total labour force of qualified engineers of 263,890, of which Victoria accounts for 27.6 per cent¹. In contrast, Western Australia has 13.3 per cent of the national engineering workforce, and South Australia only 5.7 per cent.

This point is made to highlight that whilst shipbuilding activities will be centred on these two states, it will be impossible for these states to complete these projects without the support of the engineering workforce concentrated in Victoria and New South Wales.

2.2 Victoria's expertise makes us the natural base for leading science and research collaboration

The depth in the Victorian defence industry is supported by world-leading academic, government and private research and development communities. The Victorian Government believes that Melbourne and Victoria are the natural base for national co-ordination of design, management, and implementation of science and research collaboration for Australia's national naval shipbuilding industry.

The University of Melbourne, Monash University, and Deakin University have all established themselves as leaders in aspects of maritime design and engineering. For example, the University of Melbourne houses the Extreme Air-Sea Interaction facility for advanced fluid dynamics research²⁴. Deakin University is a world leader in carbon fibre defence-related research at its Carbon Nexus research facility²⁵, and the Institute for Frontier Materials, the Institute for Intelligent Systems Research and Innovation and the Centre for Advanced Design in Engineering Training. Monash University is the location of the CAVE2 immersive visualisation platform²⁶, providing for high-level interactive 3D research.

A wide range of other defence research bodies are located in or around Melbourne. These include:

- Defence Science and Technology Group
- Defence Science Institute
- Defence Materials Technology Centre
- Australian Manufacturing and Materials Precinct (home to 40 per cent of Victoria's manufacturing companies, CSIRO, and the Australian Synchrotron).

In August, the Victorian Government welcomed Lockheed Martin's decision to establish its first non-US based multi-disciplinary research and development centre in Melbourne. According to Lockheed Martin, "Melbourne's growing international reputation for research was a key factor in the consideration of a location for the Laboratory"²⁷.

Recommendation 5: The Committee note that Victorian industry has competitive advantages in the areas of advanced manufacturing, research and development, engineering, systems integration, ICT and cyber technology and training.

Australian Maritime Innovation Centre

A proposed addition to Australia's defence research and development community is the Australian Maritime Innovation Centre. With the support of the Victorian Government, the AMIC proposal has been developed by a consortium of 21 leading Australian maritime research organisations, educational institutions, and industry associations.

AMIC's purpose is to coordinate Australia's industrial, design, research and development capabilities in support of the future submarine and future shipbuilding projects. It will advance local solutions to complex naval building challenges by providing a facility where Australian capability in maritime science, design, materials technology and building is supported¹.

Victoria would make an ideal location for AMIC's headquarters to take advantage of the state's industrial, academic, engineering and R&D capabilities. Victoria's strengths are universally acknowledged by research institutions Australia-wide.

AMIC will add significant value to upcoming Defence projects, and will significantly mitigate many of the risks of failing to localise the builds.

Establishing AMIC in Victoria should be supported given the impact of the Commonwealth's decision to focus shipbuilding in South Australia and Western Australia has had on the Victoria's maritime sector.

Recommendation 6: The Committee support the development of an Australian Maritime Innovation Centre, to be located in Victoria.

3 Victoria's defence infrastructure should be leveraged

3.1 Williamstown Shipyard has a proud history of Australian ship building achievement

Victoria is home to Williamstown Shipyard, one of Australia's oldest and most established shipbuilding facilities.

Owned by BAE Systems Australia, the shipyard has received significant investment from successive Victorian governments, resulting in capital infrastructure improvements and equipment modernisation. A report from the Australian National Audit Office on the Air Warfare Destroyer (AWD) (SEA 4000) project stated Williamstown performed significantly above the former Defence Materiel Organisation's own industry benchmark score²⁸. This means that Williamstown is well placed to be activated for future modern naval shipbuilding and integration programs.

The modernisation of Williamstown was catalysed by three large-scale defence naval projects that have been successfully completed at the site: the ANZAC Class Frigate project²⁹, the Air Warfare Destroyer (AWD) project³⁰, and the Landing Helicopter Dock (LHD) project³¹.

The ANZAC Class Frigate project involved the development, construction and maintenance of 10 anti-submarine warships for the Royal Australian Navy and the Royal New Zealand Navy³². Williamstown was also commissioned to fabricate and supply hull blocks and keel blocks for the \$8 billion AWD program that produced the Hobart-class destroyers³³, one of the largest naval shipbuilding initiatives in Australian history³⁴. This demonstrates the capability of Williamstown.

BAE Systems Australia also worked in partnership with Navantia to deliver Australia's largest warship, the 27,800 tonne amphibious Landing Helicopter Dock project at Williamstown³⁵. While Navantia was responsible for manufacture of the hulls and major components, all assembly and systems integration for the LHDs took place at Williamstown. This provides an excellent example of how Australian and

Victorian industry content and expertise can be successfully integrated into shipbuilding projects with multinational organisations.

Despite the fact that Williamstown has these achievements, this capability was ignored by the Commonwealth for the National Shipbuilding Plan, with the loss of 1,000 jobs and equipment now mothballed, as foreshadowed by the Victorian Government in 2006³⁶.

Recommendation 7: The Committee note that the Commonwealth Government's current plans do not envisage any shipbuilding work for the Williamstown shipyard, at which 1,000 jobs have been lost since the completion of the Landing Helicopter Dock ships, with equipment now mothballed.

3.2 Fishermans Bend offers the potential to be of significant strategic importance for the future submarine and future shipbuilding programs

Fishermans Bend is Australia's largest urban renewal project covering approximately 485 hectares in the heart of Melbourne. Once complete it will consist of five key precincts – Montague, Lorimer, Sandridge, Wirraway and the Employment Precinct³⁷. The Victorian Government has acquired a significant and strategic landholding, the former General Motors Holden site, within the Employment Precinct.

The Victorian Government's vision is to create a world-class location for high value technology, defence, education, auto, design and research jobs that are an integral part of Australia's economy. New and improved connections will leverage Fishermans Bend's strategic location between Port Phillip Bay, the Yarra River and Melbourne's CBD.

This site is a key catalyst project for Fishermans Bend and showcases the transition of the Employment Precinct into one of Australia's leading places for leadership in innovation. Fishermans Bend will play an important role in the growth and prosperity of Melbourne, supporting 80,000 residents and 60,000 jobs by 2050³⁸.

It is envisaged that students and researchers will work alongside business and industry leaders in these fields - sharing skills, knowledge, research and connections.

Elements of the Defence Science and Technology Group's Maritime Division are located adjacent this site, and several defence businesses are already located in close proximity, including Boeing Aerostructures Australia, Boeing Research and Development Australia and Supacat Australia, Fishermans Bend has also been proposed to be the location of the headquarters of the Australian Maritime Innovation Centre.

The existing capabilities already located within this precinct, and the Victorian Government's investment, means Fishermans Bend has the potential to be of significant strategic importance for the future submarine and future shipbuilding programs.

Recommendation 8: The Committee note the strategic potential of the Fishermans Bend Employment Precinct and the Victorian Government's strategic investment in the former General Motors Holden site.

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