

DEFENCE INDUSTRY DEVELOPMENT STRATEGY



Defence acknowledges the Traditional Custodians of Country throughout Australia.

Defence recognises their continuing connection to traditional lands and waters and would like to pay respect to their Elders both past and present.

Defence would also like to pay respect to the Aboriginal and Torres Strait Islander peoples who have contributed to the defence of Australia in times of peace and war.

1. Jindalee Operational Radar Network (JORN) transmitter site.

4. Australian Defence Force Bushmasters being refitted for gifting to Ukraine.

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2. Naval shipbuilding at Austal shipyard, Henderson.3. Defence Industry Pathways Program work placement.

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Ministerial Foreword

The primary responsibility of the Government is to protect the wellbeing and security of its people.

The Defence Strategic Review highlighted the challenging strategic environment Australia faces. It outlined the vision for Defence to transition from a balanced and joint force, to an integrated and focused force as we respond to rapid military modernisation across our region and the loss of the traditional 10-year warning time.

Defence industry is essential to delivering this vision, supporting our national security through the development, delivery and sustainment of capabilities Defence relies on. Defence industry is our critical partner in providing the deterrence our strategic circumstances demand.

It is therefore essential the Government update its defence industry policies to develop the sovereign defence industrial base we need to support National Defence.

The Defence Industry Development Strategy directly supports the delivery of the Defence Strategic Review, and underpins the forthcoming National Defence Strategy. It articulates the need for a sovereign defence industrial base and takes a holistic approach to its definition.

It highlights the need to pursue closer industrial collaboration and integration with our trusted partners. This includes co-development, co-production and co-sustainment opportunities.

Australia's deteriorating strategic environment demands prioritisation within our sovereign defence industrial base. This Strategy identifies seven Sovereign Defence Industrial Priorities (SDIPs) that we need our defence industrial base to deliver to secure our sovereignty. Through detailed definitions, they set out our vision of industry's capabilities in specific periods, providing industry with the demand signals to inform their investment decisions and Defence with a mechanism to reshape the Integrated Investment Program.

Significant reform is needed in Defence to enable closer collaboration with industry and turn Defence into a smart and agile customer. This Strategy commits to procurement reform that will transform how Defence does business with industry, reducing time and cost to enable rapid delivery of capability to the warfighter. The sustainment of Defence capabilities is more important than ever and these reforms help keep their technological edge.

Defence will reshape its communication with industry to promote a genuine partnership and work together in tackling the most sensitive and complex challenges of our time.

Workforce is at the heart of delivering the sovereign defence industrial base we need for our national interests. The measures in the Defence Industry Development Strategy to grow and train the defence industrial workforce require tri-partite collaboration between Government, industry and unions.

Industry can expect the Government to be more proactive in promoting the integration of Australian defence industry into global supply chains. This grows the resilience of our sovereign defence industrial base and secures long-term growth through a diversified customer base.

Defence must work together with industry to support and uplift the security infrastructure within industry. The acceleration of cyber attacks, espionage and foreign interference reinforces the fact they can only be appropriately addressed through transparency and trust between Defence and industry.

The Defence Industry Development Strategy replaces the 2016 Defence Industry Policy Statement and 2018 Defence Industrial Capability Plan to meet the challenges of the global defence industrial environment. It is designed to support the Australian Government's strategic priorities outlined in the Defence Strategic Review and evolve in tandem with the National Defence Strategy.

The Australian Government's vision for the future of Australia's sovereign defence industrial base is one that is capable, resilient, competitive and innovative in developing and sustaining Defence capabilities in areas of strategic priority. It is a broad and daring vision, but one that we must commit to and deliver if we are to meet, respond and overcome the challenges outlined in the Defence Strategic Review. The Defence Industry Development Strategy sets out the pathway to achieving this, through real and meaningful actions in the short and medium term.

I look forward to working with Defence, with industry and across the Australian Government to implement the Defence Industry Development Strategy, and deliver a more capable, innovative, resilient and competitive sovereign defence industrial base that creates a stronger, more secure Australia.



The Hon Pat Conroy MPMinister for Defence Industry



Chapter 1 - Strategic rationale for a sovereign defence industrial base

The global defence industrial environment

Australia is facing the most complex set of strategic challenges since the end of the Second World War. An intense contest of values and narratives, combined with a large-scale conventional and non-conventional military build-up without strategic reassurance, means the risk of military escalation and miscalculation is rising. The effects of climate change amplify the challenges in Australia's region, while actions like economic coercion restrict countries' sovereign decision-making power.

In 2022, global military spending reached a record high of USD\$2,240 billion, growing 19 per cent from 2013. In the Asia and Oceania region in particular, expenditure during this time increased by 45 per cent, driven by increased military expenditure in East Asia, as seen in Figure 1.1

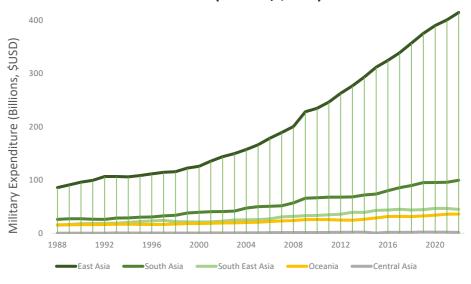


Figure 1 - Military expenditure by region in Asia and Oceania (Billions, \$USD)

Data sourced from the SIPRI Military expenditure database, https://www.sipri.org/databases/milex. All figures are at constant 2021 prices and exchange rates. Countries included in the Oceania region: Australia, Kiribati, Marshall Islands, Micronesia, Nauru, Fiji, New Zealand, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga and Tuvalu. Countries included in the South Asia region: Afghanistan, Bangladesh, India, Nepal, Pakistan and Sri Lanka. Countries included in the East Asia region include: China, Japan, North Korea, South Korea, Mongolia and Taiwan. Countries included in the South East Asia region: Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, South Vietnam (-1975), Thailand, Timor Leste and Vietnam. Countries included in the Central Asia region: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan.

Global events such as Russia's illegal invasion of Ukraine and the COVID-19 pandemic have put pressure on existing supply chains and demonstrated the challenges of rapidly scaling to meet urgent needs. These events have also highlighted the importance of resilient supply chains with trusted partners, and reinforced the criticality of domestic production capability and industrial capacity. As a result, more and more nations are looking to develop greater self-reliance.

Australia needs to grow its defence capability, and therefore sovereign defence industrial base in areas of strategic priority, particularly when considering Australia's diminishing geographic advantage. Once an asset due to its remoteness and separation from the rest of the world, Australia's geography is less relevant in the face of capability advancements and new threats.

Defining our sovereign industrial base

Previous attempts to define how 'Australian' a defence business or capability is have been unsuccessful. A tougher strategic environment necessitates a more holistic view that moves beyond the narrow lens of solely using Australian-owned businesses when seeking to define our sovereign defence industrial capability requirements.

Industrial capability

An industrial capability provides a product (which may be a platform, infrastructure, system, equipment, assembly, part or consumable) or service. It has the following characteristics:

- **Business acumen** the knowledge, systems and administration to run an effective business, including security and supply chain resilience.
- Intellectual property ownership of, or sufficient access to, detailed product knowledge and information, including the ability to innovate or develop improved and/or new products and services.
- Workforce the right mix of suitably qualified and experienced personnel.
- **Capital** the necessary assets, space, facilities, inputs and cash flow.

An industrial capability may be delivered by a single business, a network of businesses, or a partnership between a business and the Australian Government.

To deliver the outcomes the Australian Defence Force (ADF) needs, Australia's sovereign defence industrial base must encourage seamless collaboration with trusted partners, and effectively access and leverage international and domestic industrial capabilities.



An F-35A Lightning II aircraft outside of the BAE Systems maintenance hangar, Newcastle.

Defence industry

Defence industry is comprised of businesses with an industrial capability used to provide products or services used in, or which can be adapted to be used in, the Australian Department of Defence supply chain and/or an international defence force supply chain. This includes businesses that deliver services which contribute to national security outcomes in addition to warfighting outcomes.

Australia's sovereign defence industrial base

Australian defence industry is comprised of businesses with an Australian-based industrial capability and an Australian Business Number (ABN), providing products or services used in, or which can be adapted to be used in, the Australian Department of Defence supply chain and/or an international defence force supply chain.

This is Australia's sovereign defence industrial base. Only in limited circumstances is Australian ownership critical to sovereignty.

Why we need a sovereign defence industrial base

The National Defence Statement emphasised the need to develop higher levels of military preparedness and accelerated capability delivery. It stated that Australia must become more self-reliant to meet its national defence needs and contribute to regional stability, and speed up innovation and acquisition cycles to deliver credible deterrence over the short, medium, and long term. Growing and sustaining the industrial capabilities identified as priorities in Australia as part of our sovereign defence industrial base is essential to realising this goal.

To achieve this, Australia needs a new and more targeted approach to grow, support and engage with Australian defence industry. While Australia's defence industrial base will never be completely self-reliant, it must be:

- ▶ **Capable** of delivering the capacity, size, and scale to meet Defence's needs, as well as the agility to rapidly scale.
- **Resilient** to disruptions beyond our control by strengthening our network of supply chains.
- ▶ **Competitive** by providing the systems, technologies, materials, services and products Defence needs to support its mission.
- **Innovative** by maintaining a technological edge and developing the asymmetric technologies needed by Defence.

Our sovereign defence industrial base needs to deliver outcomes for the Australian Government and Defence during a time of need or crisis. This requires domestic knowledge and skills, investing in domestic research and development, employing a domestic skilled workforce and maintaining a domestic footprint for local manufacturing. Robust risk mitigation frameworks, including Australia's foreign investment framework, help to ensure the resistance of the sovereign defence industrial base to foreign involvement risks.

The benefits of a sovereign defence industrial base

There are clear national security and economic benefits associated with growing and maintaining the most important industrial capabilities domestically as part of our sovereign defence industrial base. It supports the development of resilient supply chains, provides greater strategic sovereignty, enhances export opportunities, and delivers broader economic employment benefits.

A strong sovereign defence industrial base is part of Australia's national power and contributes to regional stability. It underpins Defence's ability to develop and maintain defence capabilities within the required timeframes. It delivers a decisive, competitive, and asymmetric advantage, and builds on the world-leading industrial and defence capabilities already developed in Australia. The agility to rapidly scale to meet strategic objectives will enable Australia to withstand, endure, and recover from disruption.

Australia's sovereign defence industrial base also promotes economic deterrence through Australian-based businesses embedding themselves into supply chains of our trusted international partners. It develops local jobs, skills and industrial capabilities, as well as providing an avenue for international engagement through support to trusted partners.

A sovereign defence industrial base strengthens the partnership between Defence and industry, by continuing to build the trust, collaboration, and commitment to deliver defence capabilities in the timeframes required by Australia's strategic circumstances.

How the Australian Government will build Australia's sovereign defence industrial base

Industry and government must work in partnership to develop a sovereign defence industrial base that is able to meet the dynamic needs of our complex strategic environment.

The Australian Government will work closely with businesses to integrate sovereign defence industrial capabilities currently being delivered into Defence procurements, providing targeted support where necessary.

It will also proactively grow a sovereign defence industrial base that may not be commercially viable without Defence support or may include a cost premium on a case-by-case basis. This will include, where appropriate, investing in domestic manufacturing capabilities. Decisions will be made deliberately and be based on factors such as national security and value for money. Outside of priority areas, the Australian Industrial Capability Program will consider Australian businesses on a competitive basis.

Defence requires its industrial base to be underpinned by a strong Australian industrial base more broadly, particularly sectors such as infrastructure, health services, oil and gas, and emerging technologies. This includes businesses of all sizes. Examples include leveraging civilian services and infrastructure to secure fuel storage and distribution for the ADF, manufacturing deployable infrastructure via non-traditional suppliers, and the provision of health services in the Pacific.

The Australian Government supports strengthening industrial capabilities within the broader Australian industrial base through a range of initiatives, including National Reconstruction Fund priority sector co-investment plans. The Buy Australian Plan also aims to strengthen defence industry and capability as one of its key objectives, which will leverage the Australian Government's purchasing power to support businesses and strengthen our domestic industrial capability.

In building the sovereign defence industrial base, Defence will continue to implement initiatives to reduce emissions and accelerate its transition to clean energy. Defence will meet the legislative obligations set out in the Climate Change Act 2022, which commits Australia to reducing its greenhouse gas emissions to 43 per cent below 2005 levels by 2030 and to be net zero by 2050. We are already delivering a number of projects under the Defence Renewable Energy and Energy Security Program to support energy security and reduce energy costs, while having a positive impact on the environment and reducing emissions.

The importance of international industrial partnerships

Close industrial collaboration with trusted international partners will help build the strategic weight Australia needs to shape the future, making the nation less vulnerable to coercion and helping to deter conflict by increasing the cost of aggression against Australia and its interests.

Co-design, co-development, co-production and co-sustainment of capability will make effective use of combined resources, strengthening collective defence industrial capacity, enhancing interoperability, and accelerating technology development. The goal is to build capable, resilient, competitive, and secure supply chains that include Australian businesses, and create economies of scale for the security and stability of the Indo-Pacific.

AUKUS

AUKUS is an enhanced trilateral partnership between Australia, the United Kingdom and the United States. AUKUS recognises that the collective effect of pooling resources and leveraging comparative national advantages can deliver outcomes that could not be achieved by any one country.

In support of this capability development, AUKUS partners are creating an enabling environment for the seamless transfer of technology more broadly across our 3 systems and developing mechanisms to transition projects to capability. This includes building the frameworks that will enable broader co-design, co-development and co-production among AUKUS partners. It also includes the ability to harness potential spill-over benefits for other sectors of our economies.

This Strategy sets the framework and principles for Defence's industry policy, including an implementation plan (summarised in Annex A). It recognises that the application of Defence policy must continue to reflect the complex and evolving nature of our strategic circumstances. It is designed to enable Defence to respond effectively to the Australian Government's priorities, and provide clarity of process and approach to defence industry.

Defence will review the application of this Strategy biennially and update it, where required, in line with the National Defence Strategy. These updates will include the outcomes of evaluation and reporting conducted to understand the impact of this Strategy and its initiatives, providing the evidence base to guide revisions and continuous improvement activities. These evaluations will be conducted in accordance with best-practice evaluation approaches.



Military and civilian personnel attend a briefing on AUKUS Pillar I.



Chapter 2 - The structure of the Australian defence industrial base

The current structure of Australian defence industry

The composition of businesses in the Australian economy, and the goods and services they provide, are constantly changing in response to shifting markets and technology trends. Understanding the structure of Australia's industrial base will enable the Australian Government to design effective initiatives to develop the sovereign defence industrial base Australia needs.

Defence industry is different to many sectors in the Australian economy in that it is primarily driven by government procurement. Each year Defence awards thousands of contracts, which shape the size and composition of Australia's defence industrial base. In 2022-23, Defence awarded over \$38 billion in contracts. This accounted for almost 52 per cent of the value of all Commonwealth procurement contracts.² As part of these contracts, Defence awarded just over \$8 billion to small and medium enterprises (SMEs), the largest value of any Commonwealth agency.

A substantial workforce underpins Australia's defence industry. Estimates from 2021-22 indicate Australia's defence industry directly employed approximately 61,600 people in Australia, a growth of 17.1 per cent from the previous year.³ When factoring in the defence industry supply chain and supporting businesses, over 100,000 Australian jobs are supported.

