



Australian Government
Department of Defence

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Industry

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Submission

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Defence recognises that manufacturing is critical to a modern Australian economy. It is a key part of almost every supply chain that adds significant value to all sectors, including to the military capabilities the Australian Defence Force (ADF) needs, and will need, into the future. The Australian Government has announced \$270 billion in funding for new military capabilities to 2030, some of which will span manufacturing opportunities in Australia. This unprecedented level of investment represents opportunities for Australian firms – including those directly serving Defence’s manufacturing interests. It is estimated that the top 10 industries in Australian defence industry contributed just under \$10 billion gross value added to the Australian economy in 2018-19, immediately prior to the COVID-19 pandemic. This includes manufacturing firms.

Defence acknowledges that manufacturing for defence industry purposes is part of the broader industrial base and that the capabilities and technologies that underpin defence manufacturing are in demand across other sectors. Noting that, growth in Australia’s defence manufacturing capabilities will have spill-over benefits for the broader economy and will lead to increased capability for other sectors, particularly where firms manufacturing defence-specific goods also provide other non-military and dual-use goods.

While defence manufacturing is only a small portion of Australia’s manufacturing base, the provision of funding and work from defence in many cases helps build scale and scope that in turn ensures the competitiveness and sustainability of manufacturing in Australia.

The Government’s Modern Manufacturing Strategy recognises this overlap and, along with five other areas, identifies Defence as National Manufacturing Priority. We note this is an area of responsibility for the Department of Industry, Science, Energy and Resources but that Defence is actively engaged in that work.

Defence manufacturing represents a key priority for the Government, as well as significant opportunities for Australian businesses. This includes:

- manufacturing the components and capabilities required for Defence acquisition and sustainment projects;
- increasing our sovereignty and self-reliance; and
- integrating into global supply chains where businesses can export those components to our allies and partners.

There are industrial capabilities that must be sovereign

Domestic manufacturing businesses are already actively involved in supporting Defence. Nevertheless, the Government has recognised that it must clearly signal to businesses those industrial areas that will be most vital to supporting the ADF. In the 2018 *Defence Industrial Capability Plan*, the Government identified ten industrial capabilities that are:

- operationally critical to the Defence mission;
- priorities within the Integrated Investment Program over the next three to five years; or
- those in need of more dedicated monitoring, management, and support due to their industrial complexity, Government priority, or requirements across multiple capability programs.

On 26 August 2021, the Government identified an additional four. Collectively, the 14 *Sovereign Industrial Capability Priorities* are (in no particular order):

- Collins Class submarine maintenance and technology upgrade;
- continuous shipbuilding program (including rolling submarine acquisition);
- land combat vehicle and technology upgrade;
- enhanced active and passive phased array radar capability;
- combat clothing survivability and signature reduction technologies;
- advanced signal processing capability in electronic warfare, cyber and information security, and signature management technologies and operations;
- surveillance and intelligence data collection, analysis, dissemination and complex systems integration;
- test, evaluation, certification and systems assurance;
- munitions and small arms research, design, development and manufacture;
- aerospace platform deep maintenance;
- robotics, autonomous systems, and artificial intelligence;
- precision guided munitions, hypersonic weapons, and integrated air and missile defence systems;
- information warfare and cyber capabilities; and
- space.

It is clear that, in order to achieve sovereignty in these areas, Australian manufacturing will be critical in many of them. The defence and non-defence manufacturing sectors must continue to evolve and build its capabilities to seize opportunities, meet increased demand, and manage the complexity of Defence's acquisitions requirements. This unprecedented transformation of defence industry presents an important opportunity for businesses across the manufacturing sector, and adjacent supply chain, to build capacity in order to compete globally.

Defence industry is a significant economic contributor

Australia's defence industry is a significant economic contributor and has relatively high employment across each segment of the value chain. Defence industry is also a large employer of STEM professionals with an upwards growth trajectory in job numbers. To deliver the Government's \$270 billion investment in Defence capabilities over the next decade and beyond, the demand for Australian workers with technical, science, and technology skills within Australia's defence industry will increase.

Preliminary analysis of the sector indicates that Australia's defence industry is growing, with over 4,000 businesses collectively employing approximately 30,000 staff. An additional 11,000 Australian companies directly benefit from Defence investment, and when further downstream suppliers are included the benefits flow to approximately 70,000 workers in total.

In response to the COVID-19 pandemic, the Government announced a \$1 billion investment package to boost Australia's defence industry and support jobs across the country.

Supporting defence industry is part of the Government's economic recovery and employment plan and is especially important given current disruptions to global supply chains and emerging strategic priorities. This investment has been targeted in key areas, including increased funding for skilling, innovation and industry grants to stimulate defence industry in Australia and accelerating defence industry support through ADF capability projects targeting key sectors such as manufacturing.

Small and medium enterprises (SMEs) that have been boosted by increased defence spending generally have remained resilient despite being negatively impacted by COVID-19 and natural disasters.

Participation in global supply chains

The Government's investment in Defence can provide Australian manufacturing businesses with access to long-term strategic projects and some of the world's most advanced global supply chains. The defence industry provides Australian companies with opportunities to enter global supply chains either themselves or facilitated by large multinational companies. The Government has well-established Australian Industry Capability requirements, whereby prime contractors wishing to compete for Defence tenders over certain thresholds are required to identify Australian suppliers.

The *2020 Force Structure Plan* outlines the Government's commitment to a program of future investment and opportunity for defence industry. Over the next decade, the Government's vision is for an Australian defence industry with the capacity, posture and resilience to help meet the ADF's acquisition and sustainment needs.