Defence depends on Australia's broader industrial base. In 2022-23, Australia's industrial base consisted of 97.3 per cent of businesses employing fewer than 20 staff (small businesses), 2.5 per cent employing 20-199 staff (medium businesses), and 0.2 per cent employing over 200 staff (large businesses). This represents an 8.8 per cent increase in the number of medium businesses and an 8.0 per cent increase in the number of large businesses from the previous year.⁴

² https://www.finance.gov.au/government/procurement/statistics-australian-government-procurement-contracts-

³ https://www.abs.gov.au/statistics/economy/national-accounts/australian-defence-industry-account-experimental-estimates/latest-release. This figure only includes business units that directly received payments from Defence.

⁴ https://www.abs.gov.au/statistics/economy/business-indicators/counts-australian-businesses-including-entries-and-exits/latest-release

Characteristics of the Australian defence industrial base

Australia's defence industrial base is an ecosystem of businesses, each with different industrial capabilities that can be broadly categorised into 3 tiers. Tier 1 businesses are the prime system integrators that provide Defence with a platform, system or product. Tier 2 businesses deliver major equipment, systems, assemblies and services. Tier 3 businesses provide parts, consumables and services. The 3 tiers are depicted in Figure 2.

Figure 2 - Tiers of a defence industrial base

Tier 1 Prime system integrators enabling the integration of multiple systems and services realising an enduring platform, system or product



Businesses delivering major equipment, systems, assemblies and services realising specific functions

Strengthening the industrial base's resilience and capacity to innovate requires increasing businesses in this segment

Tier 3

Businesses providing the parts, consumables and services needed to enable the initial assembly, upgrade or ongoing operation of systems

Most Australian SMEs operate at Tier 3. SMEs are often more agile and innovative than larger businesses and can scale through their utilisation in Defence supply chains. However, they face barriers to growth such as cash flow, access to finance, and access to skilled staff. They are also disproportionately affected by supply chain shortages, increased shipping costs and high inflation. Specifically within the defence context, SMEs face barriers to entry such as increased security requirements, limited publicly available information about Defence requirements, and long lead times before contract signature.

Defence will grow the number of Australian businesses operating at Tier 2 through the range of actions outlined in this Strategy.

The structure we are looking to deliver

Australia's strategic circumstances require the targeted development of the sovereign defence industrial base in areas of strategic priority. Defence will support businesses to increase their scale and competitiveness to enable them to deliver Sovereign Defence Industrial Priorities (SDIPs) (detailed in Chapter 3).

More businesses operating at Tier 2 will increase the resilience, capability and capacity of Australian defence industry, especially its ability to innovate, develop, and deliver technology to maintain a capability edge. This will be done by simplifying procurement processes, supporting the development and retention of a skilled workforce, growing an internationally competitive industrial base through exports, increasing the security posture of our industrial base, and where appropriate, mandating the use of critical Australian businesses in Defence projects.

The following chapters describe the ways in which Defence will grow the sovereign defence industrial base in priority areas. This approach will also move Australian businesses up the value chain, in line with Defence strategic priorities, and lay the foundations to grow Australian primes in the future.

Improving measurement of industrial capability and capacity

To build the capable, resilient, competitive and innovative industrial base Defence needs, we must improve our approach to collecting data on defence industry. To achieve this, Defence will establish an internal industry intelligence capability (described further in Chapter 5), that will help to identify the strengths and vulnerabilities of our sovereign defence industrial base. Defence will work closely with other government agencies and the private sector to strengthen our approach to measurement, monitoring and assessment.

Defence is working on analysing and mapping our sovereign defence industrial base and its many supply chains. This includes our collaboration with trusted international partners, including assessments of capability, capacity and resilience to meet Defence's requirements. Defence will draw on a range of information sources to build this data, including the Industry Capability Network.

This will help the Australian Government understand where there are vulnerabilities or capacity constraints, as well as identifying critical businesses within our supply chain. Through this, the Australian Government will be able to guide investments in the industrial base and support the mandating of critical businesses in Defence projects.

Action 2.1. Defence will develop its industry intelligence capability to gain greater insights into Australia's industrial capability and capacity.







Chapter 3 - Prioritisation

The case for prioritisation

Industrial prioritisation is critical to the development of a capable, resilient, competitive and innovative industrial base. It enables Australia to build the industrial capability required to meet the challenges of our strategic circumstances and secure our sovereignty. The Defence Strategic Review (DSR) highlighted the need to prioritise Defence capabilities in line with the threats we face.

"Defence must consider Australian industry content when it makes sense and delivers capability outcomes on time." (DSR, Chapter 12)

The ability to deliver Defence capabilities in the timeframe determined by our strategic circumstances is paramount. As with any modern industrial base, Australian defence industry is constrained by 3 factors — absolute scale, the rate at which it can adapt or grow and the acknowledgment we will never be completely self-reliant. The Australian Government must consider these factors across 3 strategic outcomes, in sequence, when determining what it needs Australian defence industry to deliver.

- Outcome 1: To meet the immediate needs of Defence, including the delivery of new materiel into service and support to raise, train and sustain.
- Outcome 2: To meet the needs of tomorrow's ADF, including innovation, integration, and the evolution of Defence capability.
- Outcome 3: To contribute to the enduring prosperity of Australia, including economic value and value to our trusted partners.

Each outcome is risk-based and dictated by the threats and opportunities driven by our strategic circumstances. Successful industrial prioritisation means Defence can access the industrial capabilities it needs within available resources. These industrial capabilities must be able to scale rapidly in times of need, and enable the creation and integration of emerging innovative capabilities to maintain our capability edge and deliver asymmetric advantage.



The Sovereign Defence Industrial Priorities

Previous Defence initiatives to identify industrial priorities have been successful in growing our sovereign defence industrial base and developing world-leading industrial and defence capabilities. However, as the DSR has highlighted the urgency with which Australia must respond to its strategic circumstances, a new approach is required; one that develops industrial capability faster and with more specificity. This also means having a strong sovereign defence industrial base, with key industrial capabilities located in Australia.

Defence has analysed the need for the industrial capabilities to meet the capability priorities articulated in the DSR across the aforementioned 3 strategic outcomes to identify 7 **Sovereign Defence Industrial Priorities (SDIPs)**, shown in Figure 3. For Defence, successful industrial prioritisation means Defence can access the industrial capabilities it needs to deploy a defence capability if, when and how the Government directs.

The SDIPs represent the industrial capabilities Defence requires in Australia. Defence may need to intervene to ensure they are done in Australia rather than being sourced from an overseas supply chain. For other industrial capabilities, such as those supporting the delivery of infrastructure and theatre logistics, Defence will work with industry to ensure we have the required level of industrial capability in Australia.

Each SDIP has Capability Managers and Delivery Managers. The Vice Chief of the Defence Force is responsible for defining and communicating the capabilities Defence requires of Capability Managers. Capability Managers and Delivery Managers are responsible for the growth and health of the industrial capabilities required to deliver and sustain the directed Defence capabilities.

Figure 3 - Sovereign Defence Industrial Priorities

Epoch 1: 2023-2025

Epoch 2: 2026 - 2030

Maintenance, repair, overhaul and upgrade (MRO&U) of Australian Defence Force aircraft

Grow and guide Australia's MRO&U network through strategic alignment and horizontal integration of MRO&U capabilities with international partners and allies. Establish programs to grow Australia's technical workforce, discrete MRO&U depots around Australia, initially focusing on servicing Australia's needs and grow the capacity for selected upgrade and overhaul activities.

Establish a network of regional MRO&U depots that is assured and has sufficient capacity for Australia's needs and ready for use by allies with compatible aviation capabilities. Establish a sustainable technical workforce with capacity to serve Australia and our regional partners. Develop and deliver innovative solutions in target areas.

Continuous naval shipbuilding and sustainment

Achieve availability targets while maximising the speed of upgrade and bringing new platforms into service. Develop and build sovereign industrial capability in combat management systems, including engineering and integration and develop sovereign design capability. Strengthen maintenance activities, address supply chain challenges and grow industry's ability to develop/adapt technologies.

Develop innovation through industry's own research and development efforts, including solutions to the ADF's unique operational requirements increasing commonality across the fleet. Increase ability to integrate new capabilities into existing platforms and manufacture parts to strengthen our ability to self-sustain. Grow and maintain specialist industrial capability and capacity for nuclear-powered submarine rotational-force, sustainment and build.

Sustainment and enhancement of the combined-arms land system

Establish and/or reinforce an industrial base that will support the ongoing viability of domestic innovation, design, integration, manufacture and sustainment of land materiel and setting conditions for growth/expansion in Epoch 2.

Consolidate domestic capacity and enhance supply chain resilience to support land capabilities and defence (national) mobilisation activities. Take the opportunity from the maturity of autonomous functionality to enhance, augment or even replace systems.

Domestic manufacture of guided weapons, explosive ordnance and munitions

Manufacture selected guided weapons, commencing with assembly of imported sections/ components. Manufacture expanded types and/or increased quantities of non-guided munitions. Uplift industry for Guided Weapons and Explosive Ordnance (GWEO) technologies.

Manufacture selected weapon sub-sections and components to improve supply chain resilience (such as rocket motors and warheads). Uplift industrial capability and capacity to design and manufacture GWEO components, to position Australia to produce and sustain future weapon types.

Development and integration of autonomous systems

Prove autonomous systems are practical and dependable elements that can integrate into the ADF force structure and prioritise in the delivery of experimental air vehicle and sub-surface prototypes to explore operational concepts and inform future investment decisions.

Expand and refine the focus to establish the required level of industrial capability as Government makes investment decisions, in the context of the 2024 National Defence Strategy. Transition from innovative prototyping to delivery and sustainment of platforms and systems, while enhancing opportunities for adoption and contribution to effectiveness of the Integrated Force.

Integration and enhancement of battlespace awareness and management systems

Continuously improve battlespace awareness and management systems at different stages in their lifecycles. Key areas include improving integration of systems, sensors and communications to improve decision making speed, achieving operational resilience in degraded environments, and adapting to maintain relevance in a changing threat environment.

Integrate systems, sensors and communications, and utilise increased automation to improve decision making speed. Achieve improved resilience and asset management through use of digital twins, big data exploitation and remote condition monitoring.

Test and evaluation, certification and systems assurance

Equip industry with the capacity to assure, and if necessary, certify, enhanced Force-In Being systems and platforms are safe and effective in their own right, and able to integrate with other platforms and enabling systems to the degree required to deliver collective Minimum Viable Capability. Increase the skill and capacity for T&E across all Domains.

Be capable of integrating foreign sourced and locally produced defence materiel, including support systems, and conducting Force-Level testing of the complex systems-of-systems required to achieve the joint missions.

While the SDIPs described in Figure 3 signal the strategic direction of Defence's demand, they do not deliver the granularity needed by all levels of the supply chain, particularly from Tier 2 and Tier 3 businesses. To address this, Defence has developed **Detailed Sovereign Defence Industrial Priorities (Detailed SDIPs)** and information on how they are to be delivered to support Defence capabilities. Annex B contains Detailed SDIPs to accompany this Strategy.

The Detailed SDIPs will be refined, including through consultation with industry, to ensure continued alignment with the biennial National Defence Strategy. Defence will work with industry to identify shortfalls, critical paths and timing of areas for growth. The aim is to consistently and continuously guide and grow the sovereign defence industrial base, aligned to Defence's needs.

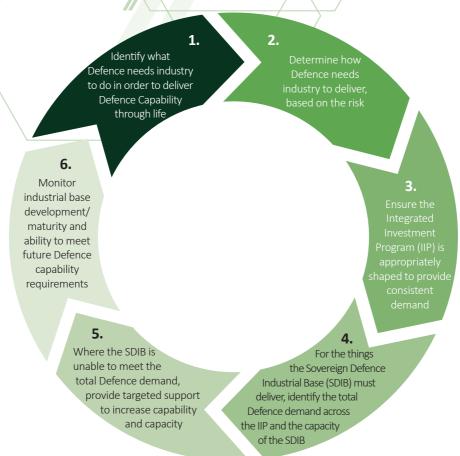
In addition to the SDIPs listed in Figure 3, Defence will use Australian industry where they offer value for money or offer export, co-development, co-production or co-sustainment opportunities. This will include opportunities as part of the Australian Industry Capability Program (described further in Chapter 5).

Reforming the Defence Capability System to support the Sovereign Defence Industrial Priorities

Realisation of any Defence capability is a complex process requiring the management of multiple risks. Delivering capability at speed means the Australian Government, Defence and industry will need to understand and accept greater levels of risk, as well as a closer partnership between the 3 parties to ensure the right information is shared at the right time.

Defence will reform the Defence Capability System to include consideration of how SDIPs will deliver and sustain Defence capabilities within, and across, all Defence programs. This includes early identification of Defence's needs as strategic circumstances evolve (reflected through the biennial updates to the National Defence Strategy), such as Defence resource constraints, industrial capacity and technology. This process will determine what must be sourced from Australian defence industry. The high-level process to identify and support the Detailed SDIPs is depicted in Figure 4.





To achieve this, Defence will engage with industry at the earliest stages of the Defence Capability System (pre-Gate Zero). This will establish a clear understanding of the current and potential capability and capacity of industry and their supply chains to meet Defence requirements.

For industry, this approach means early and ongoing exposure to Defence priorities. Industry must identify where their industrial capability aligns to the opportunities presented. This will include the preparations, investments and innovations needed to meet Defence requirements, deliver to Defence's schedule, and communicate the level of risk involved. Equally important considerations include industry's demonstrated performance to deliver on time, and industry's advice about alternative solutions available to meet Defence's needs.

Defence will use its industry intelligence function (discussed further in Chapter 5) to evaluate Australian industry for gaps and vulnerabilities, validating this assessment through engagement with the relevant businesses. By doing so, Defence will identify options to support the development of the industrial capability to meet its requirements through targeted assistance. This may include, but is not limited to, the mandated use of preferred suppliers in tenders, timing Defence purchases to manage demand, targeted grants, and priority support from the Office of Defence Industry Support (ODIS).

The result of this process is a set of Detailed SDIPs for each SDIP listed in Figure 3. These will highlight new opportunities, in advance of tendering processes, and be refined as projects/programs progress and the industrial base develops. Detailed SDIPs will be updated and communicated to industry in line with annual procurement planning and biennial National Defence Strategy cycles (as described in Chapter 6).

In the event an industrial capability is not able to meet the total Defence demand, Defence will manage its demand to support priority Defence capabilities. This may include rescheduling demand to smooth delivery, whilst working to increase capacity and resilience.

Action 3.1. Defence will update the Detailed Sovereign Defence Industrial Priorities in line with the Defence capability requirements articulated in the National Defence Strategy and its ongoing updates. This will build on the Sovereign Defence Industrial Priorities, which have been released in parallel with the Defence Industry Development Strategy.





Chapter 4 - Supporting our priorities

Managing and communicating demand

Defence recognises the significant challenge to industry posed by inconsistent demand and the resulting peaks and troughs in workload. This is particularly acute for businesses providing specialised defence products and services where adjacent markets do not exist or are not easily accessed.

Defence will communicate its ongoing demand for industrial capability via its Detailed SDIPs and through increased engagement with industry, including at the classified level. Defence will continue to communicate specific opportunities on a program and project basis, but will do so much earlier. In turn, ensuring consistent and sustainable demand for the SDIPs will be a major factor for Defence and the Australian Government when considering changes to the Integrated Investment Program (IIP). The IIP will be managed to ensure industry's ability to deliver SDIPs is maintained, supported by tailored procurement practices where required. Defence will intervene to support these priorities where necessary. This is discussed further in Chapter 5 and Chapter 6.

Action 4.1. Defence will manage the Integrated Investment Program to ensure consistent demand to maintain Sovereign Defence Industrial Priorities, while prioritising the urgent and timely delivery of capability together with value for money.