Australian defence supply chains provide significant opportunities for local firm involvement, including SMEs. The opportunity to enter local defence supply chains is likely to grow in future as the level of investment and therefore local production expands.

However, the nature of these opportunities varies and it can be challenging for non-defence and small businesses to enter the defence manufacturing sector, access supply chains, and navigate the broader defence industry. The specific characteristics and sensitivities of Australia's defence industry place particular demands and specific requirements on manufacturers. The ADF has high quality and technology maturity expectations for delivery of Defence capability. The products for Defence often require adherence to specific standards which can be hard, especially for small businesses, to implement.

High security requirements for Defence projects can include physical security of people, information and assets. Cybersecurity particularly is a challenging issue for businesses in the defence industry supply chain, with an increased risk of cyberattacks due to the sensitivity of their projects. The Defence Industry Security Office manages programs that support businesses to meet their security obligations for defence projects, including cybersecurity.

Improving the involvement of SMEs in local defence supply chains is a key goal for the Government. SMEs are active participants in Australian defence supply chains. These SMEs make up a substantial proportion of the firms that participate in defence supply chains, particularly in key industries such as manufacturing. As these firms establish themselves, they are better equipped to succeed in securing Defence contracts.

Many of the SMEs participating in defence supply chains also participate in multiple supply chains across the economy, thereby diversifying their activities.

Complementing this, the Defence Export Strategy sets out policies and initiatives to provide end-to-end support for defence industry to export, from building export readiness to identifying export opportunities and ultimately realising export outcomes through to 2028. The Strategy is implemented through the Australian Defence Export Office. Breaking into export markets poses additional challenges for Australian businesses, and exports of sensitive technology may be subject to export controls. Defence, with Austrade, assist aspiring and active defence exporters to access overseas markets and navigate the relevant regulations.

Case Study: The National Naval Shipbuilding Enterprise

In the *2017 Naval Shipbuilding Plan*, the Government set out an ambitious vision for the creation of a National Naval Shipbuilding Enterprise, underpinned by a commitment to continuous naval shipbuilding. The *2020 Force Structure Plan* increased the scale of the Government's commitment, which now includes the construction or upgrade of up to 23 classes of vessel over the coming decades.

Realising this vision will require a motivated, innovative, cost-competitive and sustainable Australian industrial base, underpinned initially by experienced international ship designers and both international and Australian builders. The Government sees the naval shipbuilding industry as a critical element of Australia's advanced manufacturing and heavy engineering capability. But this cannot be achieved through Government action alone. It must be co-created by the Commonwealth, State and Territory Governments, industry and the workforce.

The Commonwealth Government's commitment to this whole-of-nation endeavour include an undertaking to carefully manage the demand profile, to avoid the boom-bust cycles of the past. The Government is also supporting the development of the industry through measures including the construction of new shipyard infrastructure; helping create a pipeline of skilled workers, including via the creation of the Naval Shipbuilding College; and maximising opportunities for Australian industry in the supply chain.

Case Study: Australian industry participation in the Joint Strike Fighter Program

The F-35 Joint Strike Fighter (JSF) Program is an international collaboration to develop, produce, and sustain the F-35 fleet for the United States and its international partners and customers. Australia is a partner nation and signatory to the production, sustainment, and development of the JSF Program, which enables Australian industry to compete on a 'best value' basis for opportunities.

The Australian JSF Program aims to deliver new air combat capability that will meet Australia's air combat needs out to 2030 and beyond while maximising Australian industry participation to provide long-term economic benefit.

Australian industry has key opportunities to participate in the global JSF Program, including bidding for contracts in the global production supply chain on a best value basis and bidding for F-35 sustainment opportunities globally and in the Asia-Pacific region.

As of December 2020, over 50 Australian businesses had contributed to the global F-35 supply chain and related domestic activities. This participation has supported Australian industry to grow; invest in new capabilities, technologies and products; hire and develop employees; and access broader markets.

Case Study: LAND 400 Phase 2 Local Supply Chains

Rheinmetall Defence Australia (an Australian subsidiary of German company Rheinmetall) is contracted to deliver and support 211 Boxer 8x8 Combat Reconnaissance Vehicles (CRV) for the Australian Army. The Boxer 8x8 CRVs will replace the Australian Light Armoured Vehicles and enhance the safety, security, and protection of Australian troops for the next 30 years.

Extensive collaboration between the Australian Defence Enterprise, Rheinmetall and defence industry has resulted in a contracted Australian Industry Capability (AIC) commitment of \$1.858 billion (\$1.685 billion for the acquisition period of 2019 to 2026 and \$173 million in the initial support contract). This includes knowledge transfer of manufacturing techniques and skills, particularly in vehicle assembly.

Rheinmetall has based its Australian and New Zealand headquarters, as well as its manufacturing hub, in Southeast Queensland at its newly established Military Vehicle Centre of Excellence, opened by the Prime Minister in October 2020, and is establishing a supply chain of companies from across Australia.

According to independent modelling, the LAND 400 Phase 2 capability is projected to result in a total economic benefit of \$10.2 billion over the life of the capability, equating to over 60 per cent of the value of the acquisition and support contracts. The independent modelling also estimated a peak of up to 1,450 jobs would be created across Australia in acquisition and sustainment activities and support local businesses across the supply chain.

Rheinmetall engaged Bisalloy Steel Group and BlueScope, who have since worked with Defence and Naval Group, to develop and qualify the submarine steel that could be used in the Future Submarine Program. This steel had not been produced in Australia previously.

This program demonstrates how the economic contribution of Defence expenditure can be increased by building deep Australian supply chains through a consultative process.