Assisting industry to grow and adapt to Defence priorities

There are already areas where Australian defence industry supports our SDIPs, such as maintenance, repair and overhaul of aircraft. In these cases, Defence will continue to utilise the existing industrial base and work in partnership with industry to maintain certainty for industry, strengthen the resilience of supply chains, and remove unnecessary overheads. This includes leveraging existing industrial capabilities to support other Defence capabilities, providing an opportunity for businesses to scale.

Where current industrial capability and capacity in Australia cannot deliver an SDIP, Defence, supported by prime contractors where necessary, will identify options to uplift existing providers, or support the entry of new suppliers through targeted support such as grants to help develop the workforce or purchase plant

and equipment. The aim is to increase the number of businesses in Tier 2 of the supply chain, increasing our national ability to bring new equipment and innovations into service and support their operation. Where appropriate, this will include other Australian Government initiatives such as the Buy Australian Plan, National Reconstruction Fund, or through contractual arrangements such as the identification of preferred suppliers.

Action 4.2. Defence will provide tailored levels of support to industry to realise the Sovereign Defence Industrial Priorities necessary to deliver defence capability in the timeframes Defence requires.

ODIS will continue its role as the primary Defence point of contact for industry, but will be reformed to support the delivery of the goals and priorities listed in this Strategy. ODIS will provide businesses with specific guidance on available assistance, based on the particular circumstances of each business. ODIS will focus on enhancing the capability and capacity of the sovereign defence industrial base to deliver SDIPs.

Action 4.3. The reformed Office of Defence Industry Support will:

- Identify potential providers of defence industrial capability, guided by Sovereign Defence Industrial Priorities.
- Assess business suitability and maturity to deliver to Defence.
- Inform industry of defence processes and compliance requirements.
- Connect businesses to industry partners and Defence where mutually beneficial.
- Assist businesses to upskill to deliver Sovereign Defence Industrial Priorities.

For Defence, the reformed ODIS will deliver options to close capability gaps in SDIPs, and enhanced industry intelligence to support decision-making. For businesses, ODIS will deliver better access to a broader range of market opportunities in Defence, access to specialist support and services, and accelerated upskilling to be more competitive and capable in priority areas.



Enabling private investment

Defence needs to continue to encourage private investment in Australian defence industrial capabilities to complement Australian Government investment. This includes publicly signalling SDIPs, and providing greater clarity to private investors about opportunities. Defence will work with private investment providers (such as banks, superannuation funds, other institutional investors, venture capital and private equity providers) to determine how these streams of capital can best align with and build on existing and future Defence investments.

Defence recognises the role private investment plays in the growth of businesses supporting Defence. In many cases, classification requirements limit the ability of a business to leverage its success in Defence, or potential opportunities to attract investment, partnerships or accurate valuations. In addition to engagement with businesses delivering SDIPs, Defence will engage with private investors to help them understand Defence's requirements and opportunities. This includes working with industry and investors to obtain appropriate clearances to access classified information forums and share business specific information, as needed, and within security arrangements.

Action 4.4. The Commonwealth will explore with venture capital fund managers and other investors a pilot project to assess appetite, fund size and opportunities for investors to invest equity (or debt) in eligible Australian businesses who have developed defence capability, which is identified as a priority.

The Defence Industry Development Grant

Defence will deliver targeted support to Australian defence industry to develop SDIPs by tailoring its grants to grow industrial capabilities in areas of strategic priority. This will give Australian defence industry a single access point for grant opportunities. Funding will be allocated in accordance with identified areas of priority and move between streams as demand and priorities evolve.

Action 4.5. Defence will tailor each stream to build Australian industry capability in Sovereign Defence Industrial Priorities. This new grant will open in the first half of 2024.

To simplify grant arrangements, existing grant programs are being streamlined into a single Australian Defence Industry Development Grant (replacing the Sovereign Industrial Capability Priority, Skilling Australia's Defence Industry, Defence Global Competitiveness and Capability Improvement grants). This grant includes 4 separate streams to support:

- Growth of industry capability and capacity in Sovereign Defence Industrial Priorities.
- Export opportunities for Australian defence industry.
- Upskilling and training of defence industry in priority trade, technical and professional skill sets.
- Establishing and maintaining security accreditation, in line with the Defence Industry Security Program.

The whole-of-nation approach

Through the DSR, the Australian Government has shifted to a focus on 'National Defence', moving toward a whole-of-nation approach to Defence and national security. Australian defence industry is a critical element of, and fundamental input to, National Defence: it supports, equips and sustains Defence capability, and enables the posture and preparedness needed to protect Australia and its interests.

A whole-of-government and whole-of-nation approach will coordinate and focus the development of SDIPs. This Strategy is a key element of the Australian Government's industrial policy and draws on broader policies in the areas of tax, energy, industrial relations, regulation and skills.

Key to this whole-of-nation approach is the recognition that Defence depends on industry from across Australia's broader industrial base. As Defence continues to leverage the industrial capabilities it needs from adjacent sectors, it must have a clear understanding of the capacity and resilience of these sectors to support Defence requirements.

Defence support to Australian industry will complement investments across the Australian Government. This includes collaborating on initiatives such as supply chain resilience, the Government's Buy Australian Plan commitment, the National Reconstruction Fund, and the Employment White Paper.

Whole-of-government support to defence industry

Defence is working to align key industry initiatives led by other government agencies, including:

- The National Reconstruction Fund, to facilitate increased flows of finance into 7 priority areas of the Australian economy, including defence capability.
- The Industry Growth Program, to support innovative small and medium enterprises and start-ups across the National Reconstruction Fund's 7 priority sectors, including defence capability.
- The Cooperative Research Centres Program, to support industry-led collaborations between industry, researchers and end-users.
- The Research and Development Tax Incentive, to help companies innovate and grow by offsetting some of the costs of eligible research and development, generating social and economic benefits for all Australians.
- The provision of an additional 4,000 Commonwealth-supported places at universities and other higher education providers over 4 years from 2023-24, to deliver graduates from science, technology, engineering and mathematics disciplines, including professional engineering, computer science, mathematics, chemistry and physics. The Australian Government is prioritising efforts to meet Australia's skills needs, including for the sovereign workforce needed to deliver on our AUKUS commitments.

The support delivered by state and territory governments, including the implementation of their education and training policies, is key to developing the industrial base Defence requires. Together with government agencies around Australia, Defence is implementing collaborative initiatives designed to support the sovereign defence industrial base.

Supporting Indigenous procurement

A key element of the whole-of-nation approach is supporting Indigenous procurement. Defence support to Indigenous business will continue to be a key component of Defence's procurement policy.

Defence continues to exceed Australian Government targets under the Commonwealth's Indigenous Procurement Policy (IPP). Since the introduction of the IPP in 2015, over \$9 billion of Commonwealth Government contracts have been awarded to Indigenous businesses. Of this, Defence has awarded over \$4.5 billion in contract value to Indigenous-owned businesses. Defence exceeded its target for financial year 2022-23 of 737 by awarding over 4,721 contracts to Indigenous businesses at a value of \$629 million (against a target of \$207 million).

Defence will continue to engage with Indigenous businesses to build awareness and understanding of the importance of Indigenous entrepreneurship and business development, and to identify opportunities for increasing Defence's Indigenous procurement commitments in the future.



A forum to discuss and explore Indigenous employment opportunities.



Chapter 5 - Procurement reform

The rationale for procurement reform

"Australia must have a fully integrated and more capable ADF operating across five domains which work seamlessly together on joint operations to deliver enhanced and joined-up combat power." (DSR, Page 7)

"Timely and strategically relevant capability acquisition is critical in the coming period. Defence's current approach to capability acquisition is not suitable given our strategic circumstances, and there is a clear need for a more efficient acquisition process. The increasing volume and complexity of capability projects is overwhelming Defence's capability system, its limited workforce and its resource base." (DSR, Chapter 12)

"To enable Australian defence industry to deliver capability, acquisition processes must minimise the burden of working with Defence, particularly for small and medium enterprises. This will have the advantage of faster capability delivery while building depth in Australian defence industry where required." (DSR, Chapter 12)

Defence procurement must change to meet the strategic circumstances outlined in the DSR and to ensure Australia reaps the full benefits of the opportunities presented by the construction of Australia's nuclear powered submarines (SSN-AUKUS). We will simplify Defence's approach to contracting, increase its risk appetite, and shorten the time it takes to receive project and contract approvals, to deliver capability at speed while maintaining appropriate levels of governance.

Consultation and engagement with defence industry will be essential to procurement reform. Defence recognises the vital role industry plays as a partner in supporting the ADF and the imperative to work closely with industry to ensure the DSR objective of speed to capability delivery is achieved.

Defence will overhaul its approach to contracting with industry, by removing redundant or unnecessarily burdensome requirements during engagement, solicitation and selection processes, such as repeated requests for documents. Defence will be more effective and efficient in its engagement and contract management with suppliers, to deliver timely, sustained and assured capability to the

ADF. This approach is aligned to the Buy Australian Plan, which is making procurement clearer and simpler to help industry, including SMEs, Indigenous businesses, and regional and remote businesses, to compete for and win more Australian Government contracts.

Defence will adopt a more tailored approach to procurement according to the urgency and risk profile of the project. Investment decisions will be smarter, targeted and risk-based. Lower risk projects will adopt simpler procurement processes, while more complex projects will require sufficient arrangements to adequately mitigate the risks to capability delivery.

Through these reforms, Defence will support the development of a resilient and enduring sovereign defence industrial base with the business capability and capacity to meet Australian defence and ADF needs.

Reform of procurement policy and contracting frameworks

The reform process will leverage lessons learned from previous attempts to reform Defence procurement, and be managed against key metrics and performance indicators.

Defence is the largest Commonwealth procurement agency, engaging industry both in Australia and overseas for the acquisition and sustainment of capabilities. In reforming its procurement policies and frameworks, Defence will look to leverage opportunities to embed whole-of-government initiatives, including the Buy Australian Plan, to increase the contracting opportunities for Australian businesses and improve the capability and capacity of Australian industry more broadly.

Defence procurements must comply with the Commonwealth Procurement Rules (CPRs) and the reform activities will remain consistent with these rules.

Industry feedback has highlighted that a key area for improvement is Defence's application of the Australian Standard for Defence Contracting (ASDEFCON) framework. Defence is undertaking a number of reforms to the framework to make it easier for industry to do business with Defence. These reforms will reduce the paperwork required by Defence at early stages of the solicitation processes and enable Defence and industry to enter into contracts sooner, leading to cost and time efficiencies.

Reform of the contracting framework and its implementation will focus on 3 key areas:

- Revision and simplification of the ASDEFCON suite of contracts.
- Development of additional, more flexible contracting mechanisms.
- Additional guidance, training and assistance to Defence procurement staff, to ensure the contracting frameworks are implemented in accordance with the principles of tailoring, agility, flexibility and risk appetite.

Action 5.1. Defence will transform the ASDEFCON suite to make it easier, faster and more cost effective for industry to work with Defence. Defence will progressively deliver this transformation, which will result in:

- Simplified and reduced information required during the tender process to ask only what is necessary for source selection, with any additional information requirements deferred to later stages (by end 2024).
- Modified ASDEFCON Complex and Strategic Materiel templates into a standardised suite of common core requirements (by end 2024).
- Updated, contemporary templates that provide better guidance on how they should be used based on delivery risk (by end 2024).
- Improved effectiveness of ASDEFCON tailoring training, including digitisation and modular applications of the templates suite (by end 2025).

The development of additional, more flexible contracting models to support agile and developmental projects will be particularly important to support the disruptive and innovative capabilities delivered under AUKUS Pillar II and the Advanced Strategic Capabilities Accelerator (ASCA). The new contracting models will be suitable for innovation initiatives or projects where requirements are not fully known or are unable to be defined sufficiently, and where technology is changing rapidly.

New contracting models will deliver an initial level of capability to the ADF more quickly than current contracting requirements allow. They will enable continuous development of in-service capability to meet the evolving needs of the ADF and respond to the changing strategic environment. This will also support Defence and industry's capacity to exploit export opportunities based on our strategic priorities. The new models will be built around relational contract frameworks that support collaboration between Defence and industry and reflect best-for-enterprise behaviours, underpinned by:

- ▶ Contemporary engineering models, techniques and tools, such as digital engineering and mission engineering and best practice.
- Contracting templates focused on intended commercial outcomes that include disciplined governance, strategic planning and mission-focused continuous improvement.

Flexible contracting models will support the continuous development and delivery of complex capability, such as enhanced Integrated Air and Missile Defence, which has been identified as an operationally urgent capability in the DSR.

Action 5.2. Defence will have the first of the flexible contracts to support continuous capability delivery ready in 2024, to support the execution of the Integrated Air and Missile Defence program.

Strategic partnerships and procurement pathways

Procurement methods

Australian Government procurement must be undertaken in accordance with the Commonwealth Procurement Rules using one of two major methods:

- Open tender, consisting of a published open approach to market and open competition from potential suppliers.
 This includes the first stage of a multi-stage procurement, with subsequent stages involving limited tender.
- **Limited tender**, consisting of an approach to one or more potential suppliers in line with the Commonwealth Procurement Rules.

 A limited tender approach may include:
 - Direct sourcing from a partner program (for example Foreign Military Sales or Cooperative Programs).
 - Direct sourcing from a current onshore supplier in the capability niche or under a Sovereign Defence Industrial Priority where there is a known and tested single or limited number of known suppliers.
 - Co-development procurement (for example Joint Strike Fighter).

Value for money will remain the cornerstone consideration in Defence procurements. Included in this consideration is the economic benefit to the Australian economy, as required by the Commonwealth Procurement Rules. Where a decision is made not to conduct a full open solicitation process, Defence will be transparent with industry about its intentions and decisions, and provide advice as early as possible to inform industry planning and investment decisions.

Building strategic partnerships

Defence is establishing a number of enduring strategic partnerships with industry. Strategic partnerships provide long-term opportunities, spanning up to decades, to work with Defence on progressive capability development and innovation. Under these partnerships Defence may combine related acquisition and sustainment activities to offer greater certainty for industry, create economies of scale and reduce procurement overheads.

Creating enduring strategic partnerships

Enduring strategic partnerships must be based on trust and mutual respect, including openness and transparency, supported by relational contracting frameworks that promote enterprise behaviours and sharing of risk and reward. They will involve:

- Strategic alignment and strong governance.
- Measurable performance and efficiency objectives that are refined through the life of the relationship to best meet Defence needs and deliver ongoing value for money.
- Returns for industry that reflect risk and reward and disincentives for poor behaviours and performance.

A significant benefit of this approach is the opportunity for growth of medium-sized Australian businesses, including those operating at the Tier 2 level through longer-term assurance of investment. Additional benefits include:

- Greater certainty for industry and assurance for long-term investment, including the small to medium ecosystem that supports each prime.
- Incentivised enterprise behaviours and performance, including 'skin in the game' for all parties.
- A reduction in procurement overheads for both Defence and industry.

Such long-term strategic partnerships are intended to:

- ▶ Enhance Defence capability outcomes and preparedness.
- Support in-country integration, adaptation and evolution of Defence capability, including pulling through Australian innovation into Defence capability.
- Ensure sovereign, resilient, profitable and secure supply chains.

These long-term partnerships will be underpinned by contractual obligations on strategic partners to help build a stronger and enduring industrial base comprised of small and medium businesses that enhances sovereign, resilient supply chains, including commitments to:

- Nurture SMEs to grow an enduring and resilient industrial base, including supporting access to capital market funding sources.
- ▶ Manage and oversee the security, cyber-worthiness and resilience of SMEs.
- Invest in Australian innovation, pulling it through to Defence capability and leveraging this into export opportunities.
- ▶ Demonstrate Environmental, Social and Governance (ESG) and corporate responsibility.
- ▶ Play an active role in helping to build business acumen in small and medium businesses that are part of the industrial base.



Thales personnel moving a BLU-110 into the storage facility at Defence Establishment Orchard Hills.

Helping to grow more Tier 2 businesses

Building a viable, enduring and diversified industrial base of Tier 2 businesses will enhance economic benefits and increase the availability and resilience of support for:

- The operations, sustainment and preparedness of ADF capabilities.
- Australian capacity for innovation and integration, adaptation and evolution of capability.
- Sovereign and secure supply chains.
- Access to capital market funding sources.

Defence has employed a rolling wave performance-based contracting approach for the sustainment of advanced platforms for many years, which will be further refined and applied across domains going forward. Most notably, Naval Shipbuilding and Sustainment Group (NSSG) will employ a strategic partnership approach to establish continuous national shipbuilding in Australia.

This approach will be evolved further for large programs, such as Integrated Air and Missile Defence and for priorities including:

- Aerospace Maintenance, Repair, Overhaul and Upgrade and structural integrity for current and future air platforms.
- ▶ Enhanced Active Phased Array, noting CEA Technologies is transitioning to a Government Business Enterprise.
- Maritime Combat System Alliance.

The following strategic partnerships will continue to evolve in the immediate future:

- Austal, as the sovereign strategic shipbuilding partner as part of the consolidation of the industrial base in Henderson.
- ▶ Lockheed Martin Australia and Raytheon Australia, as the initial Strategic Partners of the Guided Weapons and Explosive Ordnance (GWEO) Enterprise. Additional partners may be added over time to support increased maintenance, repair, overhaul and upgrade and in-country design and manufacture of missiles and explosive ordnance.

In 2024, Defence will seek to establish strategic partnerships to support:

- Land and Joint maintenance, repair, overhaul and upgrade.
- ▶ Test and evaluation, certification and systems assurance.

Action 5.3. Defence will continue to refine and develop its strategic partnership contracting framework and will look to expand these contracting frameworks to land and Joint maintenance, repair, overhaul and upgrade and test and evaluation in 2024.

Sole source and limited tenders

Speed of capability delivery must be at the forefront of Defence's decision-making, including when determining the most appropriate procurement pathway. In circumstances such as highly limited market availability or when urgent delivery is required, Defence will either sole-source or select a small number of potential suppliers with a genuine capability and capacity to compete to tender. This will particularly be the case for procurement of off-the-shelf assets, materiel or advanced capabilities through Foreign Military Sales or other cooperative programs, or in support of SDIPs. Where this approach results in design and manufacture overseas, Defence will prioritise, including through investment in SDIPs, conducting sustainment activities utilising Australian industry.

Mandating critical Australian businesses

Where appropriate, Defence will mandate the utilisation of existing businesses supporting SDIPs as part of a larger tender. This could take the form of mandating the use of a single company, or a number of identified companies that demonstrate capability and capacity to satisfy SDIPs. This has been undertaken before, specifically with the use of CEA radars, but will be expanded as part of the implementation of this Strategy.

This mandating will only be undertaken where it is necessary to support and grow our SDIPs.

Tailored approach to procurement

Defence will tailor its procurement approach according to:

- The availability of the desired or minimum viable capability solutions and the potential sources.
- The urgency of the capability need, and whether there is a clear justification for Defence to prioritise speed of delivery over competition.
- Whether there is a clear strategic justification for Defence to intervene
 in the market, either to establish or sustain a strategically important
 industry capability.
- The risks associated with the delivery of the capability.

Minimum Viable Capability

A minimum viable capability is a capability that achieves a threshold capability effect, inclusive of all fundamental inputs of capability, in the required time.

Attributes of a minimum viable capability include:

- Can deliver what Defence needs to achieve a military effect, quickly, demonstrating Value For Money and with manageable technical risk.
- Be further developed through the sustainment or subsequent investment phases, or divested.
- A minimal viable capability is underpinned by a minimal viable product.

Minimum Viable Product

A minimum viable product is the materiel and sustainment components, or group of items and systems, that successfully support the lowest acceptable level of mission performance, in the required time.

The requirements for a minimum viable capability will be set based on the strategic need, existing systems and platforms, timing for delivery, approval pathway, procurement method, and industry capability and capacity.

The minimal viable capability will be time-dependent but capable of evolving as a program of effort. This approach requires Government, Defence and industry to understand and accept greater levels of risk. It also requires a closer partnership to ensure Government and Defence have the right information to pursue capabilities at the speed required.

International collaboration in procurement

Defence will identify opportunities for Australian defence industry to participate in joint capability development with trusted partners through mechanisms such as AUKUS Pillar II. This includes establishing frameworks to enable co-development, co-production and co-sustainment of capabilities.

The Australian Government must strike the appropriate balance between the risks of proliferation of technology to adversaries, with the benefits of technology innovation, development and potential export. This requires breaking down barriers to technology transfer and information sharing with our trusted partners.

Australia has developed innovative and world-class capabilities that it could seek to share with our trusted partners, in line with our export control regime and international obligations. Defence is seeking to increase the capacity, capability and scale of Australian defence industry through driving exports of innovative Australian capabilities. This would be best advanced and underpinned by government-to-government agreements. Defence has developed government-to-government and commercial frameworks to facilitate future export opportunities.

Defence will work with industry to increase the ability of foreign governments to procure from Australian businesses. These arrangements will streamline procurement processes and deliver additional protection for Australian sovereign technologies.

Action 5.4. Defence will develop a framework for the use of government-to-government agreements in support of Australian defence industry exports.



Radar system at CEA Technologies.

Making Defence a better customer

To deliver capability effectively and at speed and facilitate ongoing development and evaluation to meet evolving operational needs, Defence needs to be thinking, operating and engaging with industry as a smarter buyer.

Professionalisation

Defence will leverage best practice from across the Australian Government and the private sector to inform its professionalisation program as it upskills its workforce, builds business acumen across the organisation, and grows the procurement and contract management professions within the Defence workforce. Defence will gain the insights needed to be a better customer, through activities such as industry forums, engagement with peak industry bodies and secondments from industry.

Industry secondment framework

Defence will develop an industry secondment framework that will embed industry into Defence's enabling functions such as project management, commercial policy and engineering. These secondments will help guide policy development, provide greater insight into industry challenges, and inform the development of professionalisation programs in key skills areas for Defence.

Commercial best practice

Defence is developing updated and improved guidance and staff training in relation to commercial best practice, specifically for industry solicitation and contract management. Defence is investing in training and talent development programs, fostering better collaboration within Defence and with industry and academia.

Industrial intelligence capability

Defence is building its industry and market intelligence, which will offer greater insights into the capability and capacity of defence industry. This is critical for the early stages of developing capability initiatives and informing industry engagement, solicitation and tender evaluation strategies. Access to analytical tools, market research and industry engagement is key to delivering capability at speed. The Industry Capability Network platform is a key example of an industry data source that is capable of supporting this approach. This capability will assist in building a resilient industrial base, by providing the information needed to assess the capacity, size, and scale to meet Australian defence needs.

Digital engagement initiatives

Defence is improving its digital engagement with industry, realising time and cost efficiencies. This includes implementing an Australian digital engineering strategy and digitising the ASDEFCON suite. Defence is also seeking further opportunities with industry to enable collaboration digitally across industry and with Defence.

Action 5.5. Defence will implement a number of initiatives by end 2024 to increase market and business intelligence, and professionalise its workforce to make Defence a smarter buyer. These will include:

- A professionalisation framework targeting project and program management, engineering and logistics functions and commercial acumen.
- An Industry Intelligence Capability, as the Defence centre
 of knowledge of industry capability and capacity, markets
 and supply chains, equipped with enhanced analytical skills
 and tools.
- Enhanced digital engagement opportunities with and between industry, including implementation of an Australian digital engineering strategy, through collaborative engagement with industry.
- A reciprocal industry secondment framework to enhance the professionalisation programs for key skill sets.

The Australian Industry Capability Program

The Australian Industry Capability (AIC) Program will continue to be an important mechanism to ensure consideration and inclusion of Australian industry capability, especially in the SDIPs.

Defence has driven much of its industry development in the past via the AIC Program, consistent with Australia's international trade obligations. The program enjoys strong industry support and any changes to the program will be done in consultation with industry, at all levels of the supply chain, to ensure it continues to deliver on Defence's strategic objectives. Defence contracts will continue to require AIC plans to ensure the consideration and optimisation of Australian industry in delivering defence capability.

Engaging with industry early in the capability lifecycle will be essential to developing the sovereign defence industrial base. This will empower future tenderers to generate opportunities for Australian industry in the early stages of a development program, opening prospects for long-term export opportunities for Australian industry with our trusted partners.

Decisions on the use of Australian industry, working in the defence sector, will be informed by factors such as:

- Capability and capacity to respond to the strategic imperative in the timeframes required by Defence.
- ▶ SDIPs required by Defence.
- ▶ Security and cyber-worthiness.
- ▶ Value for money, with assessments on value to include benefit to the Australian economy.

Defence seeks a sovereign defence industrial base that is able to innovate and be integrated into supply chains and to export Australian defence systems, products and services to Australia's trusted partners. The AIC Program will incentivise primes to leverage Australian innovation into their development programs to enhance Australian defence industry's global competitiveness.

Defence will align the AIC and Global Supply Chain (GSC) Programs more closely. Defence will continue to require the development and execution of AIC and export strategies (linking these to the GSC Program if they are a participant) to optimise the involvement of Australian industry, and to tailor these on a project-by-project basis.

Defence will continue to refine the AIC and GSC Programs, especially in areas that align to the SDIPs, to ensure targets are met. Defence will work with primes to establish an enduring and resilient Australian industrial base that is contemporary and competitive, has the ability to scale, is secure and cyber-worthy, and has the business acumen to be profitable. This complements the Buy Australian Plan's objective to leverage the Australian Government's purchasing power to support businesses to strengthen our domestic industrial capability.

Action 5.6. By end 2024, Defence will update the Defence Policy for Industry Participation and refine the AIC and GSC Programs to ensure greater linkages between innovation, capability and export, so that:

 Innovation programs developed through ASCA can not only be brought into Defence capability programs, but are also able to be developed to exploit the potential for export.

- AIC plans for projects include export opportunities and strategies for long-term engagement of Australian industry in relevant programs of trusted partners.
- Tailored support is provided to primes to meet these objectives in their supply chains.

Case study: Nulka

When three American warships and a merchant vessel were attacked by cruise missiles off the coast of Yemen in 2016, their crews fired off a series of defensive systems which diverted some of the missiles and brought the others down. One of those systems, and key elements of another, were developed in Australia by scientists and engineers who are producing some of the world's most advanced targeting devices.

The Nulka decoy system is Australia's most successful defence export with more than \$1 billion worth of sales. It has been in operation with the Royal Australian Navy and the US Navy for over 20 years. It was developed by Australian scientists from the Defence Science and Technology Group with the high-tech company BAE Systems Australia. The Nulka forms one layer of the complex defence systems fitted to more than 150 Australian, US and Canadian warships.





Chapter 6 - Communication

Providing industry with clarity on Defence's priorities

Defence industry needs reliable and regular communication to be productive, connected and prepared. Defence must provide industry with timely insights so industry can support Defence to achieve the outcomes it needs in the required timeframes.

Defence is committed to building a strong partnership with industry to develop higher levels of military preparedness and accelerated capability delivery. To achieve this, Defence will take a coordinated and consolidated approach to industry engagement. Defence will signal its needs in sufficient time, and with enough detail, to enable industry to proactively prepare and invest to deliver Defence capabilities.

These signals are important for businesses directly contracted by Defence, businesses integrated into Defence supply chains, and private investors seeking opportunities in defence industry. This proactive investment and preparation will increase the agility of industry to meet Defence needs and minimise the lag between Defence's decision to acquire and industry's ability to deliver.

Establishing a consistent and proactive engagement approach

Defence will provide sustainable and scalable information-sharing with defence industry, to deliver enhanced awareness, and facilitate faster and better-informed decisions. This will include bi-annual Domain Industry Forums and classified briefings for businesses with appropriate security clearances.

To achieve this, Defence will implement a new approach to engaging with industry. This will incorporate a risk-based approach to effectively balance the tension between the availability of information, expected levels of classification and security requirements.

Defence will provide industry with information about its priorities. The level of information shared with industry will increase, in line with security requirements and as Defence refines capability requirements, progresses projects, and further develops its partnership with industry.

Figure 5 - Communicating with defence industry

Content Target outcome Method Industry is able to Publications and Defence industry identify potential announcements. information that defence opportunities Documentation released can be shared and across the IIP and alongside the Defence discussed publicly further forums they without restriction. **Industry Development** need to attend. Strategy and other documents/announcements as required. Updates in line with the National Defence Strategy. Industry is able to State / Territory Defence Unclassified. identify potential Industry Forums. including detailed opportunities, the uplift Conducted across the industrial priorities requirements to work country. Open registration and sharing with Defence and further for businesses and industry information on forums they need to organisations, for example successful working attend. Defence builds through ODIS. arrangements with visibility of the industrial Defence. base. Industry gains further Domain Industry Forums. Updates on key context of the industrial Conducted bi-annually capability programs capability required alongside, but separate and application of through understanding of to, major events such as detailed industrial the applicable projects, the Defence + Industry priority needs and is able to engage with Conference. Open registration for forthcoming Capability Managers (end for businesses, investors and projects. industry organisations. This users). Defence builds visibility of the industrial will replace the Environmental base and potential Working Groups held solutions. currently. Classified Working Groups. Specific detailed Industry understands the quantities involved Conducted by Capability industrial priorities and the context, and the Managers and Delivery or challenges. This availability of specific Groups to explore capability will include more support. Defence is able solutions with industry. Invited detailed information to validate its industrial attendance for identified and quantification of intelligence and refine businesses (and their potential applicable industrial its understanding of investors) with aligned industrial capabilities.

capability and appropriate security clearances.

risk / need to support.

Defence will reinvigorate its publications and announcements including publicly available SDIPs and broader opportunities, updated in line with the biennial National Defence Strategy and shared through the Domain Industry Forums. This will be supported through information forums such as ODIS events and Classified Working Groups.

As Defence's capability requirements mature, Defence will engage with industry in a more granular and interactive manner. State and territory industry forums will deliver early information on projects to enable industry to identify opportunities matched to their capabilities. In turn, the forums will develop Defence's understanding of industry's capabilities and capacity, as well as opportunities to embrace innovation. Information provided through these forums will reflect the needs, challenges and opportunities of each Defence program. This approach builds on Defence initiatives such as Environmental Working Groups, the Australian Defence Science and Universities Network, and regional and State forums delivered by ODIS.

More specific and detailed information will be provided through the Domain Industry Forums, enabling industry to engage with Capability and Delivery Manager representatives. This will help industry better understand project-specific Defence needs, and Defence to better understand what industrial capabilities are available. This engagement will commence as part of pre-Gate Zero activities. As a project progresses and requirements mature, Defence will hold Classified Working Groups for appropriately security-cleared businesses and their representatives to discuss Defence requirements in greater detail (in line with arrangements detailed in Chapter 10). These briefings will also provide an opportunity for Defence to articulate project timeframes over the short, medium and long term. These classified briefings will give trusted industry partners access to Defence's investment planning and decision making for critical Defence capabilities.

Action 6.1. Defence will hold more secure briefings with trusted industry partners within classified environments to provide demand signals on defence capability. Defence will examine how classified consultation with industry is conducted in trusted partners and work with the Australian Government, in the context of the National Defence Strategy (NDS), to determine the delivery of these secure briefings.

This will enable Defence to make informed decisions on project design and delivery, and provide industry with the level of detail required to guide their investment decisions from the beginning of the capability development process.

Action 6.2. Defence will communicate capability priorities via an updated framework of Defence-led industry engagements, forums and activities, commencing before tendering processes. This includes targeted engagement with the private finance sector to identify opportunities to increase their participation.



Chief of Army Symposium 2023.

Establishing a tri-partite defence industry council

The Australian Government is establishing a tri-partite defence industry council that will be chaired by the Minister for Defence Industry. The council will provide an avenue for communication between representatives from the Australian Government, industry and unions. The council will focus on ensuring a collaborative, whole-of-nation approach to developing the sovereign defence industrial base required to meet Defence needs.

Action 6.3. Defence will establish a tri-partite defence industry council in collaboration with the Australian Government, defence industry and unions.

Achieving transparency and value for money

The Australian Government is committed to improving openness and accountability, and ensuring it has effective mechanisms to examine and debate matters of national importance.

In order to balance transparency with timely decision-making, the Australian Government is establishing a new Joint Statutory Committee on Defence. The Joint Statutory Committee on Defence will play a critical role in providing information on the delivery of defence capability and development of the industrial base required for our national security. The Committee will support greater transparency on Australian Government investments and is focused on ensuring value for money from the Defence budget.



Defence ICT Industry Forum.



Chapter 7 - Innovating for Defence outcomes

The importance of industry innovation

Innovation is critical for Australia to maintain our technological superiority, adapt to evolving threats, improve operational efficiency, and enhance force protection. By embracing Australian industry innovation and research and development, Defence can effectively develop disruptive technologies and create asymmetric advantage to ensure the security and wellbeing of Australia and our interests.

"The strategic demand for Defence's capability innovation systems has never been higher. Defence must have a national science and technology system that enables the development of disruptive military capabilities, including harnessing advanced and emerging technologies to provide asymmetric advantage for the Australian Defence Force." (DSR, Chapter 9)

Australian industry has a demonstrated capacity to create and develop innovation, and the number of innovation-active businesses in Australia has steadily increased over the last 10 years. The Australian Bureau of Statistics states that the rate of innovation-active businesses has increased from 53.9 per cent in 2008 to 62.1 per cent in 2020, with 61 per cent of innovating businesses focusing on implementing process innovations for the first time in their organisation. Defence is often an early adopter of innovative advanced technology solutions as this enables the development of disruptive defence capabilities.

Defence – industry partnership

Collaboration between Defence and defence industry provides collateral benefits beyond capability delivery to Defence. It opens up export markets for domestic industry, bolstering Australia's international credibility and supporting our trusted partners.

^{5 &}quot;https://www.abs.gov.au/articles/addressing-historical-coherence-experimental-two-year-innovation-rate" Addressing historical coherence: the experimental two-year innovation rate | Australian Bureau of Statistics (abs.gov.au)

Defence is continuing to provide opportunities for Australian defence industry to demonstrate, test and evaluate innovations in a defence context. This includes showcases, operational experimentation, demonstration exercises and integration with the broader Defence training program in line with arrangements detailed in Chapter 6.

Global partnerships continue to be critical for the development of high-end capability. Through our AUKUS partnership, Defence continues to seek opportunities to co-develop disruptive capabilities with our trusted partners, leveraging the respective strengths of each country's industrial base.

Action 7.1. Defence will establish opportunities for industry secondments into Defence Science and Technology Group (DSTG) and the Advanced Strategic Capabilities Accelerator (ASCA) to provide technical expertise and industrial experience, to understand Defence's needs and rapidly transition innovations into service. ASCA mission leadership roles will provide deliberate opportunities to bring in experience from industry and the external research and development (R&D) sector.

Pulling innovation through to capability

Defence is taking a new approach to innovation by partnering with industry and universities to focus on rapidly pulling through disruptive technologies that deliver game changing capabilities. To achieve this, Defence's innovation systems must foster collaboration, accelerate technology development and enhance defence capability. Key elements of the innovation system include the DSTG, ASCA, Delivery Groups including Capability Acquisition and Sustainment Group (CASG), NSSG and GWEO Group, as well as the Services.

DSTG, in collaboration with Australian industry, academia, and our trusted partners, plays a crucial role in providing scientific and technological advice to Defence to develop innovative solutions. Service innovation teams play an important role as they work with end users to identify and develop solutions for their respective operational and capability needs.

Defence is streamlining its innovation activities to take advantage of accelerated technological developments. This includes shifting from delivering capability in large increments through major procurement activities, towards delivering 'minimum viable capability'. These minimum viable capabilities, through incremental upgrades, can then be improved and advanced through innovation to maintain strategic military advantage.

Action 7.2. Defence will update the Defence Innovation, Science and Technology Strategy to describe how it harnesses the overall innovation, science and technology ecosystem to rapidly deliver priority outcomes for Defence as well as foster critical areas of R&D underpinning future capability.

The Advanced Strategic Capabilities Accelerator

The Australian-Government established ASCA on 1 July 2023, investing \$3.4 billion over 10 years from financial year 2023-24, to replace the Defence Innovation Hub and Next Generation Technologies Fund and bring a new approach to Defence innovation. ASCA comprises three programs: Missions, Innovation Incubation, and Emerging and Disruptive Technologies.

Missions are driven by problem statements aligned to Defence priorities. Each mission will typically be 3 years long, with clear performance targets and off-ramps and a dedicated capability sponsor. When the technology is proven and affordable, the focus is then to get the capability into service as soon as possible. Led by Australia's most capable technical leaders, and with dedicated Defence support, ASCA missions will deliver minimum viable capabilities that can be accessed by our warfighters when they are needed.

Missions will be co-designed with partners through a short-term contract, as shown in Figure 6. During co-design, ASCA will develop contracting arrangements so that the mission is ready to commence at the end of the co-design phase.

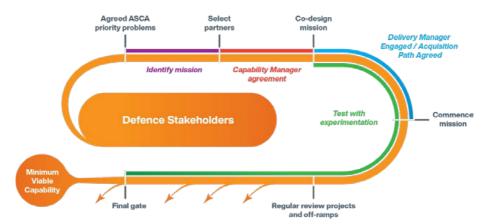


Figure 6 - The ASCA mission concept

ASCA's Innovation Incubation program nurtures industry and academia to identify innovations that can be rapidly adapted, tested and acquired to address capability priorities set out by the Vice Chief of the Defence Force. While there is no guaranteed pathway to acquisition, the intent is to uncover knowledge and progress solutions through a range of novel mechanisms, such as challenges, competitions and hackathons. In addition, while ASCA intends to focus on Defence's established priorities, it will host two pitch days per year to allow industry to present their ideas to Defence. This is to ensure that Defence remains aware of new capabilities and innovations.

ASCA's Emerging and Disruptive Technologies program focuses on the Future Force, underpinned by opportunity statements. The intent is to shape and future-proof the innovation ecosystem, as well as monitor, investigate and research technologies that may provide improvements to existing capabilities or opportunities for future capability development. The program will test basic ideas and concepts, and invest in long-term partnerships that foster critical R&D capability shaped by Defence's future requirements.

Fundamentally, ASCA seeks to develop more productive and targeted partnerships with industry and academia, with a shared purpose to address Defence's highest priority capability needs. This includes playing a key role in accelerating aspects of the advanced capabilities under AUKUS Pillar II, in collaboration with United Kingdom and United States defence innovation systems and industrial bases.

The ASCA model embraces the principles of design thinking and agile methodologies, and utilises governance and processes that bring greater efficiency and faster decision making, to keep pace with our rapidly changing strategic environment and technological advancement.

ASCA works closely with the Defence innovation ecosystem, alongside broader government policies and programs. This includes linking to the whole-of-government critical technologies agenda and priorities through the critical technologies hub and node model to ensure innovation delivers strategic and high priority capability.

ASCA Sovereign Uncrewed Aerial System (UAS) Challenge

The Sovereign UAS Challenge is ASCA's first Innovation Incubation Challenge, linked to an urgent need for Defence and other government departments to acquire very small, general purpose UAS. Small UASs are versatile and cost-effective platforms that provide near real time situational awareness at lower altitudes than larger surveillance alternatives, in an expendable and general-purpose frame. Defence and other government agencies use them for training, photography and survey tasks.

A Request for Information (RFI) was released on 31 July 2023 resulting in around 250 responses, including from many established and new UAS manufacturers, as well as a wide range of supporting componentry, services and research providers. Some responses identified technologies Defence had not known were available from Australian suppliers, and others presented insights for how Defence can improve capability in autonomy, and supply chain assurance. A total of 11 companies have signed contracts to provide a prototype for demonstration in April 2024 along with a production plan detailing how they could rapidly deliver their UAS at scale for potential use by Defence and other government departments. The contracts are worth a total of \$1.2 million.

Action 7.3. ASCA will develop and implement a new approach to identifying, validating, and articulating problem statements so it can partner with industry to accelerate capability delivery.

Action 7.4. ASCA will establish methods to identify and partner with non-traditional sectors to expedite delivery of priority capability solutions.

Action 7.5. ASCA will develop a pre-agreed acquisition pathway to fast-track the transition of minimum viable capabilities into operational use.



A Jindalee Operational Radar Network (JORN) transmitter site.

Defence's innovation challenges

Innovation by its nature is not linear. There is no firm rule as to what Technology Readiness Level (TRL) is required for a technology to be ready for innovation. Instead, the key consideration when looking to pull innovation through into capability is how quickly can that technology be pulled through to TRL 8/9 and be placed into the hands of the warfighter.

Defence is focusing on the following key areas to develop industry innovation in the defence sector:

- Prioritising areas of innovation. Defence will agree to a clear set of innovation priorities, aligned with the National Defence Strategy, to inform and direct innovation.
- Identifying and articulating priorities to industry. Defence will engage early so that Australian industry understands Defence's innovation priorities.
- ▶ Introducing disruption. Defence will re-purpose dual-use technology and equipment for a faster route for innovation in the defence sector. This is exemplified by Ukraine's adoption of dual-use technology for military use in response to Russia's continued aggression.
- Rapidly transitioning into service. Defence will quickly transition innovation to operational capability, drive the technology development process, and make acquisition decisions once proven. This will be addressed through procurement reforms (as described in Chapter 5) aimed at delivering minimum viable capability through early engagement with Australian industry.
- ▶ Engaging with risk. Defence will accept lower individual project success rates to maximise the chances of overall success. This involves implementing decision-making frameworks to justify taking on more risk, and engaging with the end user early so unsustainable projects can be closed before companies invest in them further.

Action 7.6. Defence will communicate priorities for innovation at least annually in the form of ASCA problem, innovation and opportunity statements.

Integrating with Australia's broader innovation ecosystem

The Australian Government encourages opportunities for Australian industry to benefit from dual-use applications of technology, recognising the potential application of innovative civilian technology in military contexts through rapid testing and adaptation.

The Australian Government directly invests in programs to support industry innovation, including providing businesses with access to skills, finance and markets. Defence innovation programs will link with the whole-of-government innovation initiatives, including programs such as the Department of Education's Trailblazer University Program, the Australian Economic Accelerator and the Cooperative Research Centre Program, which continue to drive industry-led collaborative research partnerships and provide opportunity for knowledge exchanges and professional development.

Defence supports the university and research ecosystem through DSTG, particularly through the Australian Defence Science and Universities Network (ADSUN), which connects Defence with researchers from universities, industry and the broader research community. DSTG will strengthen the role of ADSUN in connecting industry with the defence innovation system through visibility of Defence innovation, science and technology opportunities.

Defence will provide universities and other research institutions with guidance on research directions for the development of new and disruptive technologies. This will aid the established research and development base to support Australian industry, particularly Australian SMEs and start-ups that often lack internal capacity. This support includes access to specialist skills and training, infrastructure and capacity to rapidly scale innovation activities.

Protecting intellectual property and sensitive technologies

Protecting sensitive new capabilities from malign influence while seeking to develop these new capabilities on an accelerated timeline is challenging. Security has been a significant constraint for innovation programs, with security clearance and accreditation processes often taking longer to complete than the innovation programs themselves. Defence support to strengthen key aspects of industry security is outlined in Chapter 10.

The commercial protection of intellectual property is important. Where businesses require assistance, internal Defence intellectual property expertise, as well as working in collaboration with other government agencies such as IP Australia and the Department of Industry, Science and Resources will be helpful.

This assistance is not restricted to intellectual property protection within Australia. Australia continues to work with our trusted partners to develop contractual arrangements that recognise the need for Australian industry to have clear intellectual property usage rights to enable commercial exploitation. It is vital that Australian industry, particularly SMEs, understand the limitations and conditions for exporting defence-related intellectual property. This requires balancing the need for Defence to have access to intellectual property for capability-related outcomes against ensuring Australian SMEs maintain control of intellectual property.

Action 7.7. Defence will work with other government agencies to support Australian industry to protect their IP, including understanding defence-related export conditions.



Winner in the ADF capability displays.



Chapter 8 - Workforce

Workforce at the heart of industrial capability

Defence is undertaking significant defence capability modernisation, whilst seeking to adopt new and enhanced technology and innovation. Central to this is a skilled workforce to acquire, build, sustain and upgrade our Defence capabilities.

Implementation of the DSR recommendations will see demand for a larger skilled workforce across Australia, particularly in the fields of science, technology, engineering and mathematics (STEM). With the loss of strategic warning time and the rapid advancement in technology, growing the workforce is an increasingly important part of strengthening the viability of our industrial base and building Australia's supply chain resilience.

Securing Australia's national interests requires a regionally competitive maritime capability, including naval ships, Collins Class submarines and the forthcoming conventionally-armed nuclear-powered submarines. This will be a whole-of-nation effort, with South Australia playing a central role. By the end of this decade, Australia will begin building its first nuclear-powered submarine, SSN-AUKUS, in Adelaide. The Australian Government's commitment to continuous naval shipbuilding and sustainment, the AUKUS nuclear-powered submarine program, and GWEO will support thousands of Australian jobs in the coming decades.

Delivering the workforce to meet Defence's needs requires new or enhanced engagement, educational and upskilling programs. The scarcity of STEM skills, an ageing population and stagnating student attainment amplifies the need for long-term and integrated strategic planning and working in partnership with industry, Commonwealth and state and territory agencies to develop this workforce.

Increasing competition for skilled workers

The demand for skilled and experienced labour is being felt globally and locally, and both Defence and defence industry face many common challenges in growing their workforces in the timeframes required. The 2023 Intergenerational Report found that Australians are expected to continue living longer and remain healthier to an older age, participating in the labour market longer if they choose. Generational expectations and digital technologies are shifting the way we work and the skills required. Both Defence and defence industry must shift their approach to engagement, attraction, recruitment, skilling and retention to adapt to our changing labour market.

"Defence is facing significant workforce challenges. This was a recurring theme across all areas of the Australian Defence Force, Australian Public Service and defence industry in the Review. This is an acute issue for Defence and is reflective of broader national challenges." (DSR, Chapter 11)

Defence maritime capability

By 2030, the Naval Shipbuilding and Sustainment Enterprise will support over 8,500 direct jobs to build and sustain conventionally-powered vessels nationally. Many of these require technical or engineering knowledge. Roles currently experiencing short supply include combat systems engineers, heavy fabrication, design, naval architecture, project management and electrical engineers.

As a critical part of the broader naval enterprise, Australia's nuclear-powered submarine program also faces a significant challenge in developing the skills and workforce needed to build and sustain nuclear-powered submarines in Australia. Increased naval shipbuilding investments by foreign governments also contribute to workforce demand, with shortages in shipyards worldwide.



BAE Systems Senior Maintenance Manager, with Disability Employment Services staff.

Workforce requirements for the nuclear-powered submarine enterprise

Australia's nuclear-powered submarine enterprise will create approximately 20,000 direct jobs over the next 30 years across ADF, Australian Public Service (APS) and industry. Of these, 4,000 to 5,500 direct jobs will be created to build SSN-AUKUS.

Industry is expected to experience the greatest workforce demand from the nuclear-powered submarine program, and will need to attract, build and retain skills in an increasingly competitive market. Roles across engineering, operations, program management, supply chain and support job functions will be particularly needed, including trade and technician roles. Approximately one-quarter of the projected industrial workforce will also require further nuclear skilling.

Defence and the Australian Submarine Agency are collaboratively developing initiatives to attract, develop, qualify and retain the workforce to build and sustain Australia's naval vessels now, ready to transition to Australia's conventionally-armed nuclear-powered submarine program. These programs will be developed and implemented in partnerships with Commonwealth, state and territory government agencies and industry.

Workforce requirements for the broader defence industry

Defence must understand the totality of industry's workforce requirements and the capacity and capability gaps of this workforce. Access and analysis of industry data on current and future workforce supply and demand will enable Defence to develop strategies and signal what skills are required to governments, the education and training sector, and industry.

Skilled, experienced and security-cleared people are required from a range of job families, including but not limited to engineering, project management, operations, support, supply chain, and science and technology. Within these job families are a range of occupations including engineers (software, mechanical, systems, electrical, electronic, nuclear and civil), project managers, cyber and information and communication technology professionals, structural steel and welding trades workers, metal fitters and machinists, electricians, commercial management professionals, logistics personnel, and technicians (engineering, electronics, telecommunications and software).

A significant amount of work has already been undertaken to understand the defence industry workforce requirements in South Australia. Growing this intelligence function to reflect estimated national defence industry requirements is reliant on information provided by industry on their workforce needs, informed by Defence's capability requirements.

Defence maritime workforce data

In May 2023, Defence initiated a naval shipbuilding and sustainment workforce planning and intelligence service, in collaboration with industry. The service will deliver workforce demand and supply outlook across decades, identify workforce risks and help target investment and actions by industry and governments to meet future workforce requirements.

Action 8.1. Defence will work with industry to provide an aggregated defence industry workforce outlook commencing in July 2024.

Action 8.2. Defence will develop a rolling national defence industry workforce plan to detail practical actions to help industry achieve the required workforce capacity and capability. The plan will leverage the work already undertaken for the South Australia Defence Industry Workforce and Skills Taskforce.

Action 8.3. Defence will enhance the Schools Pathways Program by:

- Developing new intergovernmental agreements to support critical defence industry skills pathways in South Australia and Western Australia.
- Moving from a closed non-competitive grants process to an opengrants program, to encourage innovative approaches to delivering defence industry career experiences, mentoring and networking opportunities and encouraging student participation in STEM activities and/or subjects, and support workforce needs in critical defence industry hubs, such as the Hunter region.

Action 8.4. Defence will continue the Defence Industry Internship Program to target skills in defence industry in short or critical supply.

Meeting the pace of technological change as approaches to warfare evolve is critical to secure our nation. It is particularly important to inspire early learners and primary students across the country to continue to engage with STEM opportunities, while encouraging secondary students to pursue vocational and tertiary STEM studies. This can only be achieved through a sustained and collaborative effort across all levels of government, industry and the education and training sectors, that recognises the importance of a diverse workforce.

National STEM engagement programs

Many organisations promote STEM careers and pathways, deliver hands-on STEM learning experiences, increase educators' confidence and capability to teach STEM subjects and help students of all ages build foundational STEM skills that support future workforce participation. National agencies, including CSIRO, and organisations such as Questacon, ensure such opportunities are available widely.

Positive early experiences are critical for later STEM engagement. The Engineering is Elementary program is delivered by Questacon with sponsorship from Defence. It aims to build confidence and capacity in primary school educators, enabling them to bring STEM into their classrooms and highlight the breadth of engineering career paths available to their students.

The Australian Government is focused on enhancing education systems to develop an adaptable and resilient labour force. The National Skills Agreement (the Agreement), commencing 1 January 2024, is a 5-year joint agreement between the Commonwealth, states and territories to strengthen the vocational education and training (VET) sector. The Agreement represents a new stewardship model that will support governments to work collaboratively and purposefully towards national priorities, while preserving flexibility to align local skills supply with demand. An agreed inaugural national priority is developing Australia's sovereign industrial capability.

The Australian Government has also established Jobs and Skills Councils (JSCs) to bring together employers, unions and governments in a tri-partite arrangement to find solutions to skills and workforce challenges and ensure Australia's VET sector delivers better outcomes for learners and employers.

Jobs and Skills Australia

Jobs and Skills Australia produces a range of data and analytical resources to assist with understanding the defence industry workforce:

- Estimates of the level of employment by occupation by region on a monthly basis (previously only available every 5 years in the ABS Census).
- Estimates of job vacancies by both occupation and region on a monthly basis.
- Analysis of skills shortages in the labour market through the annual Skills Priority List, including assessment of the factors contributing to shortages.
- Projections of future employment growth by occupation over the next 10 years.
- Advice on the role of skilled migration in meeting domestic labour market needs.
- Analysis of the skills required within occupations and pathways between occupations and from education and training to jobs.
- Capacity studies which assess demand and supply of labour and skills in a critical area of the economy, both presently and in the future.

Building the workforce for Sovereign Defence Industrial Priorities

The expertise needed in defence industry can often take years to develop due to long education lead times, the complexity of integration and the standards required by defence industry. Additionally, while skilled migration is important and necessary, it will not sufficiently bridge the workforce gap due to the international competition for skills and the security requirements of the defence sector. Targeted planning to meet future priority defence industry workforce needs is essential across government policy areas.

For example, the establishment of a sovereign nuclear-powered submarine capability in Australia is the single biggest upgrade to Australia's defence capability in our history. Building and sustaining the SSN-AUKUS capability presents a whole-of-nation opportunity, but will require a comprehensive and integrated approach to upskill and retain our existing workforce while growing our future pipeline. This will also support greater cooperation and integration with the US and the UK on developing technology.

Focusing on the priority areas for Defence will include looking at adjacent sectors and leveraging whole-of-government initiatives, informed by a coordinated, Defence-wide view of industry workforce requirements. This is in addition to continued efforts to build Defence's own workforce.

Industry needs to engage with government and the education sector to build talent pipelines, identify and address common skill gaps, engage young people in STEM, reduce gender imbalances, and create awareness of meaningful career pathways. Strong business management, leadership and entrepreneurial capabilities are essential to growing Australian defence industry businesses.

To respond to strong competition for new workers and the exodus of talent, businesses must develop flexible workplace strategies to secure and retain talent and leverage the expertise of older workers honed through years of experience. Skills gaps can be minimised through professional development and training opportunities, and apprenticeship completion rates can be raised through improved mentoring programs. Industry has a role in removing disincentives for women and older workers to remain in STEM careers or return to them after career interruptions.

Current and future Defence workforce initiatives

Defence has funded a number of programs designed to support industry skills by engaging students to follow relevant study pathways or practical experience opportunities. These include:

- ▶ The Schools Pathways Program, which informs young Australians about the varied pathways and career opportunities within defence industry, provides access to defence industry career experiences, mentoring and networking opportunities, and encourages student participation in STEM activities and/or subjects.
- ▶ The Defence Industry Pathways Program, which provides hands-on training in the Henderson Shipbuilding precinct in Western Australia. The 12-month, paid entry-level traineeships provide practical industry experience with world-leading defence industry employers, who offer supervision, mentoring and on-the-job training. The program is planned for expansion to South Australia from 2024.
- ▶ The Defence Industry Internship Program, which links third and fourth year engineering and technology students with defence sector SMEs for a 12-week paid internship. The Program increases awareness of defence industry as a viable career pathway and provides participating undergraduates with valuable employment experience.



Defence Industry Pathways Program trainee conducting work placement in Henderson.

Defence Industry Pathways Program

The Commonwealth and South Australian Governments will partner to expand the Defence Industry Pathways Program into South Australia to provide an entry-level pathway for critical roles in shipbuilding, including logistics, engineering, drafting, design, safety and cyber security. This program supports trainees to gain practical skills and experience, and access a range of career pathways in defence industry.

The Commonwealth Government will fund \$6 million and the South Australian Government will fund \$6 million of the program, which will provide 150 places over three years from Q3 2024.

Collaboration between the Commonwealth and state governments, in consultation with defence industry, unions and education providers is needed to build Australia's defence industry workforce in priority areas. For example, through the South Australian Defence Industry Workforce and Skills Taskforce, the Commonwealth and South Australian governments engaged with industry, unions and education and training providers to release an integrated workforce and skills plan on 10 November 2023.

To meet challenges, the Government will target investment to identify and support the development of a skilled defence industry workforce. To simplify direct industry grants arrangements, the Skilling Australia's Defence Industry Program has been streamlined into the new consolidated Defence Industry Development Grant Program.

The Program will fund on-the-job, external and internal training to give industry a greater range of learning mechanisms to upskill workers, while retaining them in the workplace. The VET system is one major pathway to delivering the future workforce. The Defence Industry Development Grant Program will enhance support by funding a contribution towards apprentice supervision to encourage completion and mentoring as apprentices build their skill, knowledge and experience. Support will also be available to help businesses to champion diversity through better HR practices and to build the expertise of managers.

Skills and Training Academy

A Skills and Training Academy is being established to support the uplift of the industrial base for continuous naval shipbuilding and Australia's nuclear-powered submarine program, playing a vital role in providing employment and on-the-job skilling and experience. The Academy will:

- Expand existing programs proven to deliver benefits to Australian defence industry.
- Deliver new programs for skilling and training workers for shipbuilding and nuclear-powered submarines, including traineeships, apprenticeships and more advanced training programs.
- Build a dedicated campus in South Australia to support shipbuilding and nuclear-powered submarine-focused training and skilling. At full operation, the SA campus facilities are anticipated to support up to 800–1,000 people each year across all skill and experience levels.

Skills and Training Academy pilot training and skilling programs commenced in 2023. These programs will continue to expand throughout 2024. The Academy will also support industry to better access AUKUS partner skilling and training methods.

Action 8.5. Defence will develop a longer-term communication and engagement plan, working with Australian industry to create awareness of the strong career opportunities in defence industry, including sharing information through websites and increasing the visibility of women in STEM in the defence industry.

Collaborating with trusted international partners

Defence will continue to work closely with trusted partners to build supply chain resilience, improve advanced scientific, technological and industrial cooperation and strengthen Australia's military and industrial capabilities through workforce initiatives.

For example, as part of delivering greater industrial collaboration for Australia's GWEO Enterprise, Australia is working with the United States on pooling our collective expertise and knowledge to build Australia's critical guided weapons stores, while also delivering a trusted second source of critical munitions to the US.

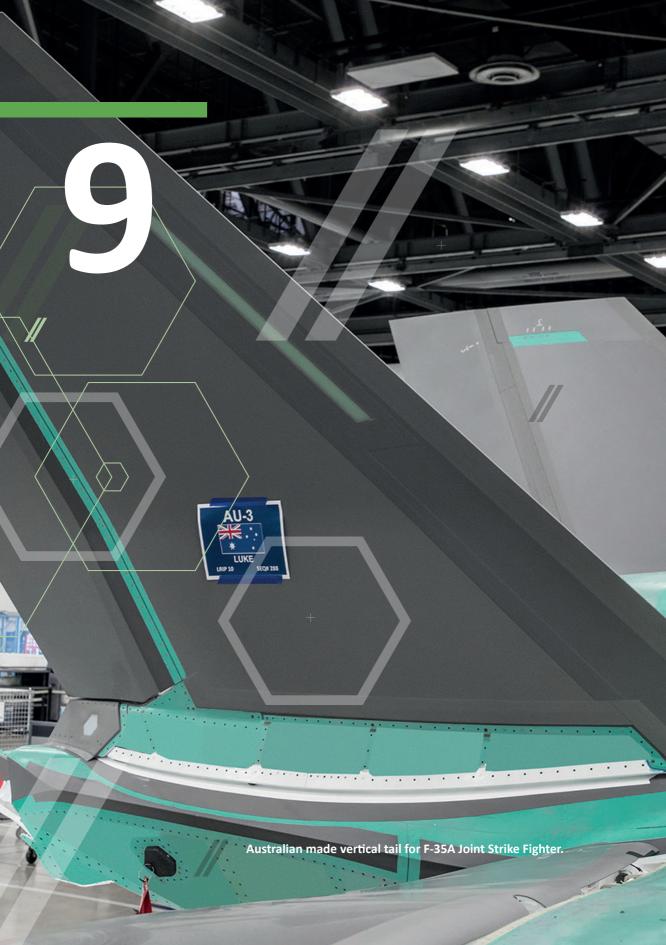
AUKUS training collaboration

"Beginning in 2023, Australian military and civilian personnel will embed with the U.S. Navy, the Royal Navy, and in the United States and United Kingdom submarine industrial bases to accelerate the training of Australian personnel.

The United States plans to increase SSN port visits to Australia beginning in 2023, with Australian sailors joining U.S. crews for training and development; the United Kingdom will increase visits to Australia beginning in 2026." (Joint Leaders Statement on AUKUS, 14 March 2023)



United States Navy Virginia Class submarine arrives at Fleet Base West, Rockingham.



Chapter 9 - Exports

Recognising the importance of exports for Australia and the industrial base

Exports grow the resilience of the Australian defence industrial base by providing diversity in revenue sources, which in turn increases both industrial capability and capacity to support Defence.

"Resilience requires the ability to withstand, endure and recover from disruption. Resilience makes Australia a harder target and less susceptible to coercion. Critical requirements include... supply chain diversity." (DSR, Chapter 4)

Australian defence industry exports are important because they:

- ▶ Bring scale, competitiveness and sustainability to Australia's industrial base.
- ▶ Increase supply chain resilience by generating economies of scale for suppliers, which can create capacity in times of need and smooth the cycles of domestic acquisition and sustainment demand.
- ▶ Deliver a strategic effect for the Australian Government, increasing interoperability and deepening ties with trusted partners.
- ▶ Strengthen Australia's ability to shape and influence our strategic environment, and be a partner of choice to supply our regional neighbours with defence equipment, supporting their sovereignty.

Defence industry exports can occur through three key approaches:

- Direct commercial sales.
- ▶ Government-to-government.
- ▶ Integrating Australian businesses into global supply chains.

GaardTech

GaardTech, a Gold Coast-based start-up founded by Australian veterans, creates robotic systems for military training, deception and combat effects. It achieved export success through close collaboration with, and support from Defence.

As part of the Team Defence Australia delegation to the 2019 UK Defence Security and Equipment International tradeshow, GaardTech secured a \$1.7 million contract with the British Army for the supply of Robotic Enemy Vehicles for military training. Additionally, GaardTech has secured further export deals with the German Army, Singapore Air Force and United States Marines.

These contracts have enabled the company to grow its Australian engineering and fabrication team, along with offices in the UK and USA.

Defence was able to call on GaardTech when identifying Australian industry options to provide support to Ukraine. GaardTech provided its systems as part of a package of support funded by the Australian Government and provided by Australian industry. GaardTech was also called upon by the UK MOD for Ukraine aid in a similar manner. GaardTech's ability to do this was linked to its previous export success.



GaardTech robotic systems

The Australian Government provides a range of support to Australian defence industry for exports, including through the Team Defence Australia Program, GSC Program, the Australian Trade and Investment Commission (Austrade) and Export Finance Australia. Where possible, the Australian Government advocates on behalf of Australian defence industry, alongside Australian Defence Attaches at Posts, Austrade and Export Finance Australia. This ensures potential Australian defence industry exporters are given every opportunity to expand their market access or gain access to new markets.

Defence also identifies opportunities for Australian defence industry to participate in joint capability development with trusted partners through mechanisms such as AUKUS Pillar II. This includes developing frameworks to enable co-design, co-development and co-production of capabilities with partners.

Government support to defence exports

Some of the key programs and initiatives the Australian Government delivers to support defence exports include:

- Austrade Business Development Managers to assist in identifying and capturing commercial development opportunities for Australian defence industry in overseas markets.
- Export Market Development Grants administered by Austrade, to help Australian businesses grow their exports in international markets.
- Export Finance Australia to provide financial expertise and solutions to support Australian defence exports across a range of sectors including advanced manufacturing, engineering and software.
- Defence Export Facility administered by Export Finance Australia, to build Australia's defence export capabilities.
- Australian Defence Export Catalogue administered by Defence to showcase defence industry products, services and technologies from businesses across Australia.
- Small Business Export Loan administered by Export Finance Australia, to support streamlined approvals for businesses that need to borrow \$20,000 to \$350,000.

The DSR articulated the need to focus on developing the industrial base in priority areas based on Defence's capability needs. In line with this, targeted export support will prioritise businesses which:

- ► Contribute to SDIPs to help build the scale and competiveness of Australian businesses.
- ▶ Strengthen our international relationships.

- ▶ Maintain interoperability or a capability edge.
- ▶ Deliver innovative solutions to Australian defence capability.

Defence is refining a number of its existing programs, including a focus on targeted trade missions, and working with other government agencies to enhance support for Australian defence industry exports. A key focus of these changes is increasing the number of Australian businesses included in global supply chains through reforms to the GSC Program. Strengthening supply chains through broadening customer bases and enhancing security (as referenced in Chapter 5 and Chapter 10) develops robust and resilient supply chains better able to support Defence's needs.

Defence Export Controls

Defence Export Controls regulate the export, supply, publication and brokering of military and dual-use goods, software and technologies. This supports stakeholders in government, industry and academia, as well as private individuals to ensure the responsible movement of military and dual-use goods and technology to any place or person outside of Australia. Regulating the exports of military and dual-use goods and technology achieves a number of objectives consistent with Australia's national interests, including:

- Maintaining the security and capability edge of our warfighters.
- Minimising regional and international instability and conflict.
- Ensuring Australia upholds its international obligations through the responsible export of military and dual-use goods and technology.
- Supporting global counter-proliferation efforts.

Defence Export Controls continue to ensure businesses looking to export controlled technology do so in accordance with Australia's export control laws, whilst maintaining objectives consistent with Australia's national interest.

Supporting Australia's priorities

Defence works closely with a network of international Defence Attachés, Advisors and Austrade Business Development Managers as well as other government agencies including state and territory governments, to identify export opportunities and support Australian defence industry to display its capabilities on the global stage.

The Team Defence Australia program within Defence works with industry to prepare Australian delegations for attendance at overseas trade shows and ensure they maximise their international exposure.

Defence collaborates across whole-of-government to deliver targeted trade missions. The missions are informed by market intelligence, and focus on areas in which Australian defence industry has a competitive advantage, supports the growth of SDIPs or strengthens industrial collaboration with trusted partners such as the US and UK.

Action 9.1. Defence will target trade missions in support of Sovereign Defence Industrial Priorities to continue promotion of industrial collaboration with trusted partners.

Export opportunities to trusted partners are critical to the success and growth of Australian defence industry businesses. Australia cannot rely solely on its own capabilities, supply chains and domestic markets to deliver Defence outcomes and sustain Australian defence industry. Industrial collaboration and cooperation between countries requires breaking down barriers to industrial collaboration with trusted partners and increasing advocacy from the Australian Government.

Australian industry faces many challenges when exporting, including navigating foreign procurement processes and protecting sensitive technologies. Defence will work more closely with industry to utilise the levers available, including the use of government-to-government arrangements, to increase foreign governments' ability to procure from Australian businesses. These arrangements can be used to streamline procurement processes and deliver additional protections for Australian-origin technologies.

Defence also supports Australian capability and military sales programs through the planning and execution of international government-to-government transfer of surplus Defence materiel, Australian-origin sensitive technology and products and services of Australian defence industry.

Action 9.2. Defence will actively work with industry to access other markets, including the use of government-to-government arrangements.

Working with Austrade

Defence also works closely with Austrade as the Australian Government's trade and investment delivery agency. Defence is looking to better utilise Austrade's advisers and networks to support Australian defence industry. This includes provision of market intelligence on opportunities to inform initiatives such as the Team Defence Australia Program and delivery of targeted trade missions.

Action 9.3. Defence and Austrade will refine and target their collaboration to better utilise Austrade's advisers and networks to ensure greater opportunities for Australian defence industry, including enhanced market intelligence and understanding of foreign government programs.



Celebrating completion of the first deep maintenance of a
US Navy MH-60R Romeo Helicopter at Sikorsky Australia's facilities at Nowra.

Expanding the Global Supply Chain Program

The GSC Program is a Defence industrial participation program that contracts major global primes to integrate Australian businesses to their global supply chains, across both defence and civil sectors. The aim is to diversify Australian businesses' revenue sources, drive economies of scale and build capacity and resilience through exports. This also assists in mitigating the peaks and troughs of domestic acquisition.

Since its inception in 2007, the GSC Program has delivered 2,220 contracts worth over \$1.7 billion to 248 Australian suppliers, achieving an average Program return on investment of 12 to one (as of 30 September 2023).

Expanding the Program, including by updating its contract and performance framework, will provide Australian businesses with greater access to broader export markets through the addition of more participants and ensure there is an ongoing pipeline of work and growth. It will also foster longer-term strategic partnerships between primes and Australian businesses to encourage early adoption, and integration of, Australian innovation, including innovation developed through ASCA.

The updated contract and performance framework will include:

- ▶ A plan to promote the scaling and growth of Australian businesses, by allowing Australian businesses of more than 200 staff to be counted within the Program.⁶
- ▶ An expanded scope of exports to consider the continuum between domestic and international projects (for example, shared platforms, retention of Australian businesses on export of Australian-made capability and sustainment of international fleets).
- ▶ Identification of opportunities for Australian innovation early in the development cycle including through ASCA's pathways and with co-development activities.
- ▶ Performance metrics to allow Defence to measure the success of primes and the Program.

In delivering an updated Program, Defence will focus on closer engagement with entities and agencies who assist Australian businesses to export, such as Austrade and Export Finance Australia. Defence will maximise the leverage of the Program's framework in delivering outcomes to Australian industry under Foreign Military Sales, co-development and maintenance, repair, overhaul and upgrade programs.

⁶ This excludes prime companies or their subsidiaries.

Action 9.4. The GSC Program will increase opportunities for Australian businesses in international supply chains, by expanding and updating the Contract and Performance Framework and adding new participants.

Pursuing co-development, co-production and co-sustainment activities

Exports must be considered from the beginning of the capability process to identify opportunities for Australian defence industry from the outset. The earlier Australian defence industry is involved in the development of capability (co-development), the easier it is to become part of a global supply chain (co-production). This also facilitates opportunities to support trusted partners by providing additional capacity in our combined industrial bases (co-sustainment).

Gaining early and streamlined access to information and export opportunities

The Government is streamlining trade and harmonising export control frameworks with AUKUS partners, to collaboratively advance our technological edge and deliver capability at pace and scale. This includes setting conditions for co-development, co-production and co-sustainment opportunities, such as an export licence-free ecosystem with our AUKUS partners.

Action 9.5. Defence, in collaboration with trusted partners, will increase information sharing agreements, address barriers to information and technology exchange, and increase industrial collaboration to deliver initiatives such as AUKUS.

Servicing other countries' platforms

Australia has proven industrial capabilities used to maintain, repair and overhaul platforms operated by the ADF. Achieving economies of scale and optimising the use of these industrial capabilities increases the resilience of our industrial base, strengthens our international engagements and supports increased operational effectiveness.

In collaboration with industry, Defence will deliver maintenance, repair and overhaul services to trusted partners. This better utilises latent capacity in Australia, supports growing the size of our collective industrial bases able to support platforms, and enables trusted partners to maintain an effective capability.

Action 9.6. Defence will leverage Australian industry maintenance, repair and overhaul capabilities, such as for the MH-60R Seahawk, to strengthen the industrial base and support trusted partners.

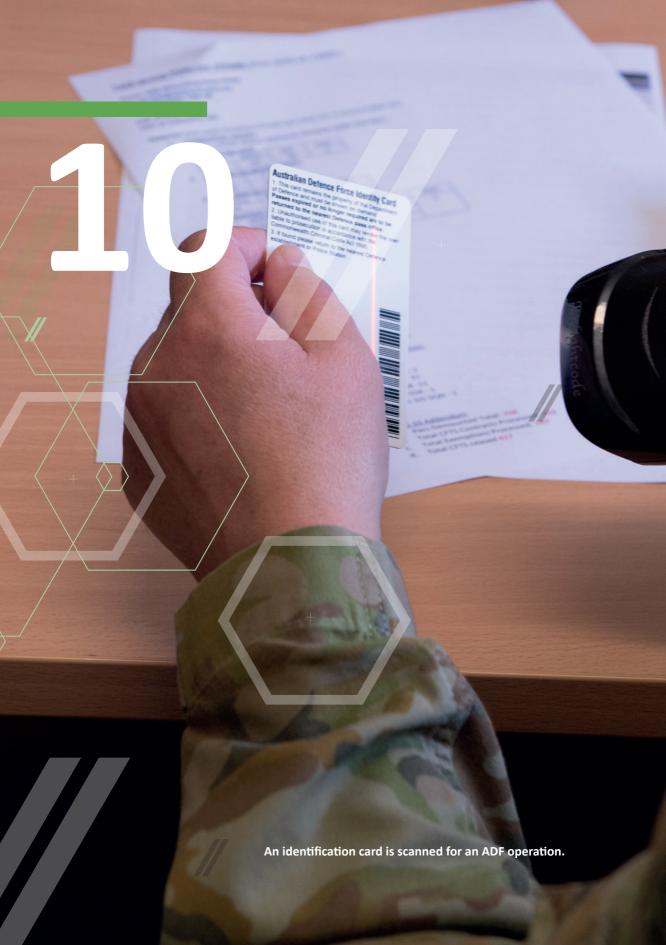
Demonstrating Australia's defence industry capability

The ADF is well positioned to support Australian defence industry as part of its international engagement. This includes promoting products and services provided by Australian defence industry during activities such as Indo-Pacific Endeavour and joint exercises such as Talisman Sabre. Defence will actively seek opportunities to demonstrate Australian-developed capability and innovations, including those not under contract with Defence. This will occur through exercises, facilitating industry engagements with foreign delegations visiting Australia and working with Australia's overseas representatives at diplomatic missions to support industry engagements with foreign governments and industry.

Action 9.7. Defence will source opportunities to demonstrate Australian defence industry capability as part of Defence exercises, training, at Australian diplomatic missions overseas and with visiting foreign delegations in Australia.



The Australian stand at an international trade show.



Chapter 10 - Security

Threats facing defence industry

Technological change continues to reshape and present challenges to our security environment. Due to the rapid uptake of new technologies including artificial intelligence, increases in data breaches, and the challenges of cyber threats across our increasingly networked society, identifying and thwarting threats has become harder, and requires new approaches and expertise. This trend is likely to continue.

Ransomware, extortion threats, espionage and fraud have become a significant threat to Australia. There has been no greater example of this than in September and October 2022, when over a 3 week period, cyber criminals stole the personal data of over 9.8 million Optus and 9.7 million Medibank customers. The severity and scale of these breaches has made cyber security and governance a priority in industry boardrooms.

Strengthening Australia's cyber security and cyber-worthiness is a fundamental priority for the Australian Government. According to the Australian Cyber Security Centre, cybercrime cost industry \$300 million in financial year 2021-22, there was a cybercrime every 10 minutes in Australia, and 43 per cent of attacks targeted small and medium enterprises. Cyber security is a national priority, and its uplift and resilience must be an integrated whole-of-nation endeavour between the Australian Government, Defence and Australian defence industry.

In defence industry, national security and business security are intertwined. With the acceleration of cyber attacks, espionage and foreign interference, Defence and defence industry must work together to address the risk of serious harm to our sovereignty, values and national interest.

 $^{7 \}quad \text{https://business.gov.au/online/cyber-security/cyber-security-and-your-business} \\$

Security in a collaborative environment

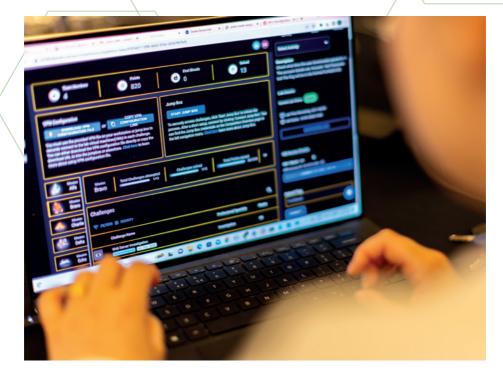
Our rapidly evolving security environment requires meaningful and closer collaboration with our trusted partners to respond to emerging threats and to maintain our technology and capability edge. It is vital that Australia protects our own and our partners' technology and information, through modern, practical mechanisms for gathering, protecting and sharing sensitive and classified information, including verification of personnel and facility security clearances between trusted key partners.

This is fundamental to delivering the integrated collective industrial base and workforce envisaged for AUKUS. Australia's nuclear-powered submarine program represents the most significant industrial and technical endeavour in Australian history. The security requirements necessary to protect the sensitive technologies the UK and the US entrust to Australia need to be considered when looking at industrial growth.

Action 10.1. Defence will review and update policies and procedures for security clearance recognition in line with international best practice to streamline processes and better support international industry collaboration.

Australia must access our trusted partners' expertise to help develop domestic capacity when an Australian workforce is not readily accessible or sufficiently skilled. Australia has a range of Security of Information Agreements and Arrangements with trusted partners to allow reciprocal recognition of security clearances and sharing of classified information. These instruments strengthen the integration of industrial bases and increase opportunities for collaboration with industry to deliver better support to our respective defence forces, while maintaining required protections.

Action 10.2. Defence will explore industry security provisions in new and existing Security of Information Agreements and Arrangements to provide the framework for increased industry security cooperation and help combat skill shortages.



The Australian Defence Force Cyber Skills Challenge.

A shared security responsibility between Defence and industry

Businesses currently working with Defence, or those seeking to work with Defence, have increased security obligations to protect Defence capabilities and eliminate security vulnerabilities for both Defence and defence industry. This includes the destruction, exposure or corruption of customer and personal information, financial records, business plans and new ideas, intellectual property, product designs, patent applications and marketing plans. The obligations include appropriate practices across security governance, personnel security, physical security, information and cyber security, ensuring security is integrated into business processes.

Defence will continue to support businesses to appropriately manage security risks across cyber, physical, personnel and governance, particularly where it is a barrier for smaller businesses seeking to enter a defence supply chain and maintain Defence Industry Security Program membership. Effective security risk management is fundamental to delivering and protecting Australia's defence capability and reputation among our trusted partners.

The Defence environment can be complex and challenging for businesses to navigate, and Defence understands the need to support businesses to meet their security obligations. The new Defence Industry Development Grant (as described in Chapter 4) will provide support for businesses to uplift security, and strengthen their ability to meet increasingly rigorous security requirements in Australia and overseas.

Defence is also increasing access to shared user hub facilities and streamlining the ability for businesses to get a Defence Common Access Card (DCAC) and Defence Industry Security Program membership. The shared facilities provide inclusive, secure, flexible and functional office environments, allowing industry the ability to securely work on their own terms. Defence has a number of shared user hub facilities across Australia, consisting of designated spaces on Defence bases and external buildings that defence industry can use with a valid security clearance and DCAC. This new integrated approach provides the necessary support for security as a critical enabler for Defence and Australian defence industry.

The Australian Government's efforts to maximise Australian industry involvement in areas of strategic priority, particularly in the naval shipbuilding enterprise, are increasingly seeing Australian industry involved in domestic and global supply chains. These efforts are being driven through early and consistent engagement with Australian industry, and the embedment of industry into all phases of Defence's capability life cycle.

Security initiatives such as the Defence Research, Innovation & Collaboration Security Program, Security of Critical Infrastructure Act and the Defence Cyber Security Strategy position Australian industry as a trusted source in global defence supply chains and reinforce the importance the Government places on industry security to our trusted partners. They also support efforts to establish a GWEO Enterprise and deliver closer industrial integration with trusted partners.



Security initiatives

Research and innovation security assurance

The Defence Research, Innovation & Collaboration Security (DRICS) program interlocks with the integrated system of security in Defence. It is a part of the Defence Protective Security Policy Framework (Principle 31) and is key to the protection of sensitive Innovation, Science and Technology (IS&T) performed in partnership with external organisations, including industry.

Security of critical infrastructure

The Security of Critical Infrastructure Act 2018 creates a framework for the regulation and protection of critical infrastructure sectors, providing the policy for the issue of identity cards to cleared industry workers. Workers are required to complete a background check and assessment, allowing them unescorted access to assets identified as critical infrastructure.

Defence Cyber Security Strategy

The Defence Cyber Security Strategy details how Defence will combat cyber threats and ensure its capabilities are secure against attacks from adversaries. It presents the path to a cyber-resilient Defence and the principles to maintain a strong cyber-security posture in a shifting strategic environment.

The Naval Shipbuilding and Sustainment Identity Card

The Naval Shipbuilding and Sustainment Identity Card (NSSIC) is a physical access card encoded with access controls allowing individuals unescorted access to Osborne Naval Shipyard subject to the responsible Defence Group or Service's business requirements. An NSSIC is valid for a two-year period and supplies photographic evidence the bearer of the card has completed an AusCheck background check. AusCheck is part of the Department of Home Affairs service delivering background-checking services for security-sensitive critical infrastructure sectors in Australia.

The primacy of security

Security cannot be considered discretionary. Threats to security can affect defence capability and the financial viability of Australian industry. They can cause loss of intellectual property, access to insights into industrial/defence capabilities or commercial advantage, resulting in Australian industry and Defence suffering reputational damage and reducing Australia's competitive position in global markets.

Industry must incorporate security and cyber-worthiness continuously into the core of any capability, product, innovation or technological advancement from design to launch to maintenance. Incorporating security throughout the development cycle fosters collaboration between Defence and industry, resulting in a better understanding of security requirements, a more efficient development process, and more secure and resilient defence capabilities.

Early and comprehensive consideration of security can help improve trust and confidence. By building security into products and services from the outset, industry can demonstrate they take cyber-worthiness and security seriously and are committed to protecting information.

Types of security

Cyber

Cyber security encompasses national security, business security, and personal security for all Australians. Australia's cyber security underscores the way every Australian, business and community organisation interacts on a day-to-day basis. It is critical for maintaining trust in our public institutions and public service, and confidence in commercial dealings and intellectual property.

Physical

Physical security involves putting in place measures to ensure a safe and secure physical environment. This could include measures such as perimeter security (fencing, locks, guards), surveillance cameras and sensors, alarms, secure server rooms, smart cards, biometric identification, and water, smoke and heat detectors. As businesses become more dependent on the internet, the importance of digital and physical security increases, demanding a significant amount of physical security to safeguard data, servers and networks.

Personnel

Australian defence industry is commonly targeted by espionage and foreign interference. Espionage efforts are also directed at Australia's science and technology sectors as well as Defence itself. The insider threat to Defence and defence industry in Australia is a growing problem, whether malicious or unintentional. Unauthorised use or disclosure of privileged information or technology by an individual has the potential to cause harm.

Governance

Governance involves organisations having clear lines of accountability and responsibility, and suitable plans, processes and people in place to ensure organisational security. It is assurance that organisations have appropriate practices across physical security, personnel security, information and cyber security.

Defence industry security requirements need to be identified in the initial stages of all Defence projects. This includes identifying the workforce clearance, physical, information and cyber security requirements for each project. This approach allows industry and Defence to understand future security requirements and identify plans to meet them.

Action 10.3. Defence will consider and report on industry security clearance and accreditation requirements earlier in the Defence Capability System, including ongoing assessment of security classification levels to support security uplift for the future workforce.

Strengthening the Defence Industry Security Program

The Defence Industry Security Program (DISP) supports Australian businesses to understand and meet their security obligations when participating in Defence projects, contracts and tenders. Updates to DISP will provide significant benefits to industry and Defence through an automated application process, changes to the membership portal, automated business processes to manage DISP through its entire lifecycle, and improved reporting and analytics capabilities. The DISP Membership System launched in December 2023 for new DISP applications, and additional system capabilities will be added in 2024.

The updates make it easier for industry to engage with the DISP, delivering more effective outcomes to strengthen our industrial security posture. Assurance processes for the DISP will continue to mature and evolve to include a scalable assurance framework for priority capabilities.

Defence Industry Security Program

Initial Operating Capability

Increases the accessibility and efficiency of DISP through release of a secure portal for all new DISP applications, streamlining the application process.

Capability Release 1

Enhances end-to-end processing of new DISP applications.

Capability Release 2

Enhances back-of-house processing and introduces self-service membership management.

Final Operating Capability

Delivers the full DISP application and self-service membership management capability.

Optimising the vetting process for security clearances

The Australian Government Security Vetting Agency (AGSVA) is the central vetting agency for the Australian Government. It plays a key role in supporting federal, state and territory government agencies, and defence industry partners, by providing responsive and assured security vetting services.

AGSVA is continuing to transform its approach to vetting processes, including the implementation of the myClearance system. myClearance is a digital vetting capability designed to support a more secure, automated and streamlined process to meet the increasing security clearance demand from across the Australian Government, Defence and defence industry. The myClearance system is already processing record numbers of clearances using additional automation to more efficiently process baseline clearances, which are the majority of industry clearances.

AGSVA has implemented a number of other initiatives, including prioritisation to streamline clearance timelines, expanded recruitment and improved contractor connectivity. AGSVA is introducing dedicated customer outreach officers to improve its customer service and response times.

Action 10.4. Defence will mature assurance processes ensuring both security clearances and Defence Industry Security Program membership processes are modernised without compromising security objectives.



RAAF Base Wagga security check of the front gate.

Annex A. Summary of implementation actions

Implementation actions from Chapter 2

Action 2.1. Defence will develop its industry intelligence capability to gain greater insights into Australia's industrial capability and capacity.

Implementation actions from Chapter 3

Action 3.1. Defence will update the Detailed Sovereign Defence Industrial Priorities in line with the Defence capability requirements articulated in the National Defence Strategy and its ongoing updates. This will build on the Sovereign Defence Industrial Priorities, which have been released in parallel with the Defence Industry Development Strategy.

Implementation actions from Chapter 4

Action 4.1. Defence will manage the Integrated Investment Program to ensure consistent demand to maintain Sovereign Defence Industrial Priorities, while prioritising the urgent and timely delivery of capability together with value for money.

Action 4.2. Defence will provide tailored levels of support to industry to realise the Sovereign Defence Industrial Priorities necessary to deliver defence capability in the timeframes Defence requires.

Action 4.3. The reformed Office of Defence industry Support will:

- Identify potential providers of defence industrial capability, guided by Sovereign Defence Industrial Priorities.
- Assess business suitability and maturity to deliver to Defence.
- Inform industry of defence processes and compliance requirements.
- Connect businesses to industry partners and Defence where mutually beneficial.
- Assist businesses to upskill to deliver Sovereign Defence Industrial Priorities.

Action 4.4. The Commonwealth will explore with venture capital fund managers and other investors a pilot project to assess appetite, fund size and opportunities for investors to invest equity (or debt) in eligible Australian businesses who have developed defence capability, which is identified as a priority.

Action 4.5. Defence will tailor each stream to build Australian industry capability in Sovereign Defence Industrial Priorities. This new grant will open in the first half of 2024.

To simplify grant arrangements, existing grant programs are being streamlined into a single Australian Defence Industry Development Grant (replacing the Sovereign Industrial Capability Priority, Skilling Australia's Defence Industry, Defence Global Competitiveness and Capability Improvement grants). This grant includes four separate streams to support:

- Growth of Industrial capability and capacity in Sovereign Defence Industry Priorities.
- Export opportunities for Australian defence industry.
- Upskilling and training of defence industry in priority trade, technical and professional skill sets.
- Establishing and maintaining security accreditation, in line with the Defence Industry Security Program.

Implementation actions from Chapter 5

Action 5.1. Defence will transform the ASDEFCON suite to make it easier, faster and more cost effective for industry to work with Defence. Defence will progressively deliver this transformation, which will result in:

- Simplified and reduced information required during the tender process to ask only what is necessary for source selection, with any additional information requirements deferred to later stages (by end 2024).
- Modified ASDEFCON Complex and Strategic Materiel templates into a standardised suite of common core requirements (by end 2024).
- Updated, contemporary templates that provide better guidance on how they should be used based on delivery risk (by end 2024).
- Improved effectiveness of ASDEFCON tailoring training, including digitisation and modular applications of the templates suite (by end 2025).

Action 5.2. Defence will have the first of the flexible contracts to support continuous capability delivery ready in 2024, to support the execution of the Integrated Air and Missile Defence program.

Action 5.3. Defence will continue to refine and develop its strategic partnership contracting framework and will look to expand these contracting frameworks to Land and Joint Maintenance, Repair, Overhaul and Upgrade and Test and Evaluation in 2024.

Action 5.4. Defence will develop a framework for the use of government-to-government agreements in support of Australian defence industry exports.

Action 5.5. Defence will implement a number of initiatives by end 2024 to increase market and business intelligence, and professionalise its workforce to make Defence a smarter buyer. These will include:

- A professionalisation framework targeting project and program management, engineering and logistics functions and commercial acumen
- An Industry Intelligence Capability, as the Defence centre of knowledge of industry capability and capacity, markets and supply chains, equipped with enhanced analytical skills and tools.
- Enhanced digital engagement opportunities with and between industry, including implementation of an Australian digital engineering strategy, through collaborative engagement with industry.
- A reciprocal industry secondment framework to enhance the professionalisation programs for key skill sets.

Action 5.6. By end 2024, Defence will update the Defence Policy for Industry Participation and refine the AIC and GSC Programs to ensure greater linkages between innovation, capability and export, so that:

- Innovation programs developed through ASCA can not only be brought into Defence capability programs, but are also able to be developed to exploit the potential for export.
- AIC plans for projects include export opportunities and strategies for long-term engagement of Australian industry in relevant programs of trusted partners.
- Tailored support is provided to primes to meet these objectives in their supply chains.

Implementation actions from Chapter 6

Action 6.1. Defence will hold more secure briefings with trusted industry partners within classified environments to provide demand signals on defence capability. To inform this, Defence will examine how classified consultation with industry is conducted in trusted partners and work with Government, in the context of the National Development Strategy (NDS), to determine the delivery of these secure briefings.

Action 6.2. Defence will communicate capability priorities via an updated framework of Defence-led industry engagements, forums and activities, commencing before tendering processes.

This includes targeted engagement with the private finance sector to identify opportunities to increase their participation.

Action 6.3. Defence will establish a tri-partite defence industry council in collaboration with the Australian Government, defence industry and unions.

Implementation actions from Chapter 7

Action 7.1. Defence will establish opportunities for industry secondments into Defence Science and Technology Group (DSTG) and Advanced Strategic Capabilities Accelerator (ASCA) to provide technical expertise and industrial experience, to understand Defence's needs and rapidly transition innovations into service. ASCA mission leadership roles will provide deliberate opportunities to bring in experience from industry and the external research and development (R&D) sector.

Action 7.2. Defence will update the Defence Innovation, Science and Technology Strategy to describe how Defence will harnesses the overall innovation, science and technology ecosystem to rapidly deliver priority outcomes for Defence as well as foster critical areas of R&D underpinning future capability.

Action 7.3. ASCA will develop and implement a new approach to identifying, validating, and articulating problem statements so it can partner with industry to accelerate capability delivery.

Action 7.4. ASCA will establish methods to identify and partner with non-traditional sectors to expedite delivery of priority capability solutions.

Action 7.5. ASCA will develop a pre-agreed acquisition pathway to fast-track the transition of minimum viable capabilities into operational use.

Action 7.6. Defence will communicate priorities for innovation at least annually in the form of ASCA problem, innovation and opportunity statements.

Action 7.7. Defence will work with other government agencies to support Australian industry to protect their IP, including understanding defence-related export conditions.

Implementation actions from Chapter 8

Action 8.1. Defence will work with industry to provide an aggregated defence industry workforce outlook commencing in July 2024.

Action 8.2. Defence will develop a rolling national Defence industry workforce plan to detail practical actions to help industry achieve the required workforce capacity and capability. The plan will leverage the work already undertaken for the South Australia Defence Industry Workforce and Skills Taskforce.

Action 8.3. Defence will enhance the Schools Pathways Program by:

- Developing new intergovernmental agreements to support critical defence industry skills pathways in South Australia and Western Australia.
- Moving from a closed non-competitive grants process to an open-grants program, to encourage innovative approaches to delivering defence industry career experiences, mentoring and networking opportunities and encouraging student participation in STEM activities and/or subjects, and support workforce needs in critical defence industry hubs delivering Sovereign Defence Industrial Priorities, such as the Hunter region.

Action 8.4. Defence will continue the Defence Industry Internship Program to target skills in defence industry in short or critical supply.

Action 8.5. Defence will develop a longer-term communication and engagement plan, working with Australian industry to create awareness of the strong career opportunities in defence industry, including sharing information through websites and increasing the visibility of Women in STEM in the defence industry.

Implementation actions from Chapter 9

Action 9.1. Defence will target trade missions in support of Sovereign Defence Industrial Priorities to continue promotion of industrial collaboration with trusted partners.

Action 9.2. Defence will actively work with industry to access other markets, including the use of government-to-government arrangements.

Action 9.3. Defence and Austrade will refine and target their collaboration to better utilise Austrade's advisers and networks to ensure greater opportunities for Australian defence industry, including enhanced market intelligence and understanding of foreign government programs.

Action 9.4. The GSC Program will increase opportunities for Australian businesses in international supply chains, by expanding and updating the Contract and Performance Framework and adding new participants.

Action 9.5. Defence, in collaboration with trusted partners, will increase information sharing agreements, address barriers to information and technology exchange, and increase industrial collaboration to deliver initiatives such as AUKUS.

Action 9.6. Defence will leverage Australian industry maintenance, repair and overhaul capabilities, such as for the MH-60R Seahawk, to strengthen the industrial base and support trusted partners.

Action 9.7. Defence will source opportunities to demonstrate Australian defence industry capability as part of Defence exercises, training, at Australian diplomatic missions overseas and with visiting foreign delegations in Australia.

Implementation actions from Chapter 10

Action 10.1. Defence will review and update policies and procedures for security clearance recognition in line with international best practice to streamline processes and better support international industry collaboration.

Action 10.2. Defence will explore industry security provisions in new and existing Security of Information Agreements and Arrangements to provide the framework for increased industry security cooperation and help combat skill shortages.

Action 10.3. Defence will consider and report on industry security clearance and accreditation requirements earlier in the Defence Capability System, including ongoing assessment of security classification levels to support security uplift for the future workforce.

Action 10.4. Defence will mature assurance processes ensuring both security clearances and Defence Industry Security Program membership processes are modernised without compromising security objectives.